

Stark Works empowers Selby Power Plant with gas infrastructure expertise

Overcoming challenges and delivering reliable solutions for **peak power generation**.

Background

Stark Works were approached by Welsh Power to install the gas infrastructure for a brand-new power plant, in 2016. The two companies are no strangers; with more than 20 successful project completions in the last two years, Welsh Power are confident in Stark Works' abilities to deliver, and to deliver well.



The project

Work began on the project in late September 2016, with a hand-picked team from Stark Works tasked with constructing a 180mm PE100 pipeline to facilitate a supply to a governor/meter unit. This new pipeline was to be supplied via a Hop Tap under pressure connection from the existing 6" NB steel pipeline.

After contacting the Gas Transporter due to concerns of the significant gas demand, we identified that the Intermediate Pressure (IP) gas main would supply sufficient pressure and capacity for the development.

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Within the gas industry, one of the most frequent – and serious – issues is a lack of gas capacity checks built into a quote. If you're looking for a gas connection quote and it seems too good to be true – a cheaper cost and a compressed timescale, it most likely is.

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Construction Manager, Stark Works



Collaboration with local authorities
and highways authority



Digging trial holes before
any digging began

Challenges faced

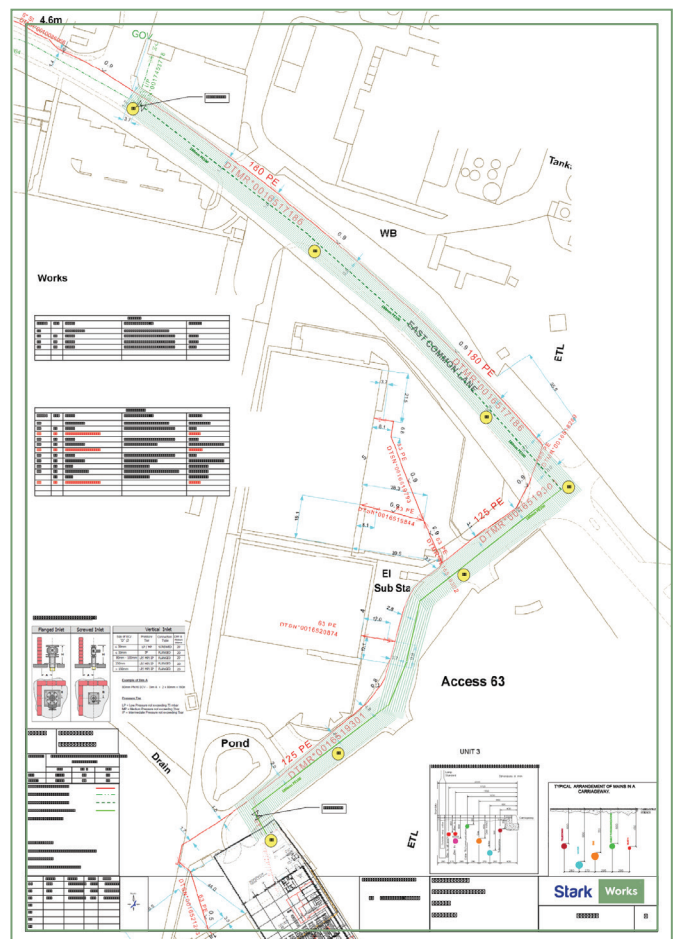
- **Distance and access:** The IP main located half a kilometer away from the site posed logistical challenges, with the proposed pipework route running through a busy access road.
- **Pressure Requirements:** The high pressure (up to 7bar) of the IP main required compliance with stringent safety regulations.

Engineering solutions

- Prior to welding, an ultrasonic scan was conducted to assess the thickness of the existing steel pipe, ensuring its suitability for the welding process.
- A live connection was made onto the existing steel main, successfully joining two meters of new 150mm steel pipe.
- Cathodic Protection System was implemented, with rigorous testing including hydrostatic and pneumatic pressure tests, visual examinations, and NDT inspections.
- Stark Works engineers installed a new 500-meter IP pipe over five weeks, connecting the Selby Power Plant to the gas mains.
- A gas meter operating at 200mbar pressure was supplied and installed, with an IP Turbine Meter designed to meet the plant's load requirements of 16MW.

Successful completion

Despite the challenges, Stark Works completed the project on time & within budget, meeting the satisfaction of both Welsh Power & Selby Power.



Selby site plans

To discuss your gas and electricity
infrastructure needs, contact one
of the team at

enquiries@stark.co.uk