



# L·A·R·S

COMMUNICATIONS

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Providing bespoke radio  
infrastructure solutions

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Established in 1989, LARS Communications Limited is an industry leader in radio site build and antenna system installation and commissioning. We are able to offer clients a range of individual, bespoke services, such as site surveys, tower fabrication, structural upgrades and antenna rigging, or even a total, 'one stop shop' radio site build solution. Whatever your requirement, we provide a comprehensive service with unrivalled quality.



Based in Carnforth, Lancashire, we are ideally located to respond to any customer request quickly and efficiently. We work to the very highest standards to ensure that we maintain our reputation for providing truly innovative solutions, on time, anywhere in the world. All of our work conforms to BS EN ISO 9001 quality standards.

Our mantra is simple. We want to make life as easy as possible for our clients. After all, you've got your own businesses to run without getting involved in the day to day running of another project.

We employ the very best people to ensure that we continue to provide not only outstanding, cost-effective solutions, but also outstanding customer service.





# Fabrication of Structures



LARS has the in-house capability to fabricate and install towers and masts. These include four leg angle structures, three leg tube towers, monopoles and bespoke structures including wall mounted poles and rooftop grillage.



We also have the capability and experience to fabricate and install an extensive array of ancillary steelwork structures, for example staircases and fencing. All of our fabrication work is certified under the CE Marking Scheme.

## In-house capabilities include:

- Cutting
- Punching
- Drilling
- Welding
- Plasma Cutting
- Galvanising
- Transport and delivery
- Pre-stressing structures prior to welding
- Assembly on or off site

LARS has a fully equipped fabrication workshop with welding bays, punching equipment, drilling, sawing and a 2-ton gantry crane. We are also able to produce fabrication drawings using a 3D structural steel detailing and information management system.





# Radio Site Build



Our extensive experience means that we are able to undertake all aspects of the site build, including the design and build of the base structure itself, through the tower fabrication and installation stage, to the final antenna installation.



## Sites built by LARS include:

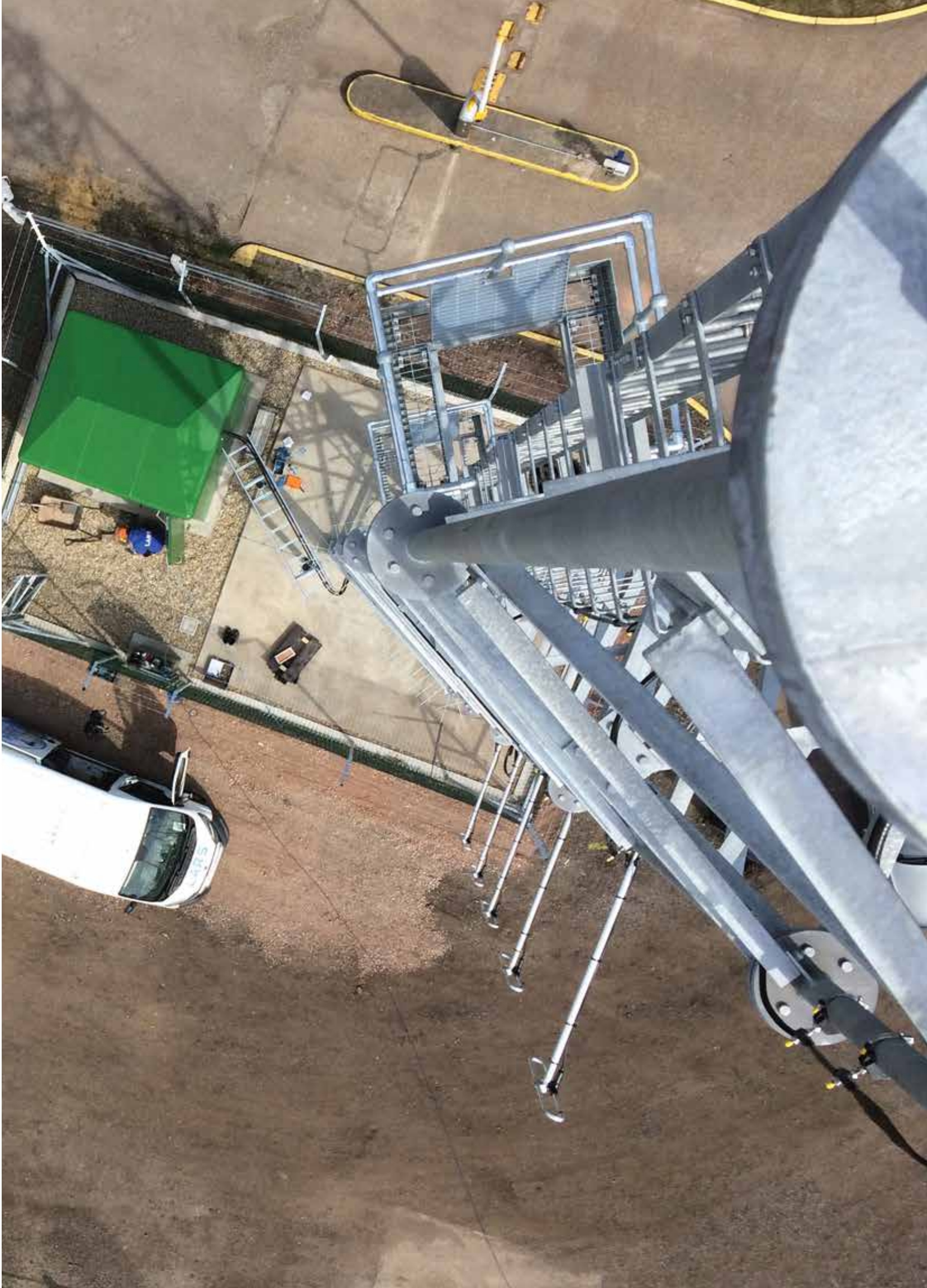
- Tower sites
- Radar sites
- Monopole sites
- Rooftop sites
- Site upgrades
- Wall mounted stub poles

