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| **Regional Delivery Partnership** |
| **Road Signs** |
| **Technical Briefing** |
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| HE551495-SKAG-GEN-CONWI\_CONW-CH-WM-0000X |
| For Procurement |
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1. Scheme Introduction

The existing A428 connects communities between St Neots and Cambourne and links the East of England to important regional, national and international hubs such as the Felixstowe and Harwich ports. The route also connects Bedford, Milton Keynes and the M1 motorway to Cambridge and the M11 motorway and is used by both local and long-distance traffic.

The existing A428 between Wyboston interchange and Caxton Gibbet interchange remains the only stretch of single carriageway between the two key economic hubs of Milton Keynes and Cambridge. The existing A428 provides a vital link between the M1 (at Milton Keynes) and the M11 (at Cambridge), connecting the communities of Bedford, St Neots, Cambridge and Cambourne. The road carries twice the traffic it was designed for, with drivers suffering daily congestion, delays and incidents.

The existing Black Cat roundabout, where the A1 meets the A421, and the existing A428 near St Neots is a daily source of queues, delays and congestion. Similar problems exist at the Barford Road, Cambridge Road (St Neots) and Caxton Gibbet roundabouts.

Journey times between the existing Black Cat roundabout and the existing Caxton Gibbet roundabout are significantly longer in peak periods than in off-peak periods. This is a consequence of road sections and intermediate junctions reaching capacity, which results in delays along the route. There are also a high number of incidents, with collision clusters at both junctions.

There is therefore a need to improve the route to address the current levels of congestion and their impacts of delay and journey unreliability on road users. The investment in additional capacity that is required to address these issues will also help to support local economic growth by improving east-west connectivity and enhanced north-south traffic flow.

The Scheme would create a reliable, high-quality route from the existing Black Cat roundabout (which is located south of St Neots) to the Caxton Gibbet junction (located to the west of Cambourne). The Scheme principally comprises of:

1. A new 16 kilometre (10 mile) dual carriageway from the Black Cat roundabout to the Caxton Gibbet roundabout, to be known as the A421 (hereafter referred to as the ‘new dual carriageway’) and in addition 3 kilometres (1.8 miles) of tie-in works.
2. A new junction to the east of the existing Cambridge Road roundabout to provide access to the new dual carriageway and maintain access provisions to the local road network.
3. A new junction to the east of the existing Cambridge Road roundabout to provide access to the new dual carriageway and maintain access provisions to the local road network.
4. A new junction at the Caxton Gibbet roundabout, which would tie in the new dual carriageway and the existing A428 to the east of the roundabout utilising elements of the existing roundabout and its alignment.
5. New crossings would be constructed to enable the new dual carriageway to cross the River Great Ouse, East Coast Main Line railway, Barford Road, the B1046/Potton Road, Toseland Road and the existing A428 at Eltisley.
6. Improved local roads within proximity to the Scheme due to safety requirements and alternative accesses provided to side roads at Chawston, Wyboston and Eltisley.
7. Safer routes for non-motorised user networks for walkers, cyclists, and horse riders and improved connections.

Sections of the existing A428 between St Neots and Caxton Gibbet would be retained for local traffic and public transport.

**1.2 Map of Scheme**Diagram

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1. Scope of Works – General Requirements

The *Subcontractor* is required to provide experienced and adequate levels of supervision for all elements of their *Subcontract Works*. Please refer to the Skanska Supervisor Assessment Procedure (SCE EHS 002-G01 June 2021) included in the Minimum Standards documents within the Scoping Documents for this package.

The *Subcontractor* shall provide the non-working Front Line Supervisor(s) (FLS(s)) with electronic tablet computers to carry out and record details of the safety briefings and to have access to quality control documents and completion of any necessary QA record forms.

The *Subcontractor* will forward details of the nominated FLS(s) so that the *Contractor* can assess their suitability prior to the pre-start meeting and ahead of the commencement of the Subcontract Works. Please ensure that the CV(s) of this/these individual(s) are included prior to appointment by the *Contractor* (see Schedule of Deliverables included in this ITT).

The *Subcontractor* shall at all times

* Comply with the *Contractor’s* Construction Environmental Management Plan (EMP).
* Maintain accurate records and measures – including the timely provision of telemetry information as required by the *Contractor*.
* Maintain QA records and site diaries in the preferred format in NOVADE within 5 working days of the work or test etc (Note; the approval/acceptance of site diaries, allocation sheets etc.
* ITP deliverables;
  + QA records for each activity shall be issued to the *Contractor* within 5 working days following completion or before any follow-on operations whichever is the soonest. (see also Section 3.6 below).

