I am a Post-Graduate (Masters) in Transportation Engineering, National Institute of Technology (NIT) – Warangal. I have 11 years of experience at all stages of the planning, design and construction of highway schemes, town ship and Infrastructure development projects in India, Middle East and Africa.

Major thrust areas cover Road design, Feasibility & Detailed Engineering studies for various infrastructure development projects. These include Feasibility and Detailed Engineering Studies for State and National highways in **India**,Conceptual and Detailed Engineering Studies for interchanges viz Isa Town Gate (3 – Level Grade Separated Interchange), Zallaq Junction (2 – level grade separated interchange) in **Bahrain,** Detailed Engineering Studies for National Highways in **Sudan** (Africa) and in LRDP project (Atkins) and Conceptual and Detailed Engineering Studies for Local Roads, Rural Roads and Urban Roads (Ashghal, **Qatar**) with the use of DMRB, AASHTO, Kuwait, Dubai, Bahrain and Qatar Road Design Manuals (QHDM) and Indian Roads Congress (IRC) guide lines.

Work handled includes site studies in connection with design and analysis of traffic, geotechnical, material investigations, topographic, road & bridge inventory survey and pavement evaluation studies. Handling computer aided design programmes such as MX Road V2.5, MX Road V8XM, MX Road V8I (formerly Moss), AutoCAD Civil3D, AutoCAD LDD etc., and other programmes AutoCAD, Micro station for preparation of design/construction drawings, reports and estimation of quantities. I have extensively used AASHTO, TRL, and IRC guide lines for design of pavement structures. Formulation of construction methods, specifications, tender documents, quality assurance plans, construction supervision manuals, maintenance manuals for expressways, National and State highways and network of roads in plain, rolling and hilly terrains.

Presently working with W.S Atkins, Doha (Qatar) since 2 years. I was with Newtech Consulting Group, Khartoum (Sudan) for 2 and half years and 2 years with Hyder Consulting Middle East Ltd (UK), Bahrain as Highway Engineer before I started working here. During last 10 years, I have handled the Highways Design tasks (road schemes, complex interchanges and junctions with extensive use of road design modelling software MX Road (MOSS) and Civil3D. I have also acted as design coordinator and solved the design issues during construction. I was also responsible in issuing the RFC’s (Request for clarifications).

I am enclosing my CV for your perusal. Please let me know if you would like to know more information about my projects.

Looking forward for your reply,

Thank you,

With warm Regards,

Gangadhar Vaddemanu

Name : Gangadhar Vaddemanu

Name of Group : WS Atkins & Partners Overseas

Profession : Civil Engineering

Position in Group : Engineer

Specialisation : Highways and Transportation Engineering

Date of Birth : 26th Jan, 1982

Years of joining Group : Since July, 2012

Nationality : Indian

Marital status : Married

Contact info : Email: [ganguhighway@gmail.com](mailto:ganguhighway@gmail.com)

Mob: +974 33183114

**Key Qualification:**

**Mr. Gangadhar Vaddemanu** a Graduate in **Civil Engineering** from Osmania University, Hyderabad, Andhra Pradesh, India, Masters in **Transportation Engineering** from National Institute of Technology (Warangal), India. I have 11 years of experience in the field of Highway Engineering including 4 and half years in the **Middle East (Bahrain & Qatar)** and 2 and half years in **Africa (Sudan)**. My areas of specialization include feasibility & detailed Engineering studies for various infrastructure development projects, road designs using MX Road/MOSS, AutoCAD Civil3D and AUTO LAND LDD software, Overlay design and optimization of quantities using MX Renew, Production of Plans & Profiles, Cross Sections, computing Earthwork quantities, Setting Out Reports, conceptual layout plans for Intersections and Interchanges (Grade separated Junctions), Pavement Evaluation Studies (Structural and Functional), Sub grade Strength Evaluation Studies, Pavement Design (Flexible and Rigid) using American Association of State Highway and Transport Officials (AASHTO), Indian Roads Congress (IRC), Transport Research Laboratory TRL), Asphalt Institute (AI) Method, Conducting Traffic studies (Classified traffic volume count, Origin-Destination, Speed and Delay surveys) and analysis (forecasting Traffic), conducting turning movement surveys and capacity analysis of the junctions, Axle load, Road inventory and Pavement condition surveys, Economic analysis using HDM–4 (1.3), Project planning and scheduling using Primavera (P6) and preparation of Feasibility and Detailed Project Reports.

