Method statement for the fitting of a welded gas supply system

1. General Requirements for the Works to Be Carried Out.

1.1 Safe working and construction procedures

All works will be carried out in accordance with the client's and K & S Pipe Contractors safe working procedures and the Management Procedure for Control and Issue of Permits to Work when applicable.

Site-specific Risk Assessment is to be carried out prior to starting work.

Safe to work form or briefing record sheet to be completed each day prior to works commencing.

"Permit to Work" to be fully complied with or K&S "Hot Works Safety Check Sheet" to be completed prior to works commencing.

The welded gas supply must be constructed as per design.

Comply with all site safety procedures.

In the event of an accident or incident occurring on site the client and the K&S Operations Manager will be contacted and the incident reporting and investigation process started (see **05.12 Incident Reporting and Investigation**).

1.2 Workforce:

A mobile fabrication team consisting of 2-4 personnel will be on site.

All operatives and staff are EUSR registered and hold the Utility SHEA (Gas) qualification.

Welding operatives will hold the relevant welding qualifications.

1.3 Personal Protective Equipment

Relevant personnel protective equipment to be worn when required including as a minimum: - Welding mask, welding gauntlets, hard hats, goggles, flame retardant overalls, hi-vis vest, welding gauntlets, safety footwear, ear defenders, RPE masks and safety glasses.

1.4 Safety Equipment

To include as a minimum: -

Full PPE as above, first aid kit, 2 x dry powder fire extinguishers. volt sticks, continuity bonds, spill kit, cable location tool to be used prior to any drilling taking place for entry positions and pipe supports.

1.5 Welfare arrangements

Welfare facilities and arrangements will be as per job pack.

1.6 Equipment used (subject to site conditions):

3.5 tonne Transit type vehicles, mobile welder generator plant, pressure testing equipment, drilling equipment, cable location tool, standard hand tools required for the fabrication of welded, flanged and screwed connections and for the installation of the pipework.

1.7 Arrangements for the protection of personnel & public:

Any specific risks are to be identified and highlighted on the site-specific risk assessment and control measures put in place to ensure the safety of all personnel who could be affected by the works. The risk assessment will be carried out prior to the start of works each day and be continually monitored, and if necessary adjusted, should site conditions change throughout the duration of the works.

Protective screens will be erected around the area of all welding works to ensure the protection of any third parties and site personnel against the effects of the welding operation.

Ensure that adequate ventilation is available in order for the works to be carried out safely. In the unlikely event of fire occurring all our operatives have been trained in the use of firefighting equipment issued to them.

1.8 Work at height from ladders and steps:

Where it is necessary to work at height using ladders or step ladders for light short duration works. The work area will be assessed to ensure safe use of the equipment can be carried out. The equipment will be visually checked prior to use and confirmed that the inspection tag is present and within date, and then used in a safe manner ensuring three points of contact are maintained at all times. Lone working is prohibited when working at height using ladders and steps.

1.9 Work at height using Delta decks and podiums:

Where it is necessary to work at height using Delta decks or podiums:

- •The work area will be assessed to ensure the equipment can be used in a safe manner.
- •The equipment will be inspected and then used in a safe manner as per the manufacturer's instructions and agreed procedures.

1.10 Work at height from mobile access towers:

Where it is necessary to work at height using a mobile access tower, the tower will be erected by the trained and competent operative. At least one member of the team working on the tower will hold the PASMA Tower User qualification. Each component of the tower shall be inspected prior to use to ensure it is not damaged or in poor condition. Ensure the ground conditions are suitable and unobstructed. Ensure there are no overhead utilities or other apparatus present. A tower tag will be dated on the day of works and attached to each completed tower.

1.11 Scaffolding:

Where work is to be carried out using a supplied scaffold system, the scaffold will be formally inspected and certified by a competent inspector. Prior to works being carried out the scaffold will be visually inspected by the K & S team ensuring that the in date "scaffold inspection tag" and any other required documentation is in place.

