

Curriculum Vitae

Amin Terouhid, Ph.D., P.E.

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Summary

Dr. Terouhid is a Principal Consultant with Adroit Consultants, LLC and a recognized expert in the areas of construction management, construction claims, personal injury, construction safety, construction defects, and delay and damages analysis. With more than 18 years of experience working on several large and mega projects internationally and throughout the United States, he is the author of numerous scholarly articles and industry guidelines. Dr. Terouhid is also the recipient of the 2018 AACE Technical Excellence Award.

Education

- 2013 Ph.D. in Construction Management, University of Florida, Gainesville, FL
- 2012 M.Sc. in Civil Engineering, University of Florida, Gainesville, FL
- 2002 and 2004 B.Ss. and M.Sc. in Industrial Engineering, Amirkabir University of Technology

Professional Certificates and Awards

- Professional Engineer (P.E.) Texas [NY and NJ applications under review as of June 2021]
- <u>Concrete Construction Special Inspector</u>, American Concrete Institute (ACI)
- AACE International (Association for the Advancement of Cost Engineering) Technical Excellence Award
- Planning and Scheduling Professional (PSP), The Association for the Advancement of Cost Engineering (AACE)
- Design and Risk Management Professional (DRMP), The Association for the Advancement of Cost Eng. (AACE)
- Project Management Professional (PMP®), Project Management Institute (PMI)

Volunteer Positions

- Oct 2018 Present Exam Committee, National Council of Examiners for Engineering and Surveying (NCEES)
- Jul 2019 Vice President, AACE-Metro NY, AACE International (The Association for the Advancement of Cost Engineering)
- Feb 2018 Present On-Site Evaluator Global Accreditation Center for Project Management Education Programs (GAC), Project Management Institute (PMI)

Work Experience

Mar 2018- Present Principal Consultant, <u>Adroit Consultants, LLC.</u> Upper Saddle River, New Jersey

Providing forensic claims, construction management consulting services, construction fraud, safety/injuries, and construction expert services. Other service areas include project scheduling and control, value engineering, risk management, construction defects, and inspection services. Examples of key projects include:

Construction Claims and Expert Services

- Dec'21: Construction injury case/litigation, Middletown, Delaware. Served as an expert and assessed incident and claim records.
- Dec'21: Expert witness department store slip & fall case/litigation, North Brunswick, NJ. Served as the defendant's expert.
- Dec '20: Amsterdam Houses, 205 West 61st St., New York. Delay analysis, assessment of schedule, and damages analysis.
- Oct '20: LaGuardia Airport Central Terminal Building Replacement Project, NY. Delay analysis and acceleration assessment.
- Oct '20: Aram Health Services (healthcare building). Standard of care, investigation and assessment of construction defects.
- Aug '20: NYC Housing Authority, Sandy recovery program at East River houses. Differing site conditions and delay assessment.
- Jun '20: VEC Engineering Construction N.V. (VEC) and Citgo Aruba Refining N. V. (CAR). International arbitration, London.
- Jun '20: Replace the 86th St Substation & Negative Return Reactors at 110th St, Delay and LOP analysis, and expert report
- Feb '20: Flu Project (industrial process plant), Delay analysis, claim preparation, and expert report preparation.
- Feb '20: Matco Electric Co., Binghamton-Johnson City joint sewage treatment plant restoration and rehab. Delay, LOP, DRB
- Jun '20 Matco Electric Co., Binghamton-Johnson City JSTP, C11 Solids Handling Electrical. Delay and LOP.
- Aug '19: Holly Frontier Tulsa FCCU Tar Option #7, refinery, Tulsa, OK. Schedule constructability review and risk assessment
- May '19: MBTA fare collection system implementation Project, Boston. Delay analysis, construction expert services.
- Apr '19: Watergate hotel, Washington DC, Delay and loss of productivity analysis, and forensic assessment of project schedules.



- Apr '19: The Pointe at Turnbury, Monmouth Junction, NJ. Construction defect analysis and expert services, building enclosure.
- May '19: Construction of Proposed Well and Well House #9, City of Brigantine, Atlantic County, NJ. Expert report.
- May '19: Comcast Innovation and Tech Center, Philadelphia. Insurance claim, delay analysis, and assessing claims for changes.
- Dec '18: Termination of the CCP 166580-C011 Camps Construction, Arcelor Mittal Liberia Limited (AML) vs. RSI, Expert report.
- Nov '18: Parkland Burnaby FCC 2020 Phase 3 Turnaround Project, Schedule constructability review and risk assessment.
- Mar '18: Kings Highway Seven Station Project, Brooklyn, NY. Assess claims for changes, delay, & LOP and prep expert report.