1. Scope of Works – Specific to Road Signs Works
   * 1. The *subcontract works* scopeshall comprise of all obligations in respect of the A428 Black Cat to Caxton Gibbet Improvements 1200 (HE551495-MOTG-HSN-CONWI\_CONW-SP-CH-01200) series for Road Signs. This includes but not limited to; the provision of all preliminaries, insurances, People, Equipment, Materials, quality assurance, inspection & testing of all works, as-built records and all other things necessary for the safe completion of the proposed *subcontract* work*.* This isall in accordance with the design, specification for Highways Works, programme and all other requirements outlined in this *Subcontract* Scope documents. Note that lighting to traffic signs is covered in a separate subcontract package and a separate Technical Briefing Note.
     2. The Scope of the *subcontract works* comprises the fabrication and installation of road signs including, where specified, any luminaire/lighting with necessary cabling up to and including a cut-out device. (Another supplier will provide the electrical connection installation from the power supply into the sign including installation into the cut-out device.) All works shall be in accordance with Manual of Contract Documents for Highway Works, Volume 1 – Specification for Highways Works in the following areas together with the associated temporary works in connection with the main contract, including where applicable any temporary works design;
        1. Project Wide (All Sections)

* A421 Main carriageway (Westbound (WB) and Eastbound (EB)
  + - 1. Section 1
* A1 Main Carriageway (Northbound (NB) and Southbound (SB)
* Black Cat gyratory and associated slip roads
* Local Roads;
  + Bedford Road (Roxton)
  + Roxton Road
  + Roxton Road Link (South)
  + Kelpie Marina Access Road
  + Roxton Road Link (North)
  + Nags Head Lane (Link & Cul-de-Sac)
  + Section of School Lane
    - 1. Section 2
* Local Roads;
  + Barford Road
    - 1. Section 3
* Local Roads;
  + Potton Road
  + B1046
* Private Means of Access (PMA), Access Tracks etc.;
  + Eastbound Emergency Access
  + Westbound Emergency Access
  + PMA to Rectory Farm Cottages
    - 1. Section 4
* Cambridge Road Junction and associated slip roads
* Local Roads;
  + Realigned A428 (North) including gyratory
  + Realigned A428 (South) including gyratory
    - 1. Section 5
* Local Roads;
  + Toseland Road
  + Realigned A428 South of Eltisley and gyratory
  + Cambridge Road (Eltisley)
  + B1040 (St.Ives Road)
  + Eltisley Link Road
  + Realigned A428 North of Eltisley and gyratory
* PMAs, Access Tracks etc.;
  + Eastbound Emergency Access
  + Westbound Emergency Access
    - 1. Section 6
* Caxton Gibbet Junction and associated slip roads
* Local Roads;
  + Realigned A428 (North)
  + Realigned A1198 (North) including gyratory
  + Caxton Gibbet Junction Link
  + Realigned A1198 (South) including gyratory
  + Caxton Gibbet Junction South West Link including gyratory

Some installation works to the existing network will be required to be carried out during night-time closures under Traffic Management supplied by the *Contractor*. The *Subcontractor* is to provide adequate notice (minimum of 15 working days) to the *Contractor* of dates when Traffic Management is required. The signs that are likely to require such traffic management closures are typically the ADSs located outside of the main traffic management. These signs are as follows (but not limited to);

Section 1

A421 Eastbound – Sign refs.;

* DS0012-Z1
* DS0042-Z1
* DS0041-Z1

A1 Northbound – Sign refs.;

* DS0039-Z1
* TM0002-Z1

A1 Southbound – Sign refs.;

* DS0038-Z1
* DS0051-Z1

Section 6

A428 Westbound – Sign ref.;