1.12 Work at height from a mobile elevating working platform (MEWP):

Where it is necessary to work at height using a MEWP. The MEWP will be positioned, set up and operated by the suitably qualified operator for the equipment being used. No unqualified operative or person present shall operate the MEWP under any circumstances. The operatives shall be briefed by the competent operator on how to descend safely in the event of an emergency. All operatives working in the MEWP will be briefed by the operator and will follow all safe working procedures. Whilst working in the MEWP, harnesses and lanyards will be worn at all times.

1.13 Tool Tethering

Whilst working at height or moving around the working at height access system, where possible all hand tools will be stored in a closed tool bag. Whilst hand tools are being used, where possible they will be tethered via a lanyard attached to the tool and then to a wrist band being worn by the operative or to the working at height system. This system will be implemented to reduce the risk of hand tools falling or being dropped from the working at height access system.

1.14 Environmental considerations:

Measures are to be put in place to ensure that any materials, fluids or fuels will be used and handled in a manner to ensure that contamination of the work area and site does not take place. Liquid materials and fuels, such as paint and solvents, or diesel and petrol fuels, shall be stored within a tray or bunded container to catch leaks and spills.

All operatives have been trained in spill prevention and in the use of the spill kits that are carried on each working vehicle. Nearby watercourses and storm drains shall be identified before work begins and any hazardous material stored at a safe distance.

Cutting machines, portable generators and other such oil and liquid fuel using equipment shall be placed on a spill control mat, tray, or plant nappy.

Noise will be kept to a minimum whilst carrying out works. Consideration shall be given to locations which may be sensitive to noise, such as schools, playgrounds, nursing homes and medical facilities. Dust-generating activities such as drilling, cutting and grinding shall be controlled. Dust suppression equipment shall be used if deemed necessary by the site-specific risk assessment.

1.15 Asbestos

Where required an asbestos survey will be carried out in the working area prior to works commencing. Before commencing works, a visual survey of the works area will be carried out and any known or suspected asbestos will be recorded. As part of the site induction, all staff and operatives will be advised of the location of any known asbestos and instructed to not drill or disturb the asbestos when carrying out works.

If operatives are unsure of any surface they are working on or believe loose asbestos may be in the working area, the procedure will be to stop work until it has been confirmed that the area is free of asbestos and safe to work in.

1.16 COSHH

COSHH Assessments are available for all materials used on site. These can be found on the Team Pack in the SharePoint app, or within the project pack. If hazardous materials are required be used but a COSHH Assessment is not available, do not use the material and contact your Operations Manager.

1.17 Arrangements for the disposal of waste:

Any waste produced by the works carried out will be removed from site and returned to the depot for reuse, recycling or disposal. All hazardous material, including used containers such as paint cans, shall be returned to the depot for safe disposal.

Excess or offcuts of free-issue materials shall be returned to the client depot from which they were drawn.

1.18 Drilling operations to make service entries and to fit pipe supports.

Whilst drilling operations are required to make service entries and to fit pipe supports, every care shall be taken to ensure that the works are carried out in a safe manner. A thorough visual survey and scan of the drilling surface will be carried out prior to the drilling operations taking place.

Where required, to ensure that a full visual survey and electronic scan can be carried out of the drilling surface the removal of kitchen panels etc. will be carried out.

1.19 Pipe joining method:

The pipe system will be joined by using welded, flanged and screwed joints as required by design.

1.20 Testing of pipe work:

The gas supply will be air pressure tested at 100mbar for services and 350mbar for mains to test for gas tightness in accordance with the procedure established in **07.13 Pressure Testing LP and MP**. This pressure test is a 'Proving Test' to ensure to pipe system has been constructed to the correct standard and the final pressure test prior to commissioning will be carried out by either a qualified and competent individual or by the UIP commissioning the pipework as applicable.

1.21 Pipe protection and identification:

The pipe and fittings will be primed and painted and be labelled as gas carrying pipe using an approved adhesive warning tape.

1.22 Commissioning of pipe work:

The commissioning works will be carried out by the client or UIP, as applicable, following completion of the pipe fitting works. When K&S Pipe Contractors are the UIP, a suitably qualified and competent individual shall carry out the commissioning in accordance with 07.15 Purging and Commissioning of Mains and Services (Gas).

