

MARCUS A. VANCE, PE

Senior Structural & Civil Engineer

✉ mvance.pe@email.com
☎ +1 (510) 555-0192
📍 San Francisco, CA
🌐 linkedin.com/in/marcus-vance-pe
🌐 vance-engineering.com

Licensed Professional Engineer (PE) with over 8 years of experience designing and managing heavy civil infrastructure projects. Proven track record in seismic analysis, reinforced concrete bridge design, and site development for multi-million dollar projects. Skilled in coordinating multi-disciplinary teams, securing municipal permits, and utilizing advanced finite element analysis (FEA) software to deliver safe, cost-effective structural solutions.

PROFESSIONAL EXPERIENCE & PROJECTS

2023 – Pres.	Sutter Creek Bridge Replacement Lead Structural Engineer \$14M Led structural design of a 180-ft, 3-span prestressed concrete girder bridge. Formulated seismic response spectra in CSI Bridge, managed geotechnical reports, and reduced concrete volume by 12% using FEA optimization.
2021 – 2023	Oakridge Commercial Center Site Civil Project Manager \$45M Managed grading, utility layout, and stormwater design for a 12-acre development. Authored hydrology reports, designed custom bioretention basins, and coordinated with municipal inspectors for code approval.
2019 – 2021	Metro Transit Line Extension Structural Designer \$110M Performed structural analysis of elevated guideway columns, retaining walls, and deep pile foundations. Resolved over 80 contractor RFIs, ensuring structural steel fabrication met AISC specifications.

KEY ACHIEVEMENTS & PROJECTS

- **Seismic Retrofitting:** Led structural retrofitting of 3 historic masonry buildings in San Francisco, complying with ASCE 41 standards.
- **Value Engineering:** Redesigned a retention wall system for a highway expansion project, saving \$220K in materials.
- **Leadership:** Mentored 4 junior engineers and oversaw drafting reviews, reducing drawing revision cycles by 25%.

EDUCATION

M.S. Structural Engineering University of California, Berkeley	2019
B.S. Civil Engineering Cal Poly SLO	2018

CERTIFICATIONS

- **Licensed Professional Engineer**
CA Board of PE, License #89432
- **ENV SP (Sustainability)**
Institute for Sustainable Infra.
- **OSHA 30-Hour Construction**
Safety Certification

TECHNICAL SKILLS

Analysis	SAP2000, ETABS, CSI Bridge, LPILE, PLAXIS
CAD/BIM	AutoCAD, Civil 3D, Revit
Water	HEC-RAS, HydroCAD
PM	Primavera P6, Bluebeam

PROJECT SPECS GRID

Codes	ASCE 7, ACI 318, AISC 360, IBC, AASHTO
Foundations	Drilled Shafts, Driven Piles, Mat Foundations
Earth Ret. Materials	MSE Walls, Sheet Piles, Grade 60 Rebar, A992 Steel, Post-Tensioned
Seismic	Response Spectrum, Pushover, Soil-Structure