

### VALUE PROPOSITION

#### Experienced CAD Engineer | BIM Specialist | Senior Draftsman Professional

A highly skilled and purposeful CAD Engineer and BIM Specialist with over 16 years of experience leading complex infrastructure projects in the Middle East and Africa. Expertise spans across design review, rebar detailing, and the creation of detailed technical drawings for large-scale projects, including the Grand Ethiopian Renaissance Dam and Riyadh Metro. Adept at collaborating with multidisciplinary teams, ensuring adherence to project specifications, and maintaining seamless communication throughout the project lifecycle. Enthusiastic about integrating innovative BIM technologies to optimize project execution, enhance productivity, and deliver high-quality outcomes. Eager to leverage my ability in CAD, BIM, and DRAFTING to drive success in future international infrastructure projects.

### EDUCATION

- **DRAUGHTSMAN – CIVIL |**  
**May 2003 – July 2005**  
National Council for Vocational Training
- **DIPLOMA IN COMPUTER APPLICATIONS |**  
**Mar 2001 – Sep 2001**  
C-DAC, Ministry of Information Technology, Government of India
- **PRE-DEGREE COURSE (P.D.C) |**  
**Mar 1999 – Mar 2001**  
Kerala University
- **SECONDARY SCHOOL |**  
**Mar 1999**  
General Education Department, Kerala, India

### TECHNICAL COMPETENCIES

- **CAD & Drafting Software Expertise:** AutoCAD (2D & 3D), AutoCAD Civil 3D, Micro Station.
- **BIM & 3D Modelling:** Revit Architecture, Navisworks, Global Mapper, Bentley OpenRail Designer, Bentley OpenTunnel Designer.
- **Structural & Civil Engineering Drafting:** Design and detailing for infrastructure, Roads, Dams, and Metro systems.
- **Rebar Detailing & Bar Bending Schedules**
- **Clash Detection**
- **Model Coordination**
- **LOD (Level of Development)**

### WORK EXPERIENCE

#### WEBUILD S.P.A. | Dec 2019 – Present (Most recent employer)

Grand Ethiopian Renaissance Dam Project (GERDP) (Most recent project)  
CAD Engineer (Most recent job)

Benishangul Gumuz, **Ethiopia** | Project Cost: **\$5.2 Billion**

- Develop and maintain detailed technical drawings, 3D models, and shop drawings in accordance with project specifications.
- Reviewed contract drawings within the technical department to ensure accuracy before project execution.
- Produced detailed construction documentation in Revit, aligned with BIM Execution Plans (BEPs).
- Review and ensure all drawings adhere to company QA/QC standards and project requirements.
- Skilled in developing detailed models across various Levels of Development (LOD 100–500).
- Contribute to the BIM model, encompassing architectural, structural, mechanical, and electrical elements, ensuring alignment with the BIM Execution Plan.
- Prepare shop/structural drawings using AutoCAD, Revit, and AutoCAD Civil 3D. Consulted with site Engineer and Consultants for any deviations in the field regularly and kept a record of the quantity of all works completed at the site.
- Integrated point cloud data to create precise as-built BIM models for renovation and extension projects, ensuring accuracy for the design team.

#### CMC DI RAVENNA ITINERA JV | Jan 2019 – Aug 2019

Error and Kimwarer Multi-Purpose Dam Project

Senior Draftsman

Eldoret, **Kenya** | Project Cost: **\$0.63 Billion**

- Produced accurate construction and shop drawings, ensuring compliance with project specifications.
- Assisted in design development and provided drawings for site facilities.
- Proficient in Revit, AutoCAD, Navisworks, and BIM 360, with firsthand experience in creating custom families and managing LOD standards.
- Supported BIM data integration to aid decision-making and project efficiency.
- Coordinated project activities, ensuring effective resource allocation and on-time delivery. Developed and maintained bill of quantities (BOQ) for various infrastructure projects, contributing to accurate cost estimations and resource allocation.

## CORE COMPETENCIES

- **CAD Design & Drafting:**  
Expertise in creating precise technical drawings, rebar detailing, and 3D models using AutoCAD and Civil 3D.
- **BIM Management:**  
Skilled in integrating BIM across multiple disciplines for project alignment and optimization.
- **Project Coordination:**  
Strong collaborator with architects, engineers, and clients to ensure seamless project execution.
- **Quality Assurance:**  
Proficient in reviewing designs for adherence to specifications and QA/QC standards.
- **Rebar Detailing & scheduling:**  
Experience in rebar detailing and creating bar bending schedules.
- **3D Modelling & Visualization:**  
Expertise in 3D modelling to enhance project visualization and decision-making.
- **Site Engineering:**  
In-depth knowledge of site management, ensuring safety, quality, and efficient resource allocation.
- **Infrastructure Design:**  
Experience in designing drainage systems, earthworks, and storm water management solutions.
- **Problem-Solving:**  
Skilled in identifying and solving project challenges to ensure timely, high-quality delivery.
- **Collaboration & Communication:**  
Collaborates effectively with architects, engineers, and contractors to maintain model integrity and support project milestones from concept to completion.

