

2.4 Project Requirements

- i) The Contractor shall, for the Duration, make provision of accommodation comprising of, as a minimum, a separate office facility and internet access for the sole use of the Company Representative with desks and storage facilities for 2 people. Access to a Meeting room and a process for booking such facility. Access to welfare facilities and Car Parking. The Contractor shall be responsible for making sure the accommodation and facilities are kept in a clean and orderly manner, any items that are directly damaged by the Contractor or his staff shall be satisfactorily repaired or replaced.
- ii) The Contractor shall provide a Project Quality Plan based upon the headings contained within BS EN ISO 9000 series documents. All section titles shall be included; any "not applicable" section must be included but annotated Not Applicable. This shall be authored by the Contractor and produced to a standard that meets the agreement of the Company.
- iii) The Contractor shall provide a detailed Project Execution Plan containing both text commentary and a Project Plan / Gantt Chart document containing both mobilisation and execution activities. This shall be authored by the Contractor and produced to a standard that meets the agreement of the Company.
- iv) The Contractor, jointly with the Company shall provide a Verification Activity Plan defining all verification and assurance activities either as a separate document or contained within a Project Quality Plan. This shall be authored by the Contractor and produced to a standard that meets the agreement of the Company.

Where an inspection or test is required to determine the condition of a component or system, the supplier will provide a detailed report that shows (but is not limited to):

- Methodology including tools and techniques to be used.
 - Inspection / Test Criteria
 - Results
 - Findings
 - and Conclusions
 - Photos or data as supporting evidence
- v) These verification activities shall include, but not be limited to, First Article Inspection (FAI), Company "E" exam, Factory Acceptance Testing (FAT), Audits and Other Product or Process verification activities. The Company require that all such activities can be viewed, comment upon or participated in by the Company Representative.
 - vi) The contractor is to indicate the process to be applied for any Non-OEM equipment or materials used to support the Overhaul. Any non OEM materials utilised must meet or exceed the OEM standard and shall not modify the life expectancy of any component or system. A list of components and/or systems is to be provided by the Contractor with the Tender Submission.
 - vii) The Contractor is required to detail all 100% changed materials or components and confirm that all change on condition materials or components are included within the offer.
 - viii) Any changes from OEM standard, either in design, material or processes will, prior to being implemented, require formally agreement in accordance with the "Change to Rolling Stock (CRS) process, defined within the referenced Assurance Standard S1538, being completed and approved.
 - ix) The Contractor must confirm that the processes or materials defined by the Contractor and used within the Overhaul will have no adverse effect on service life expectancy and maintenance requirements.
 - x) The Contractor is required to keep records of reasons for change for non-mandatory change items. Where possible actual data recording the reasons is to be maintained and supplied to the

Company on demand to assist in further condition monitoring of the fleet through the next Major Overhaul period.

- xi) During the Overhaul the Contractor is required to maintain a traceability system that tracks any serialised item throughout the processes applied.
- xii) Any float stock is to be returned to the Company at the end of the contract in the same condition it was provided.
- xiii) The Contractor is responsible for providing any specific tooling required to overhaul items in support of this specification.
- xiv) It is not expected that the Contractor will be required to carry out any works to LU depots or within LU depots.
- xv) The Contractor will be required to store and maintain their stock and any Float Materials provided by the Company. Details of such facilities required or provided by the Contractor are to be agreed with the Company.
- xvi) During the joint inward inspection of the wagon at the supplier's site and by means of written record, the work content will be agreed with the Company Representative and the supplier.

The work content will fall into one of three categories:

- a) Core Work. – Work which is identified within this scope as mandatory work.
- b) Menu Work. – Work which is identified within the scope as “on condition”.
- c) Arising Work. – Work that may not be covered in this scope of work but may need addressing.

These items will be controlled both for cost and execution by use of menu structure approach.