As a Design coordinator I have successfully delivered design and construction schemes and solved the design issues during construction.

I was involved in major road schemes including complex interchanges with extensive use of **IRC, DMRB, AASHTO, Qatar, Bahrain, Kuwait, Oman and Dubai Design standards** and Ministry of Road Transport and Highways (**MORTH) - India**, AUST Roads and UK Road Note design guidelines.

**Educational and Professional Status:**

* + M.Tech. in Transportation Engineering from NIT Warangal, India, 2006.
  + B.Eng in Civil Engineering from Osmania University, Hyderabad, Andhra Pradesh, 2003.
  + Member of Indian Roads Congress (IRC), Membership no - 37968.
  + Graduate member of ICE, Membership no - 69881516

**Trainings attended:**

* + AutoCAD Civil 3D Beginners Course from 11th Nov 2012 to 22nd Nov 2012.
  + AutoCAD Civil 3D Advanced Course from 8th Sept 2013 to 13th Sept 2013.
  + Primavera (P6 version 7.0) from Madras Management Training Institute (Qatar).
  + Other in house trainings like Temporary & Work zone Traffic Management, Health and Safety training by Atkins.
  + Site safety training by QBS Constructions International W.L.L

## Employment Record:

* + 07/2012 – To date **Engineer, WS Atkins & Partners Overseas (Qatar)**
  + 02/2010 – 06/2012 **Highways Design Engineer,** New Tech Consulting Group, Khartoum, Sudan.
  + 12/2007 – 10/2009 **Highways Engineer,** Hyder Consulting Middle East Limited, Bahrain.
  + 07/2006 – 11/2007 **Highways Engineer cum Pavement Engineer,** The Louis Berger Group Inc, India.
  + 07/2004 – 07/2006 **M.Tech/M.S student,** NIT Warangal.
  + 05/2005 – 06/2005 **Trainee Engineer**, Central Institute of Road Transport (CIRT), Pune (India)
  + 08/2003 – 06/2004 **Asst Highways Engineer**, The Louis Berger Group Inc, India.

## Relevant Previous Assignments:

**Feasibility Studies, Route Selection, Preliminary Design**

* + Feasibility, Route Selection and Preliminary Design for Andhra Pradesh State Road, Orissa state Road Project and Kerala State Road Project
  + Feasibility and detailed Engineering studies for 60km of SH-5 (Chittoor – Puttoor) Strengthening and widening to 2- lane road project, India.
  + Feasibility and detailed Engineering for 50km (JK Pur – Muniguda) Strengthening and widening to 2- lane road project, India.

**Conceptual Design, Tender Design, Detail Design**

* + Conceptual, detailed and Tender Design for Zallaq Interchanges on Sh Khalifa Bin Salman Highway, Bahrain
  + Tender/Construction Design for Isa town gate 3 – level Interchange project, Bahrain
  + Tender/Construction Design for Bahrain Investment Wharf, Bahrain
  + Conceptual, detailed and tender design Sakhir Airbase and Sakhir Airshow Roads.
  + Conceptual Design for UPDA (Qatar) package 2A, Bahrain
  + Conceptual, Detailed and Tender Design for Al Geili – Shendi – Atbara Road (270Km), Sudan
  + Conceptual design of Roads for different packages in LRDP and conceptual and detailed Engineering studies for in house projects at Ashghal.

