



**TELECOM
SERVICES**

A  QUANTA SERVICES COMPANY

OUR HISTORY

Quanta Telecommunication Services is part of the Quanta Services' family. Quanta Services safely provides engineering, procurement and construction services for comprehensive infrastructure needs in the electric power, pipeline and telecommunications industries. From engineering and design to construction, maintenance and repair, Quanta Services is the complete solution.

The Quanta Services' model is simple: acquire the best companies in the industry and allow them to operate as entrepreneurs. With a workforce over 29,000 employees strong, no single provider can match Quanta's scale and scope of work. Quanta maintains nearly 200 offices, shops, warehouses and yards in strategic locations throughout the U.S., Canada and abroad, positioning Quanta to respond quickly to customer needs, regardless of location.

Quanta Services' safety performance leads the industry. At Quanta, safety is not just a philosophy - it is our core value. Quanta has invested \$50+ million over the last two years to improve employee safety in the work force. Our duty is to complete each and every project incident and injury free. Quanta's goal is a workforce that is focused on safety 24/7, at home and at work.



INDUSTRY LEADER



- #1 2016 - Engineering News Record Specialty Contractor
- #1 2015 - Largest T&D Contractor in North America
- #1 2015 - Largest Pipeline Contractor in North America
- #4 2015 - Forbes Most Trustworthy Large Cap Companies
- #7 2016 - Fleet Owners Top Truck Fleets in the U.S.
- #32 2015 - Solar Power World Contractor Ranking
- #352 2015 - Fortune 500 List



TELECOMMUNICATION SERVICES

Quanta Telecommunication Services offers construction management, construction of underground structures, inspection services related to construction of underground structures and all services necessary for the complete installation, maintenance and repair of underground structures, as part of its Q-Trench Solution brand of services.

NORTH & SOUTH AMERICA SERVICE LINES

- Program Management
- Full-Turnkey FTTH Capabilities
- Wireless
- Make Ready Services (MRE)
- Canada and Latin America Service Lines



TELECOMMUNICATIONS TRAINING FACILITY

Since safety is paramount in everything we do, Quanta Services invested in a 2,200-acre, state-of-the-art training facility located in La Grange, Texas. At Lazy Q, we focus on safety, skill development and certifications. From telecommunications to electric power and pipeline training - Quanta offers the technical training essential to developing a skilled workforce for the future.



TELECOM TRAINING

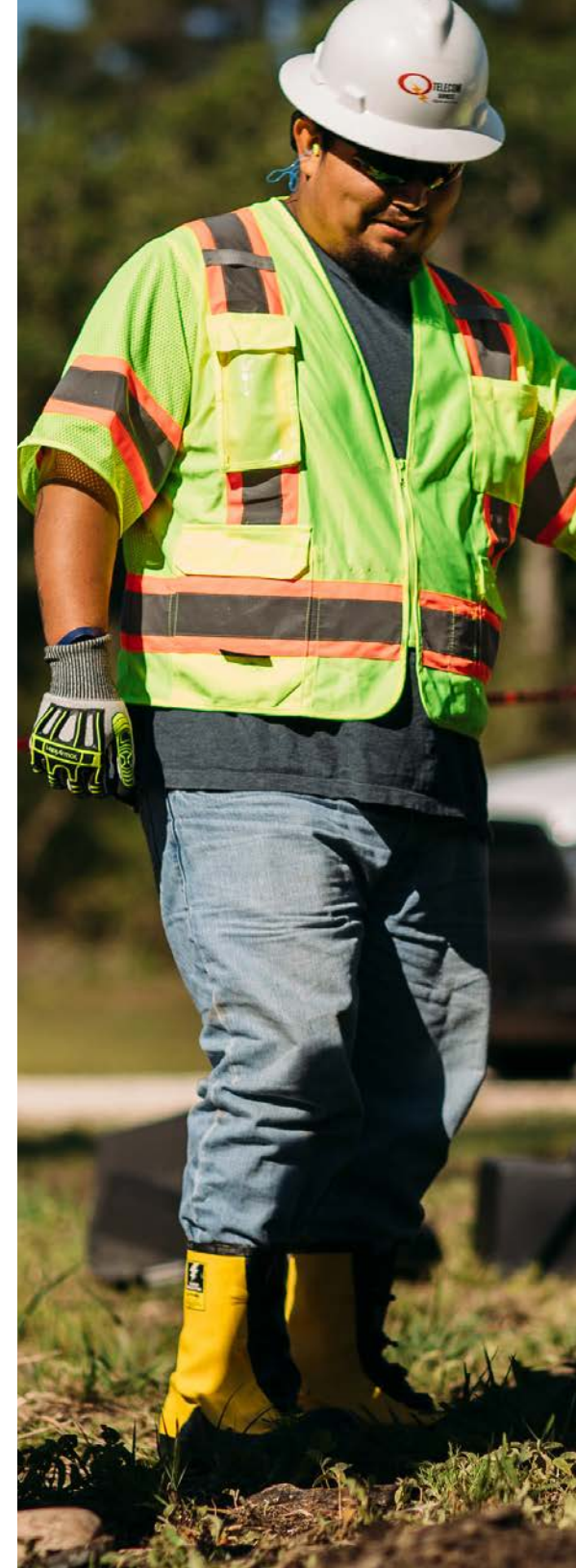
- Lineman Training
- Fiber Splicing
- Micro-Trenching
- Directional Drilling
- Inside Build
- I&R
- Inside Plant
- Lead Remediation
- Research & Development



PROGRAM MANAGEMENT

Quanta Telecom's Project Management group provides direction and coordination of resources throughout the life of a project by using modern management techniques to achieve predetermined objectives of scope, cost, time, quality and participation satisfaction.

- Overall Management of Engineering, Procurement and Construction
- Client Interface and Communication
- Subcontractor / Vendor Interface and Communication
- Resource Planning and Utilization
- Scope Management
- Tracking Program Deliverables
- Project Schedules
- Project Controls
- Budget
- Procurement Management
- Risk Management
- Environmental Compliance
- Safety
- Quality Control
- Community Relations



FULL-TURNKEY FTTH CAPABILITIES

FIBER & 5G BUILDOUT / INSTALLATION

- Turnkey Project Management for EPC Contracts
- Fiber-to-the-Home (FTTH) & Fiber-to-the-Tower (FTTT)
- All Aspects of Fiber Design
- Environment-Specific OSP Walk-Out
- Site / Route Permitting
- Splicing Schematics
- Land Acquisition
- Value Engineering Consulting Services on Fiber Buildout Strategies & Approaches

FIBER BUILDOUT FIELD ENGINEERING

- Determine Best Paths & Methods of Construction Dependent on Environment, Client Needs and Budget
- Expert Data Collection of Field Environment to Create Inclusive & Concise Construction Drawings
- Outline All Make-Ready Necessary to Construct Plant to National / Local Code
- Obtain Permits to Attach to Poles
- Submit Applications to Jurisdictions for Build Approvals

VALUE ENGINEERING & CONSULTING

- Determine Efficient & Cost-Effective Methods to Serve Area via Fiber Sizing, Cabinet Placement, Splice Locations & MDU Requirements
- Draft State-of-the-Art Designs Utilizing the Best Techniques in the Industry
- Input of Construction Drawings, Splicing and As-Built into Client Systems

EPC

More clients are looking to Quanta Telecom for our EPC turnkey capabilities. Our full-service approach alleviates customer worry during the lifecycle.

- Civil Engineering
- Distribution System Modeling & Planning
- Document Control
- Electrical Systems & Reliability Studies
- Environmental Services
- Permitting & Right-of-Way
- Program Management
- Project Management
- Quality Assurance
- Quality Control
- Surveying & Geotechnical Services
- Transmission & Distribution Engineering
- Transmission System Modeling & Planning
- Telecommunication Engineering

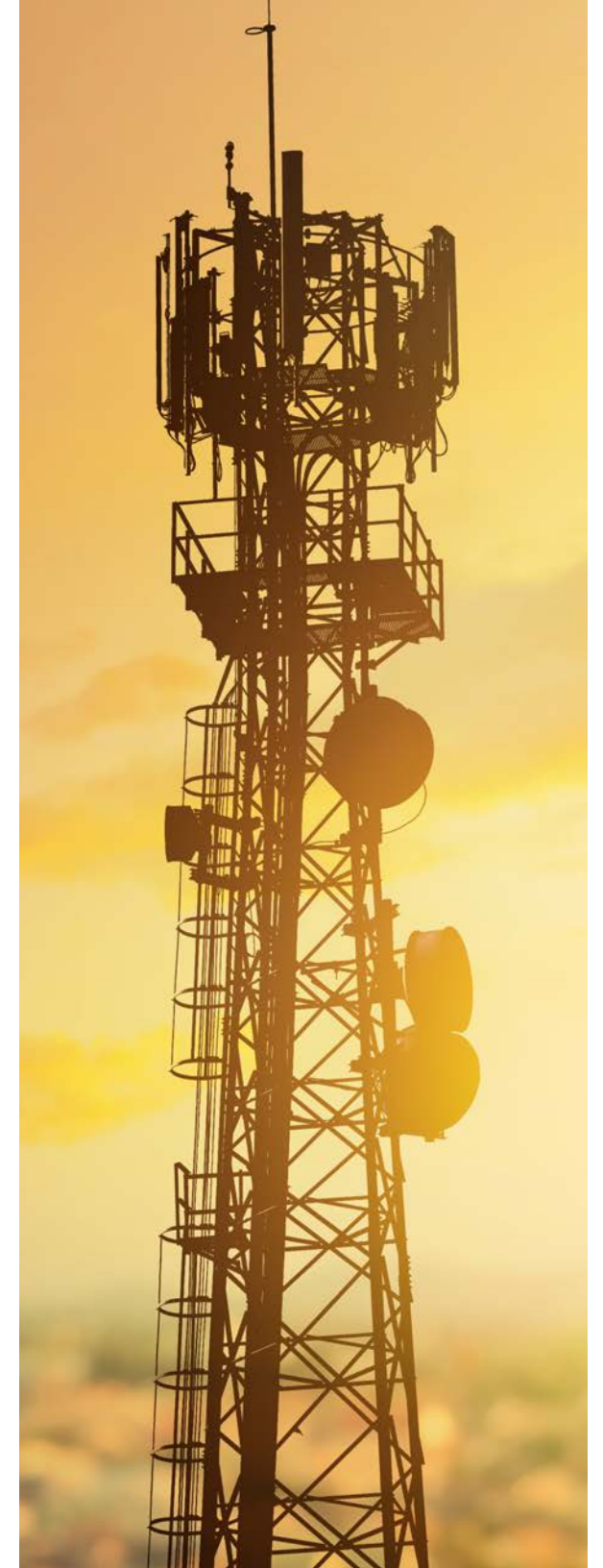
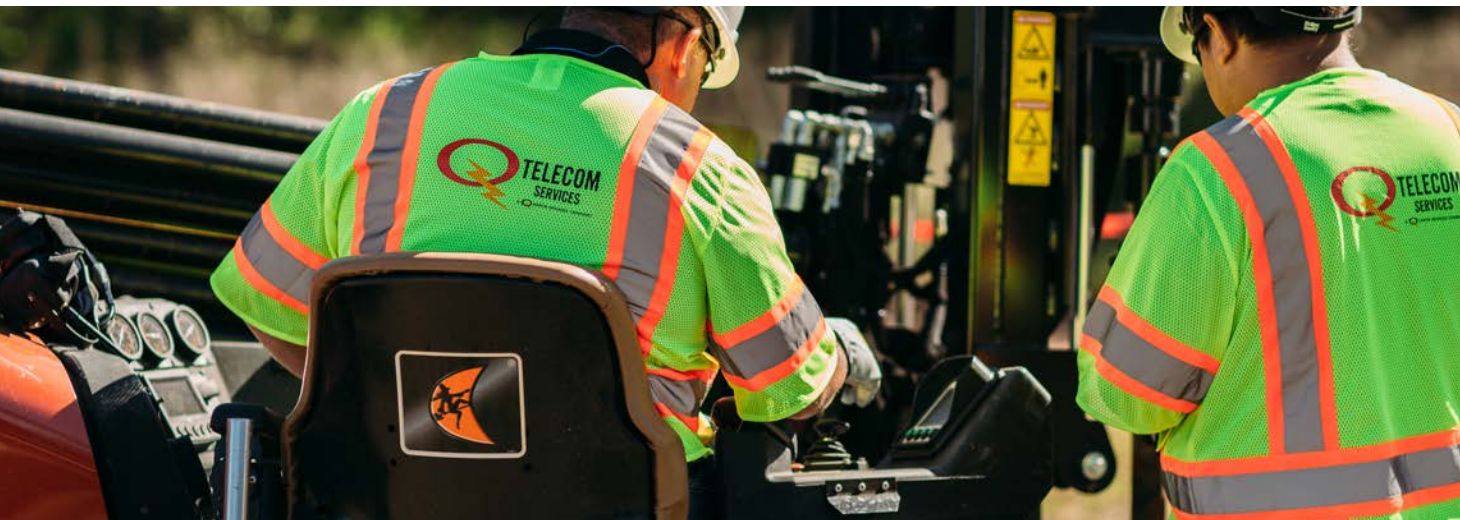
WIRELESS

WIRELESS TECHNOLOGIES

- Conductor Mount Electrical Hardware Study
- Tower Structural Analysis
- Site Drawings and Layouts for Permitting, Landowners and Records
- Hardware Selection and Management

WIRELESS ENGINEERING

- RF Designers
- Real Estate Negotiators and Specialists
- Structural Engineers
- ISP Experts



MAKE READY SERVICES

ADVANTAGES

- Quanta has done electrical engineering & construction for every major utility in the U.S.
- We have developed tools & processes to manage make ready activities
- Authorized Make Ready Engineering (MRE) and Make Ready Construction (MRC) contractor for major electric utilities across the country

INDUSTRIALIZED MRE

- Work Centers that Focus Exclusively on MRE
- Mobile Field Resources
- Process Definitions
- Management Structure Focused on Product Line
- Unrivaled Output
 - Over 3,300 poles through MRE in one week on a single project



INTERNATIONAL

QUANTA TELECOM CANADA

- Variety of service lines ranging from Fiber to the Home (FTTH) to engineering, design and permitting, aerial and underground construction, and many more
- Over 35 years of experience in Canada
- 4,000 pieces of equipment
- 2,500 employees
- www.quantatelecom.ca

LATIN AMERICA LOCATIONS

- Mexico
- Guatemala
- Ecuador
- Colombia
- Peru
- Chile

LATIN AMERICA STRENGTH

- Full EPC capabilities on fiber, wireless and wireline
- +1,000 Projects Executed in 2016
- +1,500 Employees
- Certificates in ISO 9001, 14001 and OHSAS 18001 in Colombia and Peru



ADDITIONAL INFORMATION

For additional information on Quanta Telecommunication Services, and for a full list of open positions, please visit www.quantatelcom.com.

CONNECT WITH US

- **Website:** www.quantatelcom.com
- **Twitter:** @quantatelcom
- **LinkedIn:** Quanta Telecommunication Services
- **FaceBook:** QuantaTelcom





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Quanta Telecommunication Services, LLC

7908 N. Sam Houston Pkwy W. Suite 500

Houston, TX 77064

832.634.0010

www.quantatelcom.com