Construction Management Services

- Feb '22: East Side Access Project in NYC. Construction planning, scheduling, and monitoring and project control services.
- Dec '20: Nayara Coke Drum Engineering and Constructability Study. Prepared turnaround project schedules and schedule basis.
- Sep '20: IMTT Bayonne Pipeline Project Cost Estimate Review. Risk assessment, Monte Carlo analysis, and contingency review.
- Jan '19: NYCT Consultant CM and Inspection for ADA Upgrades of Gun Hill Road Station Dyre Avenue Line (IRT), Bronx, NY
- Oct '19: Dobco Green St. mixed use facility, office building and parking garage, Newark Parking Authority, Schedule updates

Value Engineering / Value Analysis (VE/VA) Services

- Nov '20: US69, Southtown Blv. Tyler to 1-mile S. of FM2813, TxDOT Tyler Dist.: CM SME and assistant VE team leader.
- Oct '20: SH 63/LA 8 Bridge at the Sabine River VE Study, shared between Newton County, Texas and Vernon Parish, Louisiana
- Oct '20: I-95/Sunrise Blvd. Interchange, VE Workshop, Florida District 4: Served as the CM SME and assistant VE team leader.
- Aug '20: IMTT Pipeline cost estimate review and risk analysis, facilitated the workshop, and performed Monte Carlo analysis
- Jan '20: VE of Reconstruction of Primary Tanks at Bowery Bay WRRF, NY: Assisted in facilitation and served as the CM SME.
- May '19: Comcast Innovation and Tech Center, Philadelphia. Review of the design and estimate prior to and after VE studies
- Facilitation of VE/Analysis workshops related to the Hillview Reservoir Chemical Addition Facilities (on-hold due to COVID19)

Training Services

- Nov '20: AACE project planning and scheduling professional (PSP) certification training, AACE NY Metro Chapter
- Jul '20: TAP Electric/Forte, Project scheduling and delay analysis training to the project managers and executives
- Oct '19: AACE project planning and scheduling professional (PSP) certification training, AACE NY Metro Chapter
- Dec '19: TAP Electric/Forte, Project scheduling and delay analysis training to the project managers and executives
- Oct '18: Primavera P6 project planning & scheduling training to the NYCT's project control and management team in New York
- Jun '18: AACE decision and risk management (DRMP) certification training, AACE Conference and Expo, San Diego, CA
- Dec '18: AACE decision and risk management (DRMP) certification training, AACE Conference and Expo, Abuja, Nigeria

May 2014 – Mar 2018 Senior Project Manager / Consultant, The Vertex Companies, Long Island City, New York

Provided construction claim consulting services, include investigating construction claims, conducting schedule review and analysis, reviewing and evaluation of performance bond claims, claims for changes, termination, standard of care, and differing/unforeseen site conditions, and damages analysis. Examples of key projects include:

Forensic Claims and Expert Services

- Dec '17: Project: Ocean Breeze Indoor Horse Riding Arena. Assessed delays, critical and near-critical path, and delay damages.
- Nov '17: Incident investigation, provided expert report for construction and code compliance of stairway in slip and fall matter.
- Aug '17: LIRR Expansion Project. Assessed the proposed project schedule, and performed schedule constructability review.
- Dec '17: Queensville West Sewage Pumping Station, Mettko, Town of East Gwillimbury. Assessed delay and damages claim.
- Mar '17: The Shenandoah Weather Delay matter. Assessed the weather delays and quantified entitlement to time extension.
- Feb '17: Open Pipeline- Spread 2 & 3 Dillonvale, Ohio. Assessed schedule and LOP, quantified damages, and expert report.
- Feb '17: Academic classroom and office complex, West Chester University. Eval. of delays & extended general condition costs.
- Dec '16: Covenant House, 227-237 N. South Carolina Avenue, Atlantic City, NJ. Assessed extended general condition costs.
- Jan '16: Dulles Corridor Metrorail Project Phase 2. Assessed termination of an electrical contractor, and quantified damages.
- Nov '16: PS 62R Staten Island, NY. Assessed backcharges, changes, and delays related to a wiring and electrical contractors.
- Dec '16: Union County Family Court Building Elizabeth, NJ. Assessed subcontractors' claims against the bond principal.
- Sep '15: NYU Langone Medical Center, NY. Schedule and damages analysis, assessed disruptions/LOP resulted from changes.
- Jul '15: Federal projects located nationally, evaluation of principal's claims against owners, and litigation support.
- May '15: Federal Projects located internationally. Claims for changes and time-related claims related to a surety bond claim.
- Apr '15: Rowan Univ., Glassboro, NJ. Schedule & damages analysis for an HVAC contractor, evaluated out-of-sequence work.
- Mar '15: Stout St Health Center & Renaissance, St Lofts, Denver, CO. schedule and damages analysis, and prep expert report.
- Nov '15: Carl R. Darnall Army Medical Center Replacement, Ft. Hood, TX. Assessed delays & damages arisen from changes.