**Design coordination (Design Stage / Construction Stage) and Construction Supervision**

* + Detail Design, Design coordination Zallaq Interchange. Isa town gate 3 – level interchange, Sakhir Air base Roads and Sakhir Air show Roads

**Field Studies**

* + Conducted traffic studies, pavement functional evaluation & Structural evaluation studies for various roads to prepare plans for improvements for Andhra Pradesh State Road Project, Orissa State Road Project & Kerala State Road Project
  + Conducted BBD surveys on NH-8 (Delhi – Jaipur), India.
  + Conducted traffic survey for the feasibility of NH-8 (Delhi – Jaipur), India

**Experience Record:**

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| **July 2012 to To-date** | | |
| EMPLOYER | * : | WS Atkins & Partners Overseas |
| POSITION HELD |  | Engineer (Highways) |

**HIGHWAYS ENGINEER, WS Atkins, QATAR** responsible to develop conceptual design layout plans, geometric design of Rural Highways and Arterial roads, and Urban roads including at grade and grade separated junctions. Road side amenities and safety provisions, Preliminary, Detailed design reports, Utility services coordination, computing quantities and cost estimates. Production of tender/construction drawings/documents.

**Engineer (Highways) LR&DP (Doha West), Qatar.** Scope covers the Local Roads and Drainage Programme (LRDP) intends to deliver the consultancy and Engineering services for the associated infrastructure for Doha West (Area 5) within a coordinated framework of outsourced contracts over the next five years. Involved in the concept design of projects DW018, DW017, DW013, DW069, DW044, DW062, DW012, DW015 and presently working at DW015 site office to solve the design queries.

Scope of responsibilities in the above said projects cover conceptual road and junction layout options, concept design of roads, visibility check, swept path analysis, Parking analysis, mentoring the CAD team for preparing all the drawings like Road layouts, profiles, setting out, site clearance, grading plan and street furniture drawings, review of the drawings and liaising with other disciplines for the coordination. And also carried out visual condition survey and encroachment survey for DW044 and DW069.

**Engineer (Highways) ASHGHAL, Qatar,** was on secondment to **ASHGHAL** for four months. Responsibilities include concept layout options, concept design and detailed design of Rural, Local and Urban Streets. Involved in the design of following projects.

1. EDS 545, Access road to VIP property in Shahaniya (Concept and Detailed Design).
2. EDS 511, Access road to Al Areesh Coast Guard Centre (Concept and Detailed Design).
3. EDS 582, Proposed service road for Al Jazira Al Arabia Street (Concept and Detailed Design).
4. Proposed road layout and parking for Community college building (Concept options and design).
5. EDS 562, Access road to Rawdat Al Arnab (Concept options and design).
6. EDS 540, Access road to Arab Qatar Co for Poultry production (Concept options and design)
7. Additional work for North Road project (N20 East Junction detailed design)
8. EDS 620, Design of Roads in Um Salal

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| **Feb 2010 to June 2012** | | |
| EMPLOYER | * : | New Tech Consulting Group |
| POSITION HELD |  | Highways Engineer |

**HIGHWAY DESIGN ENGINEER, New Tech Consulting Group, SUDAN** responsible to develop conceptual design layout plans, geometric design of National Highways and Arterial roads, and Urban roads including at grade and grade separated junctions. Analysis of survey data, develop DTM, alignment design and production of Plan and Profiles, Grading plans and Cross sections using MX Roads. Road side amenities and safety provisions, Preliminary, Detailed design reports, Utility services coordination, computing quantities and cost estimates. Production of tender/construction drawings/documents. Design checklist for better working process, Design progress monitoring, mentoring Engineers and CAD technicians.

