Muhammad Abu Bakr

PROFESSIONAL LAND SURVEYOR AND CIVIL 3D DRAFTSMAN

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Father Name	**Muhammad Abu Bakr**	**Gender**	**Male**
Nationality	**Pakistani**	**SEC Reg**	**983724**
Marital Status	**Married**	**Visa Type**	**Transferable**
		Date of Birth	**09-03-1996**

PROFESSIONAL SUMMARY

Highly skilled Land Surveyor with **10 years**' experience in construction surveying for building and electrical projects, including substations, GIS buildings, and precast structures. Proficient in using Total Station, GPS, AutoCAD, and Civil 3D for topographic surveys, alignment, scaling, and preparation of as-built drawings. Proven track record in setting out foundations, anchor bolts, cable tunnels, and structural elements with millimeter accuracy. Adept at coordinating with civil and electrical teams to ensure precise execution, compliance with design tolerances, and timely project delivery.

CORE COMPETENCIES

- Land surveying using GPS, total stations, and digital levels.
- CAD drafting and mapping in Civil 3D.
- Boundary and topographical surveys.
- Project coordination and stakeholder communication.
- Construction Staking & Site Layout.
- Horizontal & Vertical Control.
- CAD & Survey Software (AutoCAD, Civil 3D, Revit).
- Control Point Validation.
- Survey Plats & Legal Descriptions.
- Survey Data Analysis & Quality Control.
- Quality Control & Data Verification.
- Zoning, Land Use, & Legal Compliance.
- Team Leadership & Staff Development.
- Reporting & Technical Drawings Preparation.
- Compliance with legal and regulatory standards.
- Construction layout and quantity estimation.
- Aerial Photogrammetry.
- Time and Resource Management.

1. SENIOR LAND SURVEYOR **09/2022 to Current Diriyah Gate Super Basement Package-2**
FIRST GULF COMPANY **Riyadh, Saudi Arabia**

2. LAND SURVEYOR **04/2020 to 06/2022**
AL RASHID TRADING & CONTRACTING CO. (RTCC) **Jizan, Saudi Arabia**

3. LAND SURVEYOR **06/2016 to 03/2020**
SHAPOORJI PALLONJI MIDEAST LLC **Riyadh, Saudi Arabia**

4. LAND SURVEYOR **06/2012 to 03/2015**
GHI GULF HOME BASE INTERNATIONAL CONSTRUCTION CO.
Afghanistan

5. LAND SURVEYOR **06/2011 to 03/2012**
SGC SHAMS GROUP INTERNATIONAL CONSTRUCTION CO. **Afghanistan**

PROFESSIONAL EXPERIENCE

- Conducted complex land surveys for the Diriyah Square Package-2 Super Basement, ensuring accurate data collection and compliance with engineering standards.
- Conduct detailed land surveys to capture ground levels, contours, and natural/man-made features.
- Prepare a topographic map for design and layout.
- Establish permanent benchmarks and control points (horizontal & vertical) to be used during construction.
- Mark foundations for transformers, GIS equipment, gantries, control building, cable trenches, and roads.
- set out the exact tower positions for 380 kV & 132 kV incoming/outgoing lines.
- Check depth and alignment during foundation excavation.
- Verify formation levels before concrete works.
- Precisely position anchor bolts and foundation inserts for transformers, GIS equipment, and gantries.
- Set out verticality and alignment of steel columns, beams, and gantries.
- Align circuit breakers, isolators, current transformers (CTs), potential transformers (PTs), busbars, and GIS modules.
- Survey alignment for trench routing and verify slopes for drainage.
- Layout and alignment of foundation and walls.
- Verification of floor levels and cable entry points.
- Setting out equipment rooms and panels inside the control building.
- Record final positions of all equipment, foundations, buildings, and cable trenches.
- Prepare Low & High Current Cable& Trench as-built drawings for client handover.
- Checked formation levels and reinforcement placement before concreting.
- Set out excavation limits and foundation coordinates.
- Precisely positioned anchor bolts and inserts for GIS equipment.
- Controlled verticality and alignment of columns, walls, and slabs.
- Verified floor levels, door/window openings, and embedded items.
- Set out foundations, walls, and partition grids as per approved drawings.
- Monitored slab levels and floor finishes.

