

Mace complete first borehole for Square Mile's first standalone geothermal cooling and heating system

2 years ago



The first of more than 60 240m deep geothermal boreholes has been completed on the Salisbury Square Development, a new civic hub in the heart of the Square Mile, making it the first scheme in the Square Mile to embrace a standalone closed loop cooling and heating solution which removes the requirement of gas.

The boreholes for the ground source heat pump solution are some of the deepest to ever be constructed in the City of London – at a depth of over three quarters of the height of the Shard – and are being installed by the scheme's main contractor, Mace, and subcontractor, G Core.

The geothermal borehole system takes advantage of consistent temperatures deep underground and is the most energy efficient method of heating and cooling using all-electric solutions with power sourced from renewable sources with no burning of fossil fuels.

The development, funded and delivered by the City of London Corporation, will house a flagship facility for His Majesty's Courts and Tribunal Services (HMCTS) and a new state-of-the-art headquarters for the City of London Police. It will also include grade A office accommodation, a remodelled listed building, and an enlarged and improved public realm. The development will strengthen the City's justice system, provide the City of London Police force with the assets and infrastructure to fight cyber, fraud and economic crime, and enhance the City's reputation as a world-leading location to do business.

The completion of the first geothermal borehole is a major step forward for the Salisbury Square Development. The borehole will help to reduce the development's carbon emissions and play a part in the City of London Corporation's commitment to Net Zero by 2040.

Mace, main contractor on the scheme, also has a strong commitment to responsible business. Among the contractor's sustainability ambitions included in its Responsible Business Strategy is the goal of saving 10m tonnes of carbon for clients.

Project Director for Mace Construct, Jeremy Eavis, said: "We are pleased to be supporting the City of London in delivering their high sustainability ambitions for the Salisbury Square development through embracing innovation.

"This network of 60 250m deep geothermal boreholes is the starting point for the ground-breaking installation of a closed loop system ground source heat pump in the City of London. This will mean the Salisbury Square Development will be off the gas grid, dramatically reducing its operational carbon"

Policy Chairman at the City of London Corporation, Chris Hayward said: "This is a significant milestone for the Salisbury Square Development. The completion of the first geothermal borehole is a major step forward in our plans to create a sustainable and low-carbon development.

"We are committed to using innovative technologies to reduce our carbon emissions, reach our Net Zero 2040 target and create a more sustainable London."

Assistant Commissioner Paul Betts, City of London Police said: "This key milestone is the first stage of developing the Future Police Estate, providing state of the art, efficient facilities for the force, whilst creating a far more sustainable footprint. The Salisbury Square development will provide a new headquarters for the City of London Police, supported by the addition of new sites all seeking to improve our sustainability and helping us to better serve our communities in the City."