* TM0001-Z6
  + 1. The *Subcontractor* has satisfied itself with regard to the available means of access to and from the *subcontract works*. Typically sign locations will be adjacent to existing or new road surfaces that will require the use of rubber-wheeled/tracked equipment. However, the *Contractor* cannot guarantee this for all sign locations.
    2. The *Subcontractor* shall maintain their own works locations in a safe and tidy condition and free of any debris, arisings or anything that may be considered a hazard to themselves or others. All waste (except hazardous waste) is to be sorted and disposed of in appropriate skips provided by the *Contractor*. Any packaging or light materials that may be blown away by the wind shall be weighed down. The *Subcontractor* will provide their own skips for the removal of Hazardous and / or COSHH material packaging and waste.
    3. The *Subcontractor* shall place all arisings resulting from excavation operations in a stockpile, left in a safe manner comparable to the size of the stockpile at location(s) agreed in advance with the *Contractor* and its subcontractors.
    4. The *Subcontractor* is responsible for the removal of all waste material generated from their works.
    5. Joint inspections by the *Subcontractor* and *Contractor* are carried out to confirm the availability of works areas, sufficiently in advance of commencement at each work area. Any inadequacies in the works areas shall be notified by the *Subcontractor* in CEMAR and reasonable measures shall be taken by the *Contractor* to resolve the inadequacy.
    6. The *Subcontractor* provides all necessary technical submissions and backup to facilitate acceptance of the *Subcontractor’s* proposed systems and procedures. This includes any fabrication drawings of sign faces for acceptance prior to manufacture.
    7. Where requested by the *Contractor,* the *Subcontractor* shall provide any assistance and/or supporting information which enables permissions, permits or consents to be obtained as promptly as possible within the required periods for submission and/or approval.
    8. The *Subcontractor* provides all technical support required to ensure that any necessary technical approvals are approved by the *Project Manager* for use as part of the subcontract works (e.g. fabrication drawings; as-built details/drawings etc.).
    9. Unless otherwise stated in Appendices, the *Subcontractor* provides all necessary loading/unloading and movement of the *Subcontractor’s* Equipment and Materials and the installation and removal of all works necessary to carry out the *subcontract works*. Should the *Subcontractor* require setting out details, these must be requested in writing (via CEMAR) 3 working days in advance of the setting out being required. The *Contractor* will provide dimensional control points for the work areas. The *Subcontractor* will provide all setting out required for the *subcontract works*.
    10. The *Contractor* shall identify all known underground services, apparatus or artificial obstructions, which will be marked where appropriate, as necessary to undertake the *subcontract works*. Although these activities will be carried out by the *Contractor*, this does not negate the responsibility of the *Subcontractor* to satisfy itself of these hazards prior to carrying out the *subcontract works*. Any damage caused by the *Subcontractor* to any such services, apparatus or artificial obstructions is to be notified to the *Contractor* immediately. The *subcontractor* may be subject to incurred costs for any rework to Others assets that have been damaged by the *Subcontractor.*
    11. Booking of utility protection officers may be required where the *subcontract works* crosses utility assets. The *Subcontractor* will notify the *Contractor* of any necessary information (i.e. plant details) at least four weeks in advance of works. The *Contractor* will notify the 3rd party.
    12. The *Subcontractor* provides all statutory warning notices applicable to the *subcontract works*.
    13. The *Subcontractor* is aware that the traffic management arrangement is not exclusive to the *Subcontractor’s* works. Both the *Contractor* and Others will carry out works within this traffic management prior to the *subcontract works* commencing and as such the *Subcontractor* is aware that close liaison is required with the *Contractor* and Others and is essential to ensure that both the *subcontract works* and Other’s works are not adversely affected by each other. The *Subcontractor* is required to allow sufficient time within each shift for either temporary or permanent white lining works to be completed by the *Contractor* prior to re-opening of any road closures. Liaison will be captured at the daily 1:00pm co-ordination meeting, to which the *Subcontractor’s* site based FLS is required to attend.
    14. On completion of the *subcontract works* and at the end of each shift, the *Subcontractor* ensures, before the highway reopens, that the highway is free from all debris and/or arisings relating to or associated with the *subcontract works*.
    15. The *Subcontractor* is aware of the necessity to sequence certain activities to align with the *Contractor’s* overall construction strategies, particularly at structures and within traffic management constraints. The *Subcontractor* shall work with the *Contractor* to manage and ensure the effective co-ordination and sequencing at all interfaces and connections between the *subcontract works* and all other site works
    16. The *Subcontractor* is aware that multiple separate mobilisations to Site will be required to carry out the *subcontract* *works* in accordance with the Accepted Programme & programme information identified in Appendices.
    17. The *Subcontractor* attends weekly co-ordination meetings with the *Contractor* and Others for the purpose of agreeing the co-ordination of the *subcontract works* with the works of Others employed by the *Contractor* and present on Site at the same time as the *Subcontractor*.
    18. A weekly co-ordination programme will be issued by the *Contractor* reflecting the agreements made in the weekly co-ordination meeting and showing the *Subcontractor* and others actual and planned works for 3 weeks in advance and identifying actual progress relative to planned progress.
    19. The *Subcontractor* keeps and submits a daily record of all works completed in the form an allocation sheet. These records must be signed off at the end of each working shift by the *Subcontracto*r and be approved by the *Contractor*. The *Contractor* reserves the right to ask for the records to be altered, if it feels they are incorrect, are unclear, or do not contain the required level of information and detail. The *Subcontractor* acknowledges that these records will form part of the assessment of the amount due at each assessment date. People and Equipment resources are also to be recorded. Copies of delivery tickets shall also be provided.
    20. The *Subcontractor* provides vehicle marshalling (Banksman) in all instances where the movement of Equipment is required (this includes but is not limited to) operations utilising the *Subcontractor’s* or the *Contractor’s* Equipment). Should the *Contractor* feel the level of marshalling is non-compliant with agreed safe system of working, the *Subcontractor* will need to provide additional People resources.
    21. The *Subcontractor* is responsible for the first 1 hour of all standing time event, and this will not form part of any compensation event under the *conditions of subcontract*.
    22. An internal move which does not require a low-loader and can be moved by tracking Equipment to the next work location, is to be included in the rates and prices. This is anticipated to be any area that can be tracked to within a 1-hour window.
    23. An internal site move that requires a low-loader, or other transportation, to move Equipment is to be included in the rates and prices.
  1. Noise, Vibration and Mud