- Marked cable entry points, trenches, and embedded conduits.
- Ensured correct slope for water drainage inside tunnels.
- Checked access points, manholes, and duct bank connections.
- Prepared as-built drawings of GIS building, control building, and cable tunnel.
- Collected topographic data for tower spotting and sag-tension calculations.
- Conducted peg marking for exact tower positions as per approved alignment.
- Marked tower centers and four legs with precise coordinates.
- Verified diagonal and leg spacing as per tower type.
- Coordinated with civil team for excavation and foundation works.
- Checked excavation depth and size against drawings.
- Verified template and stub setting (anchor bolts/tower stubs) to ensure verticality and alignment.
- Rechecked stub coordinates before and after concreting.
- Verified verticality and plumbness of towers during erection.
- Ensured correct orientation for cross-arms and phase conductors.
- Checked mid-span clearances and obstacle crossing levels.
- Assisted in determining sag and tension points for conductors and earth wires.
- Conducted final survey of all tower positions, profiles, and conductor clearances.
- Ensure foundation top levels match design to receive precast elements.
- Survey exact location and verticality of precast columns.
- Position wall panels and ensure alignment with grid lines.
- Set out positions for precast beams, double tees, hollow-core slabs, and staircases.
- Check levelness and bearing seat alignment before installation.
- Verify alignment of dowels, sleeves, and embedded plates.
- Verify openings (doors, windows, ducts) match design positions.
- Survey alignment of facade panels, cladding, and precast boundary walls.
- Verify floor levels and slopes for drainage inside the building.
- Set out service ducts, shafts, and MEP entry points.
- Submit survey reports confirming compliance with design tolerances.
- Prepare as-built drawings of foundation, columns, panels, and roof.
- Create digital terrain models (DTM), contour maps, and profiles.
- Adjust coordinates, apply transformations, and clean data for accuracy.
- Continuously update AutoCAD drawings with as-built modifications.

- Cross-check field survey points with AutoCAD design drawings.
- Prepare as-built drawings (foundation, structural works, utilities, roads, buildings).
- Perform topographic surveys (ground levels, contours, utilities, and existing structures).
- Create layout drawings in Civil 3D for grid lines, foundations, column centers, and walls.
- Export setting-out coordinates for Total Station to mark on site.
- Model routes for cable trenches, tunnels, duct banks, and gantry foundations.
- Update Civil 3D surfaces and alignments to reflect site progress.
- Use Civil 3D profiles and sections for earthworks, drainage, and cable duct slopes.
- Import surveyed coordinates into Civil 3D to generate as-built models.
- Submit final survey reports, surfaces, profiles, and AutoCAD Civil 3D files to client/consultant.
- Generate scaled align layout drawings for foundations, columns, walls, slabs & MEP services.

TECHNICAL PROFICIENCIES

- AutoCAD Civil 3D, Revit, AutoCAD
- Boundary Surveys, Topographical Surveys, Construction Layout, As-Built Surveys
- Contour Mapping, Profile Cross-Sections, Quantity Calculations
- Importing field notes into CAD systems for seamless workflow
- Total Station (Leica, Topcon, Trimble).
- GNSS / GPS Equipment.
- AutoCAD, Civil 3D
- Microsoft Office (Excel, Word, PowerPoint).
- Survey Data Processing & Quality Checking.
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- AutoCAD, Civil 3D
- Microsoft Office (Excel, Word, PowerPoint).
- Survey Data Processing & Quality Checking.

PERSONAL SKILL

- Leadership & Team Management.
- Excellent Communication.
- Critical Thinking & Problem Solving.
- Initiative & Self-Motivation.
- Time Management & Work Under Pressure.
- Well-Organized & Detail-Oriented.
- Physically Fit for Field Assignments
- Well Organized
- Ability to Work Under Pressure
- Attention to Detail
- Creativity

KEY ACHIEVEMENTS

- Developed and managed master plans, cross-sections, and contour maps for large-scale projects using Civil 3D.
- Improved project outcomes by identifying and resolving errors in technical drawings, enhancing accuracy and reducing delays.

- Led multiple survey teams to deliver precise data, ensuring seamless collaboration between field crews and project stakeholders.

EDUCATION

Diploma in Civil Engineering.
[Polytechnic Institute Peshawar, Pakistan– 2015

CERTIFICATIONS & LICENSES

- **National Logistic Cell (NLC)** *Certification*
- **National Vocational & Technical Training Commission (NAVTTC)** *Certification*

LANGUAGES

- **English** - *Fluent*
- **Arabic** - *Intermediate*
- **Urdu** - *Fluent*
- **Pashto** – *Native*

REFERANCE

Available upon request.