## Services provided by LARS as part of a site build include:

- Providing mobile welfare facilities
- Excavation work

- Duct work
- Earthing works including braised and welded joints
- Testing of earth connections
- Fencing
- Concrete bases
- Shuttering
- Landscaping
- GRP barriers
- Placement of cabins
- Crane lifts
- Tower builds

- Electrical works
- Cable tray and gantry works
- Drainage works
- Chambers and pits
- Re-enforcing
- Site clearance
- Rooftop installations
- Steelwork installations
- Bespoke solutions





# Antenna Rigging, Alignment and Testing



LARS rigging teams are highly trained and qualified and are approved by all major site providers in the UK.



Our attention to detail, combined with years of experience, ensures that all site work is delivered safely and to the highest quality, meeting our clients' specifications and expectations.

Our commitment to the welfare and safety of our rigging teams means that every engineer undergoes regular RF training and refresher climbing/access courses.

**Our service includes:**

- Line of Sight and Install Surveys
- Fabrication drawings for antenna mounting steelwork including face frames, leg mounts and feeder brackets
- Fabrication and galvanising of each of the above
- Onsite installation of the steelwork
- Assembly of microwave dishes
- Installation of dishes, flat panels and shrouded yagi
- Installation of feeder cables and cabling
- Installation of wave guide
- Radio installation
- Wave guide purging and pressurisation
- ODU and IDU installation
- Panning and alignment
- Commissioning





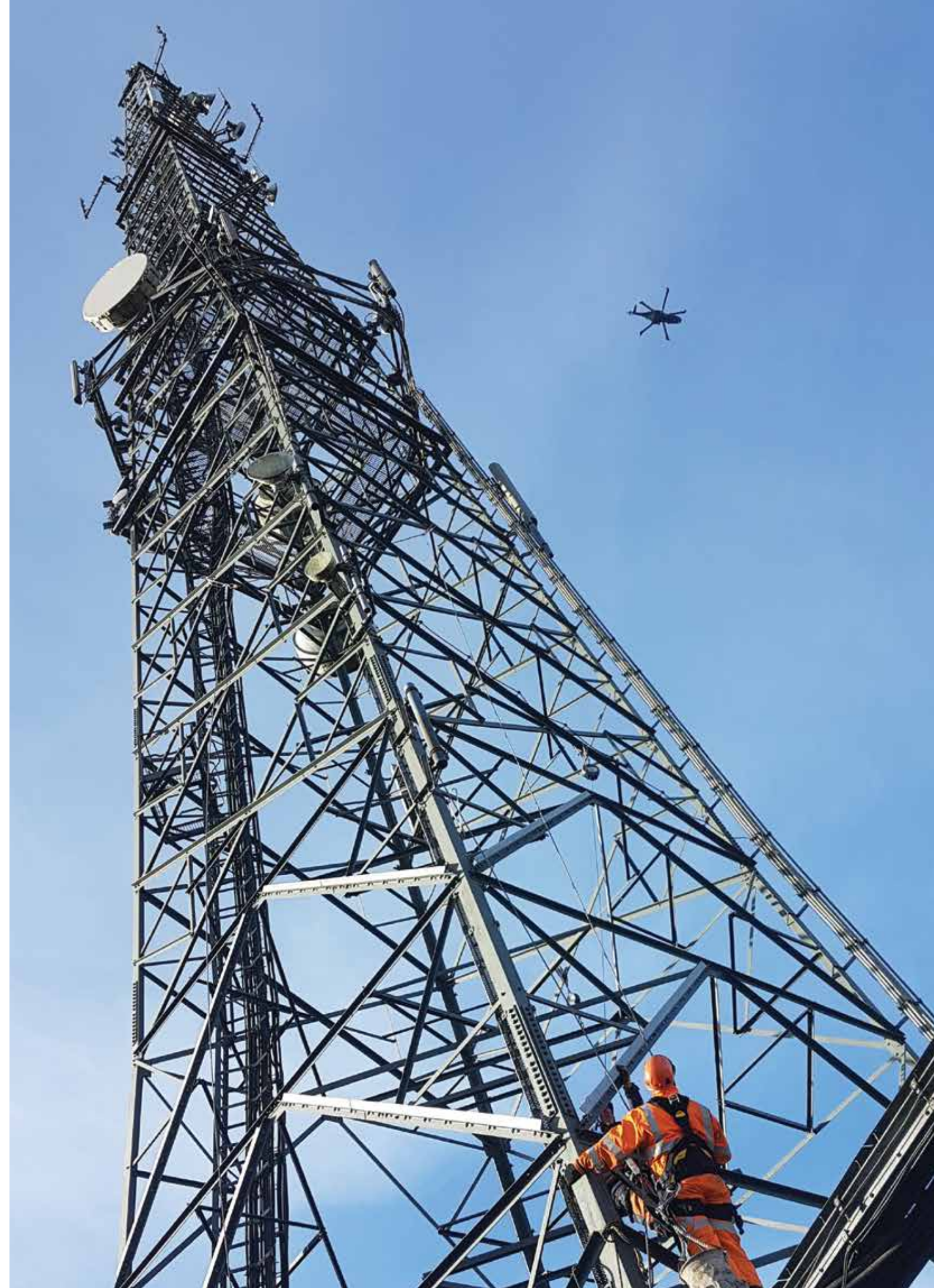
# Site Inspection and Maintenance



Maintenance teams provide an extensive range of services, which include site inspections, surveys and maintenance solutions.



- Safe to climb certification
- Line of sight surveys
- Latchway inspections
- Steelwork anti-corrosion solutions
- Tower and steelwork painting
- Pest control
- Air conditioning maintenance
- Electrical testing
- General building repairs
- Earth testing





