

# Vinod Reddy Kamagani Kuntla, P.E.

+1 (817) 946-0533 (USA) | [vinodkamagani@gmail.com](mailto:vinodkamagani@gmail.com) | [linkedin.com/in/vinodreddykamaganikuntla](https://www.linkedin.com/in/vinodreddykamaganikuntla)

## PROFESSIONAL SUMMARY

- Dedicated structural and bridge engineer with six [6] years of experience in design and project management, with a focus on large-scale civil engineering and transportation projects.
- Skilled in the areas of management, project controls with emphasis on estimating, scheduling and claims, construction means and methods, structural design and construction engineering.
- Project engineer at Siefert Associates, Connecticut, USA from September 2018 - present.
- Structural engineer at John S. Deerkoski P.E and Associates, New York, USA from October 2015 to August 2018.
- Registered Professional Engineer [P.E.] in state of Connecticut, USA.
- Good knowledge base in Bridge design, bridge repairs/strengthening using fiber reinforced polymers (FRP).
- Familiar with materials, methods and tools involved in the construction or repair of houses, buildings, bridges and other structures.
- Prepared cost estimates for NYSDOT, CTDOT, NYCTA, NJDOT, NJTA projects (Bridges) and other design bids for construction engineering services.

## EDUCATION

- **MASTER OF SCIENCE:** Structural engineering and applied mechanics (2014-2015)  
University of Texas at Arlington - Arlington, TX, USA.  
GPA: 3.25/4
- **BACHELOR OF ENGINEERING:** Civil engineering (2009-2013)  
Jawaharlal Nehru technological university - Hyderabad, India.  
Percentage: 78%

## CREDENTIALS

- PROFESSIONAL ENGINEER – CT License No. PEN.0033929

## PUBLICATIONS

- Nur Yazdani, P.E., Vinod Reddy Kamagani Kuntla and Srinivas Prabakar (2017): "Effect of FRP Wrapping on Concrete Chloride Ingress", *International Journal of Current Research Vol. 9, Issue, 01, pp.44623-44629, January, 2017.*

## PROFICIENCIES

- STAAD Pro, RISA 3D, MIDAS Civil, PG super, Micro Station, MathCAD, SAP 2000, Wood Works, ETABS, AutoCAD, Microsoft office, Microsoft Excel.

## CODE/SPECIFICATIONS

- ACI 318-14, AASHTO LRFD bridge design specifications – 7<sup>th</sup> edition, AASHTO standard specifications for Highway Bridges – 17<sup>th</sup> edition, AISC manual 15<sup>th</sup> edition, ASCE 7-10, IS 456, IS 800, AISI Cold-Formed Steel Design Manual, AMSE BTH-1-2017 Design of Below-the-hook Lifting Devices, NDS for Wood Construction.

## RELEVANT EXPERIENCE

**Siefert Associates, Connecticut, US – Project Engineer**  
(September 2018 – Present):

Responsible for providing construction-engineering services for large-scale civil engineering projects throughout the Northeast such as:

### Key Projects:

- **LIRR Expansion Project from Floral Park to Hicksville, Long Island, NY (January 2019 – Present).**
  - Involved with many different aspects of this project at each stage of construction.
  - Perform engineering calculations to determine structural adequacy of the structures, structural design of temporary supports, and analysis of existing structures during construction operations, Stability of members during demolition & erection operations, and heavy lifting operations [including accelerated bridge construction].
  - Develop structural drawings for each construction engineering operations.
  - Coordinate with various contractors, railroad agencies and manufactures to provide most efficient designs, drawings, letters and reports concerning engineering evaluation of structures and technical specifications.
  - Develop crane plans and crane mat designs at each stage of construction.
  - Review calculations, construction submittals, RFI's, contract drawings and shop drawings.
  - Perform site visits/inspections and provide technical support for various field issues to contractor.
- **Brooklyn Bridge – Rehabilitation of Approach Arches Towers and Miscellaneous, New York, NY (March 2019 – November 2020).**
  - Design of bracing struts between each arch block span for infill walls demolition to prevent any movements of granite arches.
  - Design of temporary hanging working platforms for cable inspection.
  - Develop structural drawings and Provide demolition & structural monitoring procedures during infill wall removal.
  - Design temporary shielding and scaffolding for protection of bracing struts during demolition operations.
  - Perform site visits for existing site conditions and inspections at different stages of work.
  - Coordinate with contractors, NYCDOT and EOR during the course of the project.
  - Review contract and as-built drawings.
- **Hugh L. Carey Tunnel – Manhattan Blower Building, New York, NY (March 2020 –January 2021).**
  - Design of pump room for the proposed Hugh L. Carey Tunnel Manhattan blower building.
  - Pump Room Design includes design of structural steel framing, existing floodwall footing extension, reinforced concrete grade beam, reinforced concrete slab on grade and floodwall stability analysis.
  - Perform calculations using ASCE 7-16, ACI318-14 and AISC steel construction manual 15<sup>th</sup> edition.
  - Provide loads for helical piles design and coordinate with geotechnical engineers.
  - Coordinate with contractors, Architects and TBTA during the course of the project.

