**Project dates:** September 2017 - December 2019

**Contract description:** Virgin Media - Project Lightning in Heanor, Derbyshire

**What did we do?**

Project Lightning is Virgin Media’s programme dedicated to bringing broadband, phone, TV and mobile to homes across the UK. As a part of this project, we were awarded the installation of high-speed broadband fibre connections to 12,500 homes in Heanor, Derbyshire.

The contract was valued in excess of £6million and was scheduled to be completed within 18 months. As the Principal Contractor, we were responsible for all aspects of the work including CDM Compliance, NRSWA Notifications and Traffic Management.

**What was the challenge?**

As a Supply Partner, we worked in partnership with Virgin Media to identify programme sequences, budgetary control and reduce contingency costs. Through close collaboration, our team supported Virgin Media in discussions with local authority partners by attending joint meetings, providing factual information and formal proposals. Along with other Supply Partners, we agreed traffic management arrangements and supplied crews to assist with the completion of all necessary construction works.

The main activities of this project were:

* Trenching
* Excavation
* Ducting
* Reinstatement
* Cabinet placement & construction
* Local Authority Liaison (NRSWA Notices)

**What was the solution?**

In order to successfully deliver the project, we first carried out a full survey of the area during the design phase. As well as the physical survey, we also carried out Ground Radar Mapping to identify all service types and locations. This was provided to the Designers and Planners and ‘Mapped Data’ to ensure that our team avoided existing infrastructure where possible.

We also provided our own planning team who were responsible for producing the overall programme. The team then gathered the information from the appropriate designer and developed the project’s ‘Construction Information Pack’, containing all of the information necessary for onsite installation including Health and Safety risks, Utility Service Locations and Specialist Engineering Requirements. These documents were issued as an ‘Electronic Package’ - providing works supervisors with continual access through handheld devices whilst on location and ensuring that they were equipped to make any necessary alterations should they be required.

These packs also identified the bundle route from the connection points provided by Virgin Media with the planner specifying ducts to the level 2, 2.5 and level 3 cabinets as applicable. A Toby Box was used as an access point during home installations with these boxes placed on the public highway, adjacent to property boundaries. All Toby Box locations were positioned to support a simple and cost-effective installation, keeping the project on time and within budget for the client. Considerations when locating these boxes included:

* Surface Type (avoiding having to dig across concrete/block paved driveways)
* Vegetation (avoiding large shrubs/trees)
* Likely CPE location (with the Toby Box placed strategically to the TV point)
* Wherever practical, Toby boxes were shared, with one per two homes
* No more than two micro ducts used the same Toby Box