- Nov '15: Build Group Inc. vs Alta Laguna LLC. Eval. of subcontractors' claims, time-related claims, and review of delay damages.
- Nov '15: AERO Automatic Sprinkler Company Claim, Chandler, Arizona. LOP claim involving trades stacking and disruptions
- Jan '15: Federal project family housing. Assessed the surety claims including contract termination and identified damages.
- Jan '15: Laughlin AFB Repair Runway at Spofford Aux. Airfield. Assessed reworks and delays related to the pavement contract.
- Nov '14: Fort Peck, MT. Assessed delays, disruptions, and LOP affecting a drilling and anchor installation contractor.
- Oct '14: Ruttan Mine, MB, Canada. T4C. Forensic review of claim documents, delay analysis, and prepared expert report.
- Oct '14: NJ Turnpike Contract T300.176, Interchange 9 Improv., Milepost 83. Assessed surety claims and prep expert reports.
- Jun '14: Waterloo WWTP Upgrade, Secondary Treatment and Digestion. Review of multiple REAs and claims for changes.
- Aug '14: Solana Solar Power Plant, Phoenix, Arizona. Review of unpaid change order work, disruption, & interference claim.

Construction Defect Services

- The Views at Hudson Pointe, North Bergen, NJ. Inspected the site, assessed construction defects, and prepared expert report.
- The Thread Condominium Association, Union City, NJ. Evaluated construction defects and prepared expert report.
- 125 N 10th St, Brooklyn, New York. Performed inspections, evaluated construction defects and prepared expert report.
- Bay View Community v. Acies. Performed building evaluation and served as an expert for construction defect litigation matter.
- Palms Place Condominium Hotel, Las Vegas, Nevada. Evaluated construction defects and prepared expert report.
- Residential project, Wanague, NJ. Performed inspections, evaluated construction defects, assessed building enclosure.

Construction Management Services

- Feb '18: C-470 Express Lanes Project, The Colorado DOT, Reviewed the cost estimate, the reasonableness of its level of detail.
- Nov '17: Pier 6, Residential Project located at Parcel A and B, Brooklyn, NY. Reviewed the design and oversaw project progress.
- San Juan Water Treatment Facility, San Juan, Texas. Led construction planning and scheduling efforts and analyzed disruptions.
- · Water Treatment Plant, Shenandoah, IA. Led construction planning and scheduling efforts and analyzed disruptions.
- Port Liberte II and III projects. Provided construction supervision, engineering, and CM services for renovation projects.
- DOT 69th Street Bridge North Bergen. Reviewed the design, oversaw project progress, and assessed the updated schedules.

Other Services

Provided prevention of disease and injury associated with building water systems (Legionella testing services)
Weill-Cornell and Lower Manhattan hospitals

Aug 2009 – May 2014 Individual Project Management Consultant

Provided project and construction management services including PMO consultancy, project cost engineering, project risk management, and construction claim management services to clients, including Pinnacle Strategies, Inc. and targetbase.

• Jun '01 - Aug 2009 AVEC Engineering Consultant

Construction Management Services

- Sep '07 Aug '09 Program Lead Project Control Engineer, Secunda Growth Program (SGP) Natural gas program, Sasol Technology (Pty) Ltd., Secunda, South Africa
- Feb '07- Aug '07: Cost-Based Project Control Office and ERP Consultant. 9th Olefin Complex, Arya Sasol Polymer Company, Asaluyeh, Iran
- Nov '06 Feb '07: Project Planning and Control Manager, AVEC Engineering Consultant. Gorgan Urea and Ammonia Project, Golestan Petrochemical Company, Gorgan, Iran
- Oct '05 Jun '06: Project Planning and Control Manager. ZAMYAD's 2nd Complex of Vehicles Manufacturing, SAIPA expansion engineