

Abdulhalim Alrayh Almahdi Ali

Survey Lead | Senior Survey Engineer

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Kingdom of Saudi Arabia

Saudi Council of Engineers

Professional Member

SCE Membership ID: 803297

PROFESSIONAL SUMMARY

Senior Survey Engineer with over 10 years of experience in large-scale infrastructure and industrial projects, including 5 years of dedicated experience in Saudi Aramco projects. Expert in managing survey methodologies, subcontractor oversight, and ensuring high-accuracy spatial data integration within BIM and CDE environments. Proven ability to manage technical office duties, quantity surveying (QS), and providing a 'single source of truth' for engineering data across multidisciplinary project teams.

CORE COMPETENCIES

■ Survey Management

Methodology planning, positional/angular accuracy definition, and precision equipment selection for industrial and infrastructure projects.

■ BIM / CDE Integration

Verified as-built documentation and spatial data; coordinating with BIM/CDE teams to ensure seamless data flow and accuracy.

■ Instrument Management

Managed calibration, verification, and instrument logs for high-precision tools (Total Station, GNSS, Digital Levels, Laser Scanners).

■ HSE Compliance

Expert knowledge of Permit to Work (PTW) systems, working at heights, confined spaces, PPE, and safe working on active industrial sites.

■ Subcontractor Oversight

Lead supervisor for subcontractor survey operations — enforcing project specifications, design tolerances, and strict QC protocols.

■ Technical Office & QS

Expert in preparing detailed BOQs, technical reports, and progress validation to support client payments and project reporting.

■ Software Proficiency

Advanced AutoCAD, Civil 3D, MS Office Suite (expert Excel for QS and cost control), and Geomatics data processing tools.

■ Project Coordination

Liaising between design teams, site personnel, and clients to ensure operational readiness and on-time delivery.

TECHNICAL SKILLS & TOOLS

Survey Instruments	Total Station (Sokkia, Trimble) · GNSS/GPS · Digital & Optical Levels · Theodolite · Laser Scanners
Software	AutoCAD (Advanced) · Civil 3D · MS Office Suite (Expert Excel) · Geomatics Data Processing
Survey Operations	Topographic data gathering · Coordinate control · Horizontal/vertical layout · Subsea pipeline data processing · As-built data management
Languages	Arabic (Native) · English (Professional Working Proficiency — Technical reporting & communications)

PROFESSIONAL EXPERIENCE

Chief Surveyor & Technical Support — New Horizon for Maintenance & Contracting (NHC)

Contractor for Saudi Aramco | Al-Dammam, Kingdom of Saudi Arabia

2021 – Present

- **Subcontractor Management:** Acted as lead supervisor for subcontractor survey operations, enforcing strict adherence to project specifications, design tolerances, and QC protocols on Aramco power station extension projects.
- **Data Validation & BIM:** Verified and approved as-built documentation and spatial data, coordinating with BIM/CDE teams to ensure seamless data flow and high positional accuracy throughout all project phases.
- **Survey Methodology:** Defined and managed survey methodologies and positioning accuracy for large-scale piping and steel installation works on active industrial sites.
- **Technical Office & QS:** Prepared detailed BOQs, technical reports, and daily progress validation to support client payments and reporting to Aramco representatives.
- **Civil 3D & AutoCAD:** Coordinated engineering drawing modifications using AutoCAD and Civil 3D, maintaining compliance with design standards and site requirements.
- **Instrument Management:** Managed calibration, verification, and instrument logs for Total Stations, GNSS units, and Digital Levels to ensure measurement integrity.
- **HSE Compliance:** Enforced PTW systems, working at heights, and confined space safety protocols; ensured timely and thorough reporting to client HSE representatives.

Senior Survey Engineer & Quantity Surveyor — Albalsam for Building and Construction

Al-Ola, Kingdom of Saudi Arabia

2020 – 2021

- Performed quantity surveying and site supervision for landscape and infrastructure works at Prince Abdul Mageed Bin Abdul Aziz Airport.
- Supervised excavation, backfilling, structural alignment, and paving operations; ensured accurate measurements and cost control.
- Managed horizontal/vertical layout works for colored concrete ground, lighting towers, and curbstone installations.
- Prepared progress reports and coordinated with design teams to ensure full compliance with approved plans.

Site Engineer — Sudan Pile for Roads & Bridges (SPRB)

Sudan

2017 – 2020

- Managed all site survey activities for the National Medical Suppliers Fund Store project — a large structural development from foundation through commissioning.
- Produced as-built drawings using AutoCAD; coordinated with HQ design team to reflect all site changes in real time.
- Handled quantities estimation, material control, earth-moving equipment management, and document control.
- Ensured strict HSE compliance on site; liaised with client representatives and government stakeholders.

Survey Consultant Engineer — Sert for Design & Engineering Consultancy

Sudan

2016 – 2017

- Monitored contractor execution of highway road works (Elfashir–Kotom, North Darfour), comparing implementation against design.
- Conducted quantity estimation for road construction projects, ensuring accurate material procurement and budget compliance.
- Modified engineering drawings to comply with site requirements; provided technical advice and HSE oversight.

Survey Trainee — Sudanese Survey Authority

Geodesy & Floor Space Section | Sudan

Aug 2013 – Sep 2013

- Practical training on Digital Levels, Total Station Sokkia, and Total Station Trimble during undergraduate studies.

SAFETY & COMPLIANCE (HSE)

- Strong commitment to HSE requirements on active industrial sites, including Permit to Work (PTW) systems, working at heights, and confined spaces.

- Enforced safety and quality standards during field operations, ensuring thorough and timely reporting to client representatives.
- Directed site crews on all safety instructions; maintained zero-incident record through proactive HSE management.

EDUCATION

Bachelor of Survey Engineering (BSc. Honours)

Omdurman Islamic University (OIU) | Sudan | Graduated: Second Upper Class

2011 – 2016

PROFESSIONAL REGISTRATION

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