Reversing alarms shall be of white noise alarms type. Minimize reversing when working near housing areas (i.e., make use of one-way systems for plant movements wherever possible).

Vibration monitoring points shall be installed over locations identified in EMP and limits shall be adhered to.

The risk of depositing mud on public roads will be managed by utilising wheel washers/baths provided at exits from site and crossing points. The wheel washers and/or drive through lorry baths shall be provided and manned by the *Contractor* at site exits and road crossings and the *Subcontractor’s* vehicles and those of their material suppliers shall use these. Road crossings are currently planned for Roxton Road, Barford Road, Potton Road, B1046, Toseland Road, St Ives Road (B1040). Additionally, road sweepers shall be employed by the *Contractor* where required. However, this does not relieve the *Subcontractor* of their obligation to ensure that road surfaces are left in a suitable state of cleanliness following their works.

* 1. Site Establishment

Office space for up to 2 number *Subcontractor* staff in the main office at Wintringham. In addition to this storage space for one container shall be available in the main store/site stores for any of the miscellaneous tools and plant. The *Subcontractor* shall request any requirement for additional storage space in the *Contactor’s* compound to the *Contractor* in writing. However, the *Contractor* cannot guarantee if any space can be made available.

* Large items of equipment shall be stored on site at plant parking areas which shall be agreed with the *Contractor*.
* Attendances shall be as per Appendix 1 – Table at the end of this document.
* No other attendances/facilities will be provided, and the *Subcontractor* has allowed for all such other costs as required to provide for the subcontract works within their prices.
  1. Methodology/Sequence of Works

In advance of preparing any risk assessment and method statements (RAMS) the *Subcontractor* will attend a HAZID meeting with the *Contractor* and other interested parties to identify key hazards and personnel behaviours that will affect the works to be undertaken.

RAMS shall be submitted for acceptance/approval by the *Contractor* at least 2 weeks in advance of the works being carried out. Requirements for approval periods from a third party (e.g. Network Rail) is provided in Section 4.

A list of potential activities are as follows but not limited to;

* Excavation works
* Delivery and unloading of materials
* Working with wet concrete
* Lifting operations
* Working at height
* Working with and adjacent to other *subcontractors*
  1. Subcontractor’s Design

All permanent works will be designed by the *Contractor’s* designer. Any changes, modifications or improvements suggested shall be submitted to the *Contractor* for approval/acceptance before acceptance of the *Subcontractor’s* design.

* 1. Quality Control of the Works

Tolerances for the road signs works shall be as per the Specification and any approved departure from standard and the approved/accepted Inspection and Test Plan (ITP). A right first-time approach is required by the *Contractor*, and every attempt shall be made to check and verify the works before carrying on subsequent works.