1.23 Pipe and fittings and specification:

K&S or the client will supply pipe and fittings to the required specification.

1.24 Meter Work and Outlet Pipe Work (if required):

The disconnection and reconnection of any gas meters and the copper outlet pipe work (the internal copper pipe laid between the new gas meter position and the existing internal pipe work) will be carried out, tested and commissioned by the nominated contractor with the relevant industry recognised qualification and competencies.

1.25 Timber-Framed Buildings:

Service entries to internal meter positions into timber framed buildings should avoid passing through the cavity or any part of the structure of the frame, particularly above the ground floor. If an entry drilling is required above the ground floor, consult the Operations Manager to ensure that structural movement has been catered for by the building developer and by the designer of the project.

Only Surface-Mounted and Inset meter boxes are suitable for use in timber-framed buildings. Inset meter boxes shall only be installed by a qualified contractor who is competent to do so without compromising the integrity of the timber frame.

2. Site Construction

2.1 Method of construction of welded pipe work

Visually check and put on appropriate personal protective equipment to enable works to be carried out in a safe manner.

Carry out site specific risk assessment (to be carried out at the start of each day, shift start or if site conditions change whilst works are ongoing).

As part of the risk assessment and pre-construction checks, survey the planned route, position of pipe work and meter location to ensure no unforeseen risks are present and that effected parties are aware of the works being carried out.

Set up the working area to enable works to be carried out in a safe manner.

Check all safety equipment is available and in good working order.

Visually check all plant, machinery and equipment and complete mandatory inspections. Deploy drip trays, plant nappies, and other leak and spill prevention as applicable for the type of equipment.

Where using ladders, steps, Delta decks or podiums, prepare the work area for the equipment to be used, assemble the equipment as per the manufacturer's instructions and carry out a final inspection of the equipment prior to commencing works.

Where using a mobile access tower, prepare the work area for the tower to be fitted, fit the tower as per the manufacturer's instructions and PASMA guidance. Carry out a final inspection of the completed tower prior to commencing work.

Where using the supplied scaffold. Carry out a visual examination of the scaffold system and confirm that all inspections and documentation is in place including an in date 'scafftag'.

Mark out and drill the external/internal walls and floors of the building and properties to allow for the pipe system to be installed and to make service pipe entries where required. Ensure that no cables, pipes or obstructions are present prior to drilling holes by carrying out a visual check of the surface and surrounding area, along with the use of an electronic cable location tool.

Fit pipe supports to walls, ensuring that no cables are present prior to drilling walls. Ensure that no cables, pipes or obstructions are present prior to drilling holes by carrying out a visual check of the surface and surrounding area, along with the use of an electronic cable location tool.

Measure the pipe to be fitted along route of supply, and where practical, fabricate the pipework system off-site or at a designated site fabrication area rather than 'in-situ'.

When carrying out onsite cutting and fabrication works, erect screens in the working area and prepare the measured pipe ends and fittings for onsite fabrication and positional welds.

Carry out site production and positional welding operations to the required design standard and in accordance with the relevant approved Welding Procedure.

Whilst welding operations are taking place, the area around welding works will continually monitored to ensure that site conditions do not change, and that the works are carried out in a continued safe manner.

Complete the fitting of the pipe system leaving gas emergency control valves/connection points at each meter position.

Inspect the pipe work and ensure that the pipe system is secured to the pipe supports.

Carry out the 350mbar pneumatic pressure test of the completed pipe system in accordance with section 1.20 above. This is a 'Proving Test' only to confirm the integrity of the pipework. The final pressure test shall be carried out by the commissioning UIP, GT or iGT as applicable.

Complete the painting of the pipe work using the approved coating and fit gas identification tape along line of supply.

Ensure that at all times excess pipe, fittings, equipment and waste materials are clear from working platform and surface working areas.

On completion of the works ensure that all materials and equipment are cleared from site and that the site is left in a safe condition.