2.5 Wagon Acceptance

Contractor

On completion of the overhaul of each wagon the Contractor shall, prior to the wagon being inspected by the company, submit the following information to facilitate the Company inspection. This documentation should be in both hard copy format suitable collated and in electronic format (PDF). The Company Inspection process may be varied to facilitate quicker handover during the programme and as confidence builds.

This information should include but not be limited to:

- Overhaul Scope of Work
- Purchase Order & Variations Orders
- Raw Material Certificates (where applicable)
- Overhaul Process Instruction.
- Route Card (Job Traveller) Completed route cards (Artisan sign off of work undertaken) and record of Final Inspection Sign Off and Measuring Equipment Serial No. (Completed Inspection and Test Plan)
- Certificate of Conformity
- NDT Report (If Applicable) and a copy of Operatives in date NDT Certification
- Concessions (where applicable)
- Evidence of Competency for personal having worked upon the Overhaul of the Wagons
- Pressure Vessel Test Certificate (If Applicable)
- “E” exam result sheets. (Artisan sign off of work undertaken)
- Practical Completion Certificate. (Part 1 completed and signed)

Note: Wagons cannot be submitted for Company inspection without Part 1 of the Practical Completion Certificate (set out in Schedule xx of the Contract) being completed.

Company

After Contractor Completion of the above responsibilities the Company shall carry out an inspection of the wagon by means of a First Article Inspection (FAI). This will include a wagon inspection and a review of the supporting documentation. On Successful Completion of this inspection the Company shall complete Part 2 of the Practical Completion Certificate.

Note: Wagons cannot be accepted or delivered to Ruislip without Part 2 of the Practical Completion Certificate being completed.

On delivery to Ruislip depot, Transplant personnel will assure the wagons fitness to run on the underground.

3 Scope

3.1 General

The work content below represents an overall technical strategy for the Overhaul of the S&B wagons. It does not represent an order in which work should be carried out nor does it review float availability and wagon availability.

All Fasteners are "Mandatory Change" items unless specifically defined within the Scope below.

All fasteners shall be torque tightened in accordance with Transplant torque tightening reference document R2678 unless otherwise stated.

New materials and overhaul services for repairable materials will be provided by the Company excluding standard Fasteners, Cleaning Fluids, Grease & Oils, Welding Materials including Plate materials and Filler Rods and Paint which are to be provided by the Contractor.

3.2 Wagons Structural

3.2.1 Wagon Structure General:

Core Work: Check wagon structure for damage, corrosion and condition of paint. Including Headstock, Longitudinal, Cross Members and Side Bearers. Remove any loose coating materials from Underframe. Structural Repairs necessary will require approval.

Menu Work Paint wagon including replacement of Numbering / Livery as appropriate. (IPL 26.00.01 & IPL 27.02.01) & Drg. 89697C

Menu Work Secure Wagon Side Panels in accordance with Modification Instruction.

This requires 100mm * 100mm * 6mm Mild Steel Angle to be stitch welded into position at the bottom of each Wagon Door/Side Panel on the inner edge to permanently restrict opening of Door/Side Panel in addition to activities described within CRS 2275.

Menu Work Repair Short Longitudinal Members (2 per vehicle end) adjacent to Drawgear where evidence of damage is apparent.

For each Short Longitudinal member adjacent to the Drawgear that shows damage to the surface, Stich Weld a S275 Plate 120mm * 10mm and 50mm longer than the length of damage observed on the outer face of the Longitudinal Section, Plate to be positioned equally around damaged area.

Arising Work: Any structural repair work content required will be undertaken as arising work.

3.2.2 Coupler Aperture in Headstock:

Menu Work: Examine Headstock Coupler Aperture for size and form reference drawing SW/DE/57403 refers.

Menu Work: Remove Headstock Coupler Aperture and replace with New Item (Note will require Jig Assembly complete with Female Pivot Plate and Pivot Plate Structural Members).

Arising Work: Any repair work content required will be undertaken as arising work.

3.2.3 Coupler Female Pivot Plate:

Menu Work: Examine Female Pivot Plate for size and form in accordance with criteria below