Non-conformances shall be reported and closed out promptly with corrective actions in a timely manner of becoming apparent in respect of follow-on operations. Any request for departure or relaxation in standards shall be made in writing to the *Contractor*.

The accepted ITPs produced by the *Subcontractor* will identify all requirements of testing and recording evidence of testing. A sample ITP format is attached in the Scope document Appendices

QA forms and records identified in the ITP shall be generated at the end of the shift, duly signed off and uploaded to the Novade platform. Any proposed relaxation required in testing shall be submitted in writing to the *Contractor* for approval/acceptance. The *Subcontractor* shall be permitted to use their own record forms where it is not possible to use the project forms. This will be agreed with the *Contractor* in advance of works commencing.

Material Wastage will be limited to 3% over the theoretical requirement. *Subcontractor* to be responsible for anything in excess of 3% over usage and considered disallowed costs e.g. concrete supplied by the *Subcontractor*.

* 1. Damage to Own and Others Works

The *Subcontractor* shall ensure it is fully protecting all elements of its work until the *Subcontract* Completion Date

Adequate care shall be taken while working around structures, culverts, drainage apparatus or street furniture, slip-formed elements (i.e. slot drain, surface water channel, concrete stepped barrier), kerbs and the like.

Damages due to plant colliding or tracking over any works, whether completed or not, shall be reported to the *Contractor* as soon as possible. The *Subcontractor* shall be liable for carrying out any repairs to damage that they cause to their or other’s work. These repairs shall not affect any follow-on operations. If the *Subcontractor* cannot carry out the required repairs the *Subcontractor* shall notify the *Contractor* in writing and will be liable for the costs of repairs and any potential delays to follow-on works.

The same requirement will apply to the *Contractor* and other *Subcontractors* to prevent damage to the road sign works.

* 1. Temporary Works

All temporary works required for completion of permanent works carried out by the *Subcontractor* is the responsibility of the *Subcontractor*.

The *Subcontractor’s* temporary works designs shall be submitted to the *Contractor* for approval/acceptance at least 4 weeks in advance of actual works taking place. All temporary works designs will need to be approved/accepted by the *Contractor’s* temporary works coordinator, or third party approval/acceptance before the work can be carried out. This is to ensure that there is no delay for mobilizing resources to do the works.

Periodic inspection of the *Subcontractor’s* temporary works shall be carried out by the *Subcontractor* in accordance with the requirements of the temporary works design to ensure the design/installation is safe and suitable for purpose. A list of temporary works generally required are as below. This is by no means exhaustive and any additional temporary works required shall be provided by the *Subcontractor* as per A428 project requirements.

* 1. Miscellaneous

The daily diaries shall be prepared by the *Subcontractor* and submitted to *Contractor* on the following shift. Notification for testing/inspection will need to be issued 24 hours in advance.

Weekly forecasts of imported materials is required (See items 3.1.18 & 3.1.19).

1. Known Constraints

Access to site will be through the access points from site compounds and/or public roads.

There are several known utilities crossing the works area. These areas will have exclusion zones which will be established and maintained by the *Contractor*. Specific speed limits will apply at these areas, and also throughout the site, over any protection slabs and these will be signposted by the *Contractor*.

Special permit to work will be required to work in these exclusion zones. Attendance of plant protection officers (PPO) from utility companies will be required while working within exclusion zones of utilities. The *Subcontractor* will provide the *Contractor* with two weeks’ notice to organise the PPOs for these works.

RAMS for working in vicinity of utilities will have to be approved by utility owners. Allow 12 weeks for these approvals. Works can only proceed after the approval.

In addition to this works in and around River Great Ouse shall be as per the Environmental Management Plan (EMP) and Environment Agency (EA) guidelines. Works can only proceed after the approval of the methodology by the *Contractor*.

Works in and around the East Coast Mainline (ECML) will require the method statements to be approved by the asset owner - Network Rail and this will take up to 10 weeks for approval. Works can only proceed after the approval. Similarly, if any temporary works required by the *Subcontractor* impact on Network Rail assets the relevant Forms A, B & C shall be submitted to Network Rail via the *Contractor* 12 weeks in advance of approval being required (see Table 1 below).