**Project 1: Al Geili – Shendi – Atbara Road (270 Km)**

The scope of the project is upgrading the Serviceability of **Al Geili – Shendi – Atbara** Road of length 270 Km. Project scope covers duelling the road i.e., upgrading from 2- lane single carriageway to 4-lane Dual carriageway. Responsibility includes design of highway from concept to detailed design which consists from in the concept layout development, Survey data analysis, Horizontal and Vertical alignment, long sections and cross sections, volumetric analysis, Signs and Markings, Long sections and Cross sections for the existing Nalah/Drains, major and minor Rivers and Khors.

**Description of duties**

* + Analysis of survey data and develop digital terrain model
  + Conceptual Design lay out options for Junctions and Roundabouts
  + Detail design and production of plan, profiles, cross sections, signing & marking and Utility shifting plans.
  + Computing the quantities.
  + Generating setting out reports.
  + Producing Construction drawings

**Project 2: Dindir to Dindir National Park, Sudan (EU funded Project)**

This is a Detailed Engineering Study project for the Road of length 125 Km. This project is funded by EU. Project scope covers geometry improvement and upgrading the road from Gravel surface to Asphalt surface. This is project is designed using AutoCAD Civil3D

**Description of duties**

* + Analysis of survey data and develop digital terrain model
  + Detail design and production of plan, profiles and cross sections.
  + Computing the quantities.
  + Generating setting out reports.
  + Producing Construction drawings.

**Project 3: Adar Oil Base**

This is an Infrastructure Project. The scope of the work is to design the total Oil base including buildings, internal Roads and Drainage. Responsibility includes final grading of the area, advising on the surface drainage, Design of internal Roads and preparation of construction drawings.

**Project 4: Juba Whole Sale Market**

This is an Infrastructure Project. Responsibility includes final grading of the area, advising on the surface drainage, Design of internal Roads and preparation of construction drawings.

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| **Dec, 2007 to Oct 2009** | | |
| EMPLOYER | * : | Hyder Consulting Middle East Limited |
| POSITION HELD |  | Highways Engineer |

**HIGHWAYS ENGINEER, Hyder Consulting Middle East Ltd, BAHRAIN** responsible to develop conceptual design layout plans, geometric design of Expressways, Highways and arterial roads, including at grade ad grade separated junctions. Analysis of survey data, develop DTM, alignment design and production plan and profiles, Grading plans and Cross sections using MX Roads. Road side amenities and safety provisions, preliminary, detailed design reports, utility services coordination, computing quantities and cost estimates. Production of tender / construction drawings/ documents and acted as a design coordinator in resolving the design issues during construction.

**Project 1: Additional Roads of South of Zallaq, Bahrain**

This is a 2 level interchange of type basic diverge and hook merge layout (or a Trumpet type interchange). The scope of works include 1.5km road design and flyover on a major urban expressway, design of a 2level interchange and the ramps to tie in with the Sh. Khalifa Bin Salman Highway and Zallaq Highway Link, to provide access to the Bahrain University.

**Description of duties**

* + Conceptual Interchange layout plans with possible options
  + Analysis of survey data and develop digital terrain model
  + Detail design and production of plan, profiles, cross sections, signing & marking and Utility shifting plans.
  + Computing the quantities.
  + Generating setting out reports.
  + Producing Construction drawings
  + Design coordination during construction.

**Project 2: Isa Town Gate (3 – Level Grade Separated Interchange), Bahrain**

The scope works include staggered signalised intersection for at grade traffic distribution. Access from Sh Salman Highway northbound to Baghdad Avenue and Road 1521 is via an access road below the overpasses through an additional two traffic signals onto Esteglal Highway northbound off-ramp, a dual three lane underpass each way conduct Sh Salman Highway through-traffic below the intersection, and two independent 2 lane viaduct overpasses connect Sh Salman Highway south-bound traffic onto Esteglal Highway.

**Description of duties**

* + Review and modify Conceptual Interchange layout plans
  + Analysis of survey data and develop digital terrain model
  + Design of at grade service roads
  + Detail design and production of plan, profiles, cross sections, signing & marking and Utility shifting plans.
  + Computing the quantities.
  + Generating setting out reports.
  + Producing Construction drawings
  + Design coordination during construction.