- Delegate drafters and fabricator for developing structural drawings and steel connection designs.
- Review as-built drawings of Hugh L. Carey Tunnel for existing conditions.
- **Throgs Neck Bridge – Replacement of Roadway Deck, New York, NY (March 2020 –January 2021).**
  - Perform engineering calculations for erection of gantry for removal and replacement of deck, design of temporary supports, analysis of existing bridge during construction/crane operations, Stability of members during demolition & erection operations, and design of custom rigging arrangement for demolition & erection operations.
  - Coordinate with contractors, DOT agencies for precise staging plans.
  - Develop crane plans and crane mat designs at each stage of construction.
  - Delegate drafters and develop structural drawings.
- **Route 32 over Route 17 Bridge – Steel Erection, Monroe, NY.**
  - Develop crane plans and crane mat designs for erection of steel girders.
  - Perform engineering calculations for erection of steel girders, Stability of girders during erection operations, and design of rigging arrangement.
  - Develop drawings for girders lift plan in coordination with MPT plans.
- **70 Nardoizzi Place – Commercial Building Steel Erection, New Rochelle, NY.**
  - Develop crane plans for each sequence [14] of construction and crane mat designs for erection of steel.
  - Perform engineering calculations for erection of steel, Stability of steel members during erection operations, and design of typical rigging for steel members.
  - Develop working drawings for structural steel fabricator & erector in coordination with sequence of construction
  - Coordinate with contractors and EOR to provide most efficient drawings, letters and reports concerning engineering evaluation of support of excavation & cast-in-place slab for crane loads.
  - Perform site visits/inspections at each stage of sequenced construction.
- **Bruckner Expressway over Bruckner Blvd, Contract No. D263839, Bronx, NY.**
  - Design of temporary support system at pier 119 for concrete repairs.
  - Temporary support system design includes design of structural steel shoring towers, timber dunnage, distribution beams, bracing support and jacking system.
  - Develop working drawings with jacking procedure for contractors
  - Perform site visits for existing site conditions and constraints.

**Other Noteworthy Projects:**

- George Washington Bridge Main Span Upper Level Structural Steel Rehabilitation, PANYNJ Contract no. GWB-244.260, New York, NY – Temporary support for steel repairs.
- I-64 Southside Widening & High Rise Bridge, VA – Pile Template Design.
- LIRR East Side Access – Traction Power, Contract no. CS084, NY.
- Rehabilitation of I-278 Bridges, Richmond and King Counties, NY.
- NYSDOT I-84, I-684 & Sprain Brook Parkway Sign Structure Erection, NY.
- Reconstruction of the New York State Pavilion Observation Towers, Queens, NY.

**John S. Deerkoski P.E. and Associates, New York, US – Structural Engineer**  
*(October 2015 – August 2018):*

Involved in design and construction support phases of several projects. Daily tasks include, but are not limited to:

- **Replacement of Bridges 03163 & 03164, Route 160 over I-91, Town of Rocky Hill, CT**
  - Design & analyze bridges 03163 & 03164 in SAP 2000 using details from contract drawings.
  - Determine loads at bearing points and check the structure for stresses.
  - In order to ensure ease of installation manufactured shoring products were specified for prefabrication of structures in offsite staging areas.
  - Design grillage and mats for manufactured shoring towers.
  - Determine transverse loads and design transverse bracing for shoring towers.
  - Design & analyze bridges 03163 & 03164 in SAP 2000 with support locations @ Self Propelled Modular Transporter (SPMT) pick points.
  - Provide out-of-tolerance movement limits for bridges 03163 & 03164 while moving bridges from offsite locations to final position using SPMT.
  - Additionally, perform drafting of all engineering drawings.
  
- ***NJDOT Route 7, Contract 3, Hackensack River, Wittpenn Bridge, NJ - Analysis of H-Piles and Pipe piles supporting carrier beam with girder weights including angles and cables as cross bracings using SAP 2000.***
  - Involved with many different aspects of this project from design to calculation and drawings checking/review.
  - Design and analyze the deflection and stresses of H-piles and pipe piles with wind load in SAP 2000.
  - Analyze and compare results of H-Piles and Pipe piles, to select appropriate Piles.
  
- ***NJDOT Route 7, Contract 3 - Analysis of Steel Girders in SAP 2000***
  - Design and analyze steel girders with overhang brackets and diaphragms while erecting using crane in SAP 2000.
  - Analyze deflections and stresses in steel girders while erecting and placing on piers.
  - Design and analyze curved steel girders with overhang brackets and diaphragms.
  
- ***3109 Buhre Ave, Bronx, NY - Analysis of 7 storey building in ETABS & structural members for NYCDOB peer review report***
  - Design and analyze seven-storey building in ETABS.
  - Analyze building with seismic and wind loading.
  - Prepare structural peer review report of building as per NYCDOB requirements.
  
- ***40-31 82nd St, Flushing, NY - Support of Excavation and Underpinning***
  - Design temporary support of excavation for whole perimeter of building.
  - Design underpinning for supporting adjacent building during excavation.
  - Prepare detailed report for all test pits dug at site.
  - Prepare sequence for underpinning, Jacking and assist drafting engineer for engineering drawings.

#### Other Noteworthy Projects:

- *Brooklyn Bridge, Arch block B, New York NY.*
- *62 Chelsea Piers, New York, NY*
- *318 W 115<sup>th</sup> Street, New York, NY*
- *870 Metropolitan Ave, Brooklyn, NY*
- *LaGuardia airport central terminal building replacement project (Frontage roadway structures & L29 bridge) – Stay-in-place Precast Fascia Stringer Forms.*
- *444 Park Avenue South, Manhattan, NY - Demolition of Building.*

#### RESEARCH EXPERIENCE

Graduate research assistant at University of Texas at Arlington (September 2014 – August 2015) -

"Concrete *chloride Ingress: Effects of FRP type, Layers and Epoxy*"

- Cast concrete molds as specified by ASTM C1543 using ACI mix design
- Install FRP on test specimens
- Conduct chemical tests based on ASTM C1152 to know the chloride percentage
- Compare performance of control specimens with test specimens, based on the results obtained from chemical tests.
- Establish reduction of chloride penetration and Controlled corrosion using FRP and layers of FRP
- Study resistance of FRP to chemical solutions
- Establish equivalent cover for ACI and AASHTO minimum clear covers using FRP and layers of FRP.