**Table 1 – Summary of key review and approval periods**

| Item | Period | Comments |
| --- | --- | --- |
| Network Rail Possessions | * 26 weeks * 6 weeks notice period to cancel booked possessions without incurring a charge |  |
| Network Rail Forms A, B and C for temporary works | 10 weeks as follows:   * 2 weeks review by *Contractor* * 4 weeks review by the *Contractor*’s CAT3 checker and the *Employer* * 4 weeks review by Network Rail | Form A & B to be approved before Form C submission |
| RAMS requiring Network Rail approval | * 2 weeks review by *Contractor* * 4 weeks review by Network Rail * RAMS to be fully approved 2 weeks prior to works commencing on site |  |
| RAMS not requiring Network Rail approval | * 2 weeks review by *Contractor* |  |
| Temporary works design not requiring Network Rail approval | * CAT1 / CAT2 check – 4 weeks review by *Contractor* * CAT3 check – 2 weeks review by *Contractor* plus 4 weeks review by the *Contractor*’s CAT3 checker |  |
| Out of hours working | * 1 week review by *Contractor* * 2 weeks review by Local Council |  |
| Traffic management | * 3 weeks for *Contractor* to book traffic management * 24 hours notice required to cancel traffic management without charge |  |
| Public interface | * Any deviation from the current Approved in Principle will require a 10 week approval. |  |

Haul roads through site may be shared between other *Subcontractors* working in the area. The *Contractor* will organise collaboration between parties during the daily co-ordination meeting if there is need for shared use.

The *Subcontractor* is permitted to work between the hours of 07:00 to 18:00 Monday to Friday and has allowed in their Prices for such working hours.

Applications to work outside core working hours will need to be applied for by the *Contractor* and agreed prior to works commencing for works outside normal hours of 07:00 – 18:00 Monday to Friday, 07:00 – 13:00 Saturday. Any hours outside these will require consent from the local authority. Approval periods detailed in Table 1 above. If the *Subcontractor* wishes to work outside normal working hours (including weekend working) the *Subcontractor* shall inform the *Contractor* in writing 3 weeks prior to the required date(s) (1 week for *Contractor* review and 2 weeks for local authority acceptance)

The above working hours may be reduced during winter months due to reduced day light hours. Works can be carried out during the darker hours if requested by the *Subcontractor* and suitable task lighting is provided by the *Subcontractor*. Working hours shall be monitored to comply with project fatigue management policy which will be included in the Scope documents.

Traffic management shall be provided by the *Contractor* and access and exit to work area using traffic management shall only be with vehicles marked with Chapter 8 markings and twin amber flashing lights as per project requirements.

Any specific traffic management required by the *Subcontractor* shall be requested to the *Contractor* at least 3 weeks prior to the actual works a 24-hour notice of cancellation will be required to prevent charge for aborted works.

1. Programme of Works
   1. Milestones/Key Dates

A table of key activities are as below in Table 2.

**Table 2 – Road Sign Works Key Activities**

|  |  |
| --- | --- |
| **Location** | **Activity** |
| Section 1 | SC-S6-CON-S1-PH1-167 – Traffic signs A421 WB on slip (start of works in S1) |
| SC-S6-CON-S1-PH1-168 – Traffic signs Bedford Road (end of side roads in S1) |
| SC-S6-CON-S1-PH4-149 – Traffic signs A1 mainline (completion on A1) |
| SC-S6-CON-S1-PH4-146 – Traffic signs A428 mainline (completion on A428 in S1) |
| Section 2 | SC-S6-CON-S2-HGW-114 – Traffic signs Barford Road (end of side roads in S2) |
| SC-S6-CON-S2-HGW-137 – Traffic signs Mainline S2 (completion on A428 in S2) |
| Section 3 | SC-S6-CON-S3-HGW-144 – Traffic signs B1046 (end of side roads in S3) |
| SC-S6-CON-S3-HGW-129 – Traffic signs Mainline S3 (completion on A428 in S3) |
| Section 4 | SC-S6-CON-S4-HGW-141 – Traffic signs Camb Rd Junction (completion in S4) |
| Section 5 | SC-S6-CON-S5-HGW-123 – Traffic signs Eltisley Junction (end of side roads in S5) |
| SC-S6-CON-S5-HGW-144 – Traffic signs Mainline S5 (completion on A428 in S5) |
| Section 6 | SC-S6-CON-S6-PH1-1370 – Traffic signs A428 EB off/on slip (start of works in S6) |
| SC-S6-CON-S6-PH2-1270 – Traffic signs Mainline A428 (completion of works in S6) |

(October 23 Cl. 32 Programme Doc. Ref. HE551495-SKAG-GEN-CONWI\_CONW-PR-ZM-00013 Rev.33)

A programme of works in a form agreed with the *Contractor* (P6 compatible XML file or MS Project preferred) shall be submitted. It shall show the level of detail (including resources, quantities, and outputs) appropriate to each stage of the Works and all activities and restraints, each of which shall be given a short title. All events shall be numbered and annotated with earliest and latest event dates. The critical path should be clearly identified in the programme, network diagram and bar chart. The content shall include resources, quantities, and outputs.