## SALINI IMPREGILO | Mar 2014 – Dec 2018

Riyadh Metro Project Package-2 Line-3

Senior Draftsman

Riyadh, **Saudi Arabia** | Project Cost: **\$25 Billion**

- Developed construction drawings for elevated and underground stations, ensuring accuracy and compliance with client specifications.
- Prepared topographic survey drawings, relief maps, and detailed sections for earthwork and tunnel stations.
- Design and detailing of construction site facilities such as civil camps and industrial sites with the aid of AutoCAD civil 3D to produce plans to used quantity tack off and construction.
- Created a library of over 150 custom, parametric Revit families, significantly improving modeling speed and consistency across the team.
- Contributed to the creation of detailed templates and coordinate systems for smooth project execution.
- Supported infrastructure and landscape design documentation for project planning.
- Utilized AutoCAD and Revit to create 3D models and visualizations for complex infrastructure projects, enhancing project understanding and communication.
- Developed comprehensive civil drawings including grading, erosion control, utility layouts, and drainage profiles for both residential and commercial projects.
- Created detailed architectural plans, elevations, and room layouts, ensuring optimal space utilization and functionality.
- Produced maps for special reports, including accurate house counts and zoning analysis.
- Updated and maintained county sewer and water infrastructure maps utilizing as-built documentation.
- Modified topographic and contour mapping for clients, enhancing their understanding of land changes.
- Utilized aerial photography to provide clients with clear visual representations of property changes.
- Ability in 3D BIM modeling, parametric family creation, and generating construction documentation using Autodesk Revit.
- Proficient in coordinating federated models and performing clash detection analysis with Autodesk Navisworks Manage.
- Coordinate with multidisciplinary teams including Survey, Planning, and Quantity Surveying to ensure project alignment.

## HUSSAIN ALI AL MAHROUS (HAMCO Arabia) | Apr 2013 – Mar 2014

Waste Water Treatment Plant Saudi Aramco (YASREF) Project

Draughtsman

Yanbu, **Saudi Arabia**

- Produced detailed shop drawings, following Saudi Aramco's stringent standards and client specifications.
- Contributed to site coordination and ensured accuracy of drawings for construction activities.
- Developed 3D models for enhanced project visualization and decision-making.
- Issued detailed sketches for contractors and assisted with site inspections and drawing coordination.
- Updated existing plans based on site assessments, ensuring correct representation of current conditions.
- Translated conceptual designs and survey data into accurate construction plans for highways, drainage systems, and utility corridors.
- Assisted in the preparation of as-built drawings upon project completion, ensuring accurate documentation for facility management.

## INFRASTRUCTURE PROJECT EXPERIENCE

- **Roads & Highways**
- **Bridges**
- **Water Supply Systems**
- **Sewer Networks**
- **Stormwater Management**
- **Subdivision Planning**
- **Urban Infrastructure**
- **Rail or Metro Systems**
- **Site Development Projects**
- **Residential / Commercial Projects**
- **Dams and hydropower projects**

## PERSONAL DETAILS

- **Gender:** Male
- **Nationality:** Indian
- **Languages:** Malayalam, Tamil, Hindi, English, and Arabic
- **Passport Number:** S9884652
- **Driving Licenses:** India & Saudi Arabia
- **Marriage status:** Married (Two Children's)
- **Date of birth:** 26-May-1983

## REFERENCE PERSON

- **Name:** Andrea Bongiorno

**Position:** Former Technical service manager Grand Ethiopian Renaissance dam project.

**Email:**  
a.bongiorno@webuildgroup.com

**Contact:** +39 333 756 7588

- **Name:** Biagio Paglialonga

**Position:** Chief Technical Office Engineer Grand Ethiopian Renaissance dam project.

**Email:**  
b.paglialonga@webuildgroup.et

**Contact:** +39 338 776 3664

## NESMA & PARTNERS | Jun 2012 – Mar 2013

Jeddah Storm Water Drainage Project | Wadi Briman & Wadi Ghea Dam  
CAD Operator

Jeddah, **Saudi Arabia**

- Generated detailed profiles, sections, and shop drawings for dams, spillways, and drainage systems.
- Maintained and updated Request for Information (RFI) logs, ensuring accurate construction data.
- Supported the development of electrical line diagrams and other key infrastructure documentation.
- Assisted engineers in translating rough sketches and concepts into detailed construction drawings.
- Drafted civil plans for sewage disposal systems highways and other major infrastructure projects.
- Collaborate with architects, engineers, and clients to ensure seamless integration of design and construction phases.
- Providing technical support to the project implementation team through offering technical ability, interpreting structural drawings, managing contractors and project staff.
- Managed the model federation process, coordinating with structural and MEP teams to create a clash-free, integrated project model.
- Generated a full set of construction documents, including plans, elevations, sections, and details, directly from the central Revit model.
- Developed detailed drawings for reinforced concrete structures, including foundations, columns, beams, and Retaining walls.

## P&R CONSTRUCTION | May 2008 – Apr 2012

Various Projects for Kerala State Public Works Department

Site Engineer

Kerala, **India**

- Managed construction projects, ensuring adherence to timelines, budgets, and quality standards.
- Coordinated procurement of materials and supported daily progress.
- Collaborated closely with consultants and contractors to ensure efficient project execution.
- Assisted senior engineers in project planning, resource allocation, and progress scheduling.

## Center of Science and Technology for Rural Development (COSTFORD) | Mar 2006 – Apr 2008

Managed rural development projects, focusing on eco-friendly and cost-effective construction methods.

Site Engineer

Kerala & Tamil Nadu, **India**

- Managed rural development projects, focusing on eco-friendly and cost-effective construction methods.
- Led site inspections and supported drawing coordination for accurate project documentation.
- Contributed to cost analysis & feasibility studies for various construction.
- Provided on-site project oversight, ensuring safety, quality, and compliance with project plans.
- Conducted site investigations to gather project requirements and environmental data, producing detailed reports and site plans that guided design and construction phases.
- Project documentation using Microsoft Word and Excel, project tracking and budgetary control and advisory to ensure prompt and cost-effective delivery of projects; and writing up project closure reports.