# Total Radio Site Solution



Design and Structural Detailing

Construction Management

Site Security

Traffic Management

Ducting, Trenching and Chambers

Tower and Cabin Foundations

Craneage

Tower Supply and Install

Cabin Supply and Install

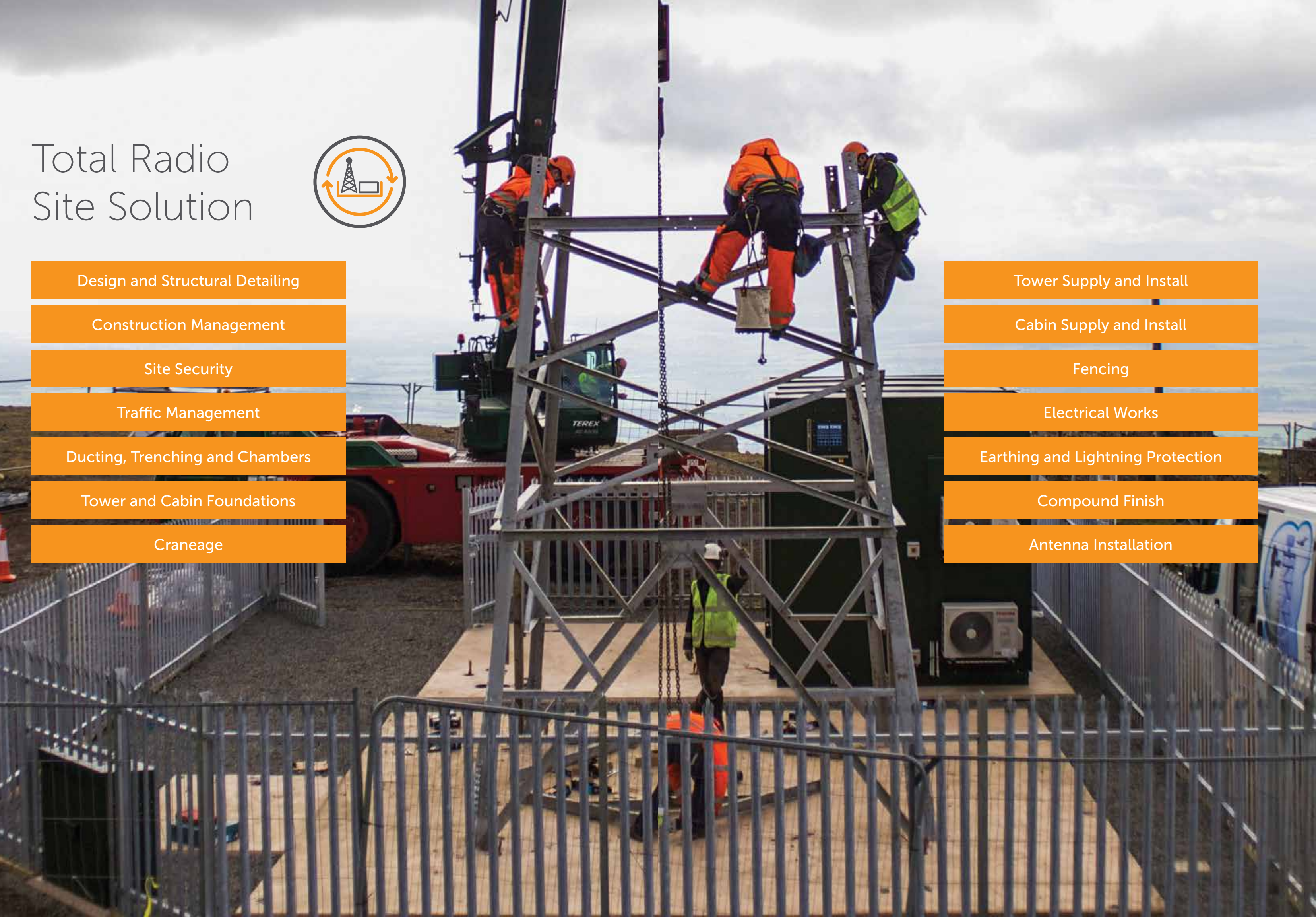
Fencing

Electrical Works

Earthing and Lightning Protection

Compound Finish

Antenna Installation





# Project Management



LARS applies its broad knowledge, skills and techniques to execute projects effectively and efficiently.



We have extensive experience of acting as Principal Contractor and Designer under the Construction Design Management Regulations 2015.

We listen to our customers, working alongside them to ensure that the very best solution is developed.