The *Subcontractor* shall be flexible in the use of resources including increasing resources at peak times to maintain or achieve programme.

Programmes shall be updated weekly, identifying actual progress relative to planned progress.

1. Specification

The works shall be carried out in accordance with SHW 1200 series, the project specification and appendices and any approved departure(s) from standard.

Hierarchy of requirements will be project specification as in drawings and appendices to Series 1200 (document refs as per item 3.1.1), and relevant standards in SHW.

Project specification and schedules are attached as an Appendix to the scoping document.

1. Drawings/Models

The drawings are attached as Appendix 2 to this document.

A copy of version P52 of the federated 3-dimensional model is also attached to as an Appendix to the scoping document.

1. Minimum standards

The minimum standards that the Subcontractor shall comply with are identified within the 'Minimum Standards, Policies and Procedures - Contents' document. This is appended to the enquiry as a separate attachment.

1. Appendices
2. Table of attendances as below

**Appendix 1 – Table of Attendances**

The following attendances/facilities will be provided by the *Contractor*, free of charge (unless noted), from the first subcontract access date until the Sub-contract Completion Date or for the agreed number of occurrences. Unless described otherwise, the attendances/facilities will be shared with others and are not for the exclusive use of the *Subcontractor*.

No other attendances/facilities will be provided by the *Contractor*, and the *Subcontractor* has allowed for all such other costs as required to Provide the Sub-contract Works within their Prices.

The *Contractor* reserves the right to withdraw any of the below attendances/facilities in the event of wilful damage or misuse by the *Subcontractor*.