**Project 3: Bahrain Investment Wharf, Bahrain**

This is an Infrastructure Project. The scope of the project includes develop a master plan and infrastructure design for the Bahrain Investment Wharf development.

**Description of duties**

* + Analysis of survey data and develop digital terrain model
  + Design of Primary, Secondary and Tertiary Roads
  + Design of junctions including roundabouts.
  + Detail design and production of plan, profiles, cross sections, signing & marking and Utility shifting plans.
  + Generating the setting out reports.
  + Preparation of Construction drawings.
  + Design coordination during construction.

**Project 4: Sakhir Airbase, Bahrain**

This project covers the Sakhir Air Base area. The scope of the project includes design of the internal roads, Sakhir Air base. This also includes road around the runway and road from entrance gate to Sakhir Palace and other connector roads and access roads to the facilities.

**Description of duties**

* + Analysis of survey data and develop digital terrain model
  + Design of internal roads with in the Air base.
  + Detail design and production of plan, profiles and cross sections.
  + Generating the setting out reports.
  + Preparation of Construction drawings.
  + Design coordination during construction and also with external authorities involved in the project viz Bapco, Water & electricity departments for the utility relocation.
  + Assist the Project manager in his day – to – day activities.

**Project 5: Sakhir External Road and Sakhir Air show, Bahrain**

The Scope of the project includes the design of 5 Km Road from Zallaq Highway to Sakhir Air base access for the upcoming Bahrain International Air show, connector and access roads with in the Air show area and design of junctions.

**Description of duties**

* + Analysis of survey data and develop digital terrain model
  + Review and improve the geometry of the existing 5 Km External Road & Junctions with Airbase Roads.
  + Overlay Design using MX Renew and optimising the quantities.
  + Detail design and production of plan, profiles, cross sections, signing & marking and Utility shifting plans.
  + Generating the setting out reports.
  + Preparation of Pavement scheduling.
  + Design coordination during construction and also with external authorities involved in the project viz Bapco, Water & electricity departments for the utility relocation.

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| **July 2006 to Nov 2007** | | |
| EMPLOYER | * : | The Louis Berger Group Inc, New Delhi |
| POSITION HELD |  | Highways Engineer |

**HIGHWAYS ENGINEER, The Louis Berger Group Inc, New Delhi, INDIA** wasresponsible to prepare conceptual designs, geometric design of State Highways and arterial projects, including at grade and grade separated junctions, interchanges. Analysis of survey data and develop DTM, Production of plan and profiles, Grading plans and Cross sections using MX Road design software. Road side amenities and safety provisions, preliminary, detailed design reports, utility services coordination, quantity estimates and preparation of tender / construction drawings.

**Project 1: Up gradation of Jamal A. Nasser Street and Jahra Road to Motorway Standards, Kuwait**

The scope of Project includes upgrading two major Roads to Motorway standards in Kuwait. This also includes Four 2- level and One 3 – level interchanges at Ghazali.

**Description of duties**

* + Assisting in Design to the Senior Highways Design Engineer.
  + Ingress and Egress Design.
  + Producing plans, profiles and detailed cross sections.
  + Generating of setting out drawings and reports
  + Computing the Pier coordinates and shift in the pier coordinates.
  + Visibility analysis for Roundabouts.
  + Checking the required Vertical clearance for the interchanges.

**Project 2: Consultancy Services for Feasibility Study and Detailed Project Preparation for Andhra Pradesh State Road Project**

The scope of Project includes Detailed Engineering for Roads of 1000 Km length and feasibility study for Roads of 2000 Km length.

**Description of duties**

* + Traffic studies, analysis of traffic data and future forecasting the Traffic.
  + Ground investigations and Pavement Evaluation studies.
  + Road Inventory studies.
  + Preparation of terrain model and analysis of terrain model.
  + Design of Chittoor – Puttoor Road of length 50Km.
  + Generating plans, profiles, cross sections and quantities.
  + Preparing the setting out reports.
  + Preparation of Construction drawings

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| **May 2005 to June 2005** | | |
| EMPLOYER | * : | Central Institute of Road Transport, Pune, India |
| POSITION HELD |  | Trainee Engineer |

**Project: Traffic Management for Gangtok city and Zorethang district in Sikkim state in India**

Responsibilities included conducting Traffic surveys, classified volume count survey, mid block traffic counts, Origin and Destination surveys, Zone coding and templates preparation and analysis of Traffic data.

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| **Aug 2003 to June 2004** | | |
| EMPLOYER | * : | The Louis Berger Group Inc, New Delhi |
| POSITION HELD |  | Asst Highways Engineer |

**Asst HIGHWAYS ENGINEER, The Louis Berger Group Inc, New Delhi** wasresponsible for Material and Geo technical investigations, Traffic Survey (turning movements, mid block counts, axle load, origin and destinations), Hydrological survey, Pavement evaluation study (Benkelman beam, roughness survey, pavement condition etc.), road -bridge inventory study and analysis of the data / test results.

**Project: Kerala State Road Project**

The scope of Project includes Detailed Engineering for Roads of 600 Km length and feasibility study for Roads of 1000 Km length.

**Description of duties**

* + Traffic studies, analysis of traffic data and future forecasting the Traffic.
  + Material, Ground investigations and Pavement Evaluation studies.
  + Road Inventory studies.
  + Preparation of proposals for widening of existing state highways and improvement of geometrics to higher design speed.
  + Preparation of Strip Plans, Land Acquisition Plans, Utilities relocation Drawings etc.
  + Design of pavement and overlay based on Geotechnical investigations and BBD tests.

**Software Skills**

Operating Systems : DOS, Windows XP, Windows 7, Project wise

Packages : MS office, Auto CAD 2004 to Auto CAD 2012

Highway Design Packages : MX V8I (MX Road, MX Renew (MOSS)), AutoCAD Civil3D, Auto CAD LDD

Highway Maintenance : HDM 4 (1.3)

Project Planning : Primavera P6 for project planning and management

Languages : C

**Training Programmes Attended**

* + Undergone industrial training as a ‘Trainee’ at “Central Institute of Road Transport (CIRT), Pune” for two months. During this period, I was involved in “Traffic Management for Gangtok city and Zorethang district in Sikkim state”.

**Languages Known:** English, Hindi and Telugu

**REFERENCES:**

**Mr. K.S.N Reddy Mr. Usama Khoury**

Ex employee of LBG (Sr Highway Engg) Highways Function Leader

Gurgaon, Haryana-122015 Hyder Consulting Middle East Ltd

Phone : +91 9818147245 Al Seef Dist, Bahrain-26073

**E-mail:** [ksnreddy\_27@rediffmail.com](mailto:ksnreddy_27@rediffmail.com)E-mail: [usama.khoury@hyderconsulting.com](mailto:usama.khoury@hyderconsulting.com)

**Mr. K. BGP Reddy** **Mr. Akbar Nuthimadugu**

Team Leader, Highways Division Team Leader, Ashghal (on secondment from Atkins)

The Louis Berger Group Inc. USA, W.S Atkins, Doha, Qatar

Gurgaon, Haryana-122015 **E-mail:** [Akbar.Nuthimadugu@atkinsglobal.com](mailto:Akbar.Nuthimadugu@atkinsglobal.com)

**E-mail:** [bgpreddy@yahoo.com](mailto:bgpreddy@yahoo.com)

[bgpreddy@louisberger.com](mailto:bgpreddy@louisberger.com)

I hereby declare that the above information is true and correct to the best of my knowledge and belief.

Place: Doha (Qatar)

Date: 14.07.14  **(Gangadhar Vaddemanu)**