We provide supervision and coordination of the works, including attendance at all required meetings, as well as production and presentation of reports and certification whenever necessary. We also deliver compliance reports against performance targets set.

We are able to choose from an extensive range of trusted associates and suppliers, helping us deliver projects on time, to an agreed budget, and to the highest possible quality.

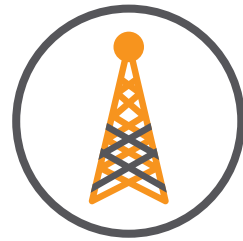
**Project Management Services include:**

- Acting as principal contractor
- Cad drawing
- Preparation of construction health and safety plans
- Planning and programming
- Budget management
- Quality control
- Programme scheduling
- Site inspection
- Compilation of health and safety handover files
- Resource management
- Client liaison
- Briefing and toolbox talks
- Welfare
- Liaison with Design Consultants





# Tower Strengthening and Structural Upgrades



LARS' experience means that we are able to undertake structural analysis on masts and towers and provide detailed reports outlining any issues.



With our in-house, fully equipped fabrication workshop; the ability to produce detailed fabrication drawings using a structural steel detailing and information management system; and our extensive experience installing steelwork on-site, we can provide a comprehensive range of structural upgrades including:

- Conversion of electricity pylons to telecommunications towers
- Tower strengthening on existing structures
- Tower remedial works
- Anti-climb upgrades
- Fall arrest upgrades

- Safe to Climb inspections
- Staircase installation
- Platform installation
- Ladder installation
- Tower extensions

- Tower truncations

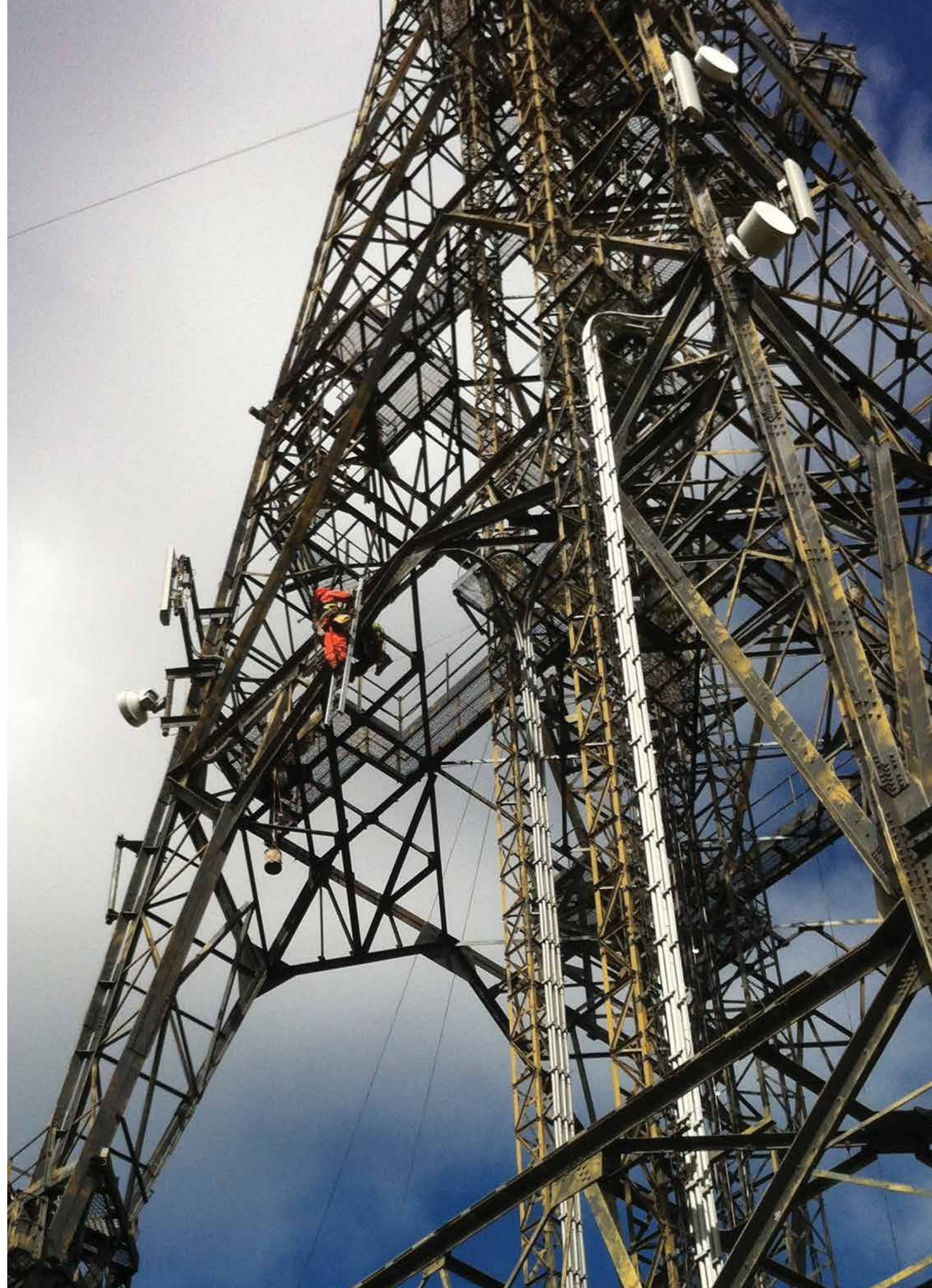
We can also fabricate and install an array of ancillary steelwork, from access gantries and platforms, ladders and handrails to steel brackets, angles and bespoke structural fixings.

We have teams of experienced site personnel, trained and accredited with the Construction Skills Certificate Scheme (CSCS). All LARS installation personnel are highly trained and approved by all major site providers in the UK.

Each team member has the required Arqiva approved working at height qualification and regularly undergoes refresher climbing courses.

## On and off-site Welding Services

LARS welding personnel are skilled and qualified in all areas of the welding process, including metal arc, MIG and TIG. Welding services can be carried out on-site or in our fabrication facility, with the same extremely high standards.





# Line of Sight and Radio Surveys



LARS offers line of sight capability using in-house teams with high power spotlights and our own cherry pickers.



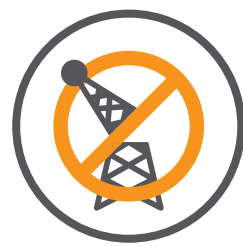
Our comprehensive reporting system covers all elements required to operate an effective microwave system.

- Personnel trained in Radio Test equipment including 1.4GHz microwave, UHF and VHF
- Rapid path verification
- Path clearance and distance verification
- Service used extensively by wireless operators, government and private organisations





# Radio Site Decommissioning



Our decommissioning service can be used as a standalone service, or as part of a 'one stop shop' solution, where we will decommission first generation sites before installing and commissioning new sites.



We carry a waste licence from the Environmental Agency and our Environmental Management System is compliant with the requirements of ISO14001, meaning our customers can be assured of a risk free decommissioning solution.

■ Dish and antenna removal

■ Rooftop clearance

■ Waste removal

■ Tower removal and disposal

■ Sites returned to greenfield status





# Your Guarantee of Quality



We work to the very highest standards to ensure that we maintain our reputation for providing truly innovative solutions, on time, anywhere in the world.



**CE Marking** has become a compulsory requirement for structural steelwork and all UK steel manufacturers have to comply.

LARS is certified under the CE marking scheme. The mark is applied as a declaration to clients that the supplied product conforms to the technical specifications and that relevant manufacturing procedures have been complied with throughout the fabrication process.

We are all extremely proud at LARS in achieving the CE marking accreditation. We have invested significant time, effort and finance to obtain this certification so that our customers can be assured that our workmanship and quality is of the very highest standard.

All of our work also conforms to **BS EN ISO 9001** quality standards.

**CE** CE Marking - Certificate No. 1224-CPR-0748





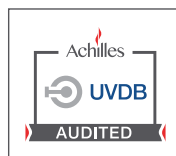
# Accreditations and Contact Details



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