| Attendance / Facility: | Contractor Provides: | *Subcontractor* Provides: | Comment: |
| --- | --- | --- | --- |
| 1. Material Supply for: | | | |
| 1. Road signs, posts, foundations and fixings |  |  |  |
| 1. Testing |  |  |  |
| 1. Temporary Works |  |  |  |
| 1. Permanent Works |  |  |  |
| 1. Wastage (over and above agreed) |  |  |  |
| 1. Materials Handling | | | |
| * 1. Receiving (i.e. Checking) |  |  |  |
| * 1. Offloading in stock or store |  |  | *Contractor* will unload at the stores area any material provided by ourselves, the *Subcontractor* to do so for materials provided by themselves |
| * 1. Stacking / Unstacking |  |  | *Subcontractor* to be responsible for unloading and stacking materials at all works  locations |
| * 1. Protecting |  |  | *Subcontractor* to protect works until Subcontract Completion i.e. protection from damage during storage etc |
| * 1. Handling & Distribution from storage to site location |  |  |  |
| * 1. Placing |  |  |  |
| 1. The *Subcontract* Works | | | |
| 1. Setting out |  |  | The C*ontractor* to carry out setting out on site |
| 1. Management & Supervision |  |  |  |
| 1. Control of labour |  |  |  |
| 1. Protection until taken over |  |  |  |
| 1. Disposal of all of materials rendered unsuitable off site |  |  |  |
| 1. Disposal of non-hazardous waste to designated skips on site |  |  | Skips provided by the *Contractor* (e.g. for waste materials & packaging etc.), The *Subcontractor* to ensure correct materials placed in correct skip and that no hazardous waste (e.g. COSHH materials (paint cans etc.) or contaminated packaging) enters these |
| 1. Identification & marking, as appropriate of known underground services |  |  | Subcontractor is responsible for working to the Permit to Dig |
| 1. Issue of Permits to break ground & Other Permits to Work |  |  | Hot works permits by the *Subcontractor* (if required), other permits by Skanska |
| 1. Traffic Management when applicable |  |  |  |
| 1. Temporary barriers to works areas |  |  | Not temporary road restraint |
| 1. Spill kits |  |  |  |
| 1. Noise, dust and vibration control and monitoring |  |  | *Subcontractor* to carry out daily inspections of working areas. *Contractor* will carry out necessary monitoring for contractual and reporting purposes to the *Client* |
| 1. Tools, plant, and equipment | | | |
| 1. Small tools – shovels, picks, wedges & the like |  |  |  |
| 1. Hand-held power tools, drills & the like |  |  |  |
| 1. Small plant, barrows, working platforms & the like |  |  |  |
| 1. Small mechanical plant – Power benders, saws, mobile hoists, compressors, bowsers, etc |  |  |  |
| 1. Operated plant – MEWPs, hiabs and the like |  |  |  |
| 1. Mobile & fixed craneage, concrete pumps |  |  |  |
| 1. Vehicle marshalls for plant/vehicle movements |  |  |  |
| 1. Waste skips & containers for recyclable material |  |  | *Contractor* will provide general waste skips; *Subcontractor* to dispose of own COSHH waste |
| 1. Access scaffolding Fixed and mobile working platforms |  |  |  |
| 1. Pumping and dewatering |  |  |  |
| 1. Fuel |  |  | HVO fuel required for site plant |
| 1. Use of Contractor’s Site Facilities | | | |
| * 1. Storage area within site compound |  |  | Storage area in site compound by *Contractor*  Storage area close to work locations to be identified by *Subcontractor* and agreed with the *Contractor* |
| * 1. Desk space within Contractor’s office |  |  | **Up to 2** desks in Wintringham offices will be provided by the *Contractor*, This may be removed at any time if required. |
| * 1. IT & Communication (computers, IT network, software, telephones) |  |  | *Contractor* will make available wi-fi for connectivity only at Wintringham offices. *Subcontractor* to supply all other IT & comms requirements |
| * 1. Printing, copying |  |  | *Subcontractor* to provide own printers if required. |
| * 1. Storerooms, containers, satellite offices |  |  |  |
| * 1. Light / power to storage areas |  |  |  |
| * 1. 110v single phase / 240v or 415v three phase power supply to within 50m of work area |  |  |  |
| * 1. Task lighting |  |  |  |
| * 1. Background / safety lighting |  |  | This is only at compound locations |
| * 1. Water for work |  |  | From the compound or designated stand pipes only and agreed with the *Contractor* in advance |
| * 1. Telephone / Fax machine / Pay phone |  |  |  |
| * 1. Security / watchman |  |  | Compound Only *Subcontractor* is responsible for the security of their equipment left on site. The Contractor is not liable for any theft or damage which occurs in the Compounds. |
| * 1. Road cleaning or wheel washing facilities at access/egress points to and from the site |  |  | At strategic locations only |
| * 1. Cleaning of works area and removal of rubbish to designated skips |  |  | *Contractor* only provides the skips (including for hazardous materials (e.g. COSHH)). See also 3f above |
| * 1. Access to the Contractor’s web-based document control system. |  |  | Access will be permitted to specific areas, including for storage of quality documents. |
| * 1. Haul roads other than for bulk earthworks', by Contractor. | ☒ |  |  |
| 1. Welfare | | | |
| 1. Branded PPE |  |  | PPE will comply with the document “NH branding specifications – Guidance for Contractors” Version 2.0 – September 2021 (and any subsequent updates as required) |
| 1. Other protective equipment and the like |  |  |  |
| 1. Contractor’s main compound drying room |  |  |  |
| 1. Contractor’s First aider and first aid facilities |  |  | *Subcontractor* to include first aiders and supplies within site team as per minimum standards |
| 1. Contractor’s main compound kitchen facilities |  |  | Kitchen facilities will be within welfare locations and will be a non-catered facility |
| 1. Contractor’s main compound toilet / washing facilities |  |  |  |
| 1. Contractor’s compound/s parking areas on site to be made available to park plant and vehicles | ☒ | ☐ | Parking for site operatives, HGVs, and necessary plant service areas |

No other attendances/facilities will be provided by the *Contractor*, and the *Subcontractor* has allowed for all such other costs as required to Provide the Sub-contract Works within their Prices.

The cost of providing any of the above attendances/facilities beyond the Sub-contract Completion Date or the agreed number of occurrences, will be assessed by the *Contractor* and will be paid by or retained from the *Subcontractor* pursuant to clause 50.2 of the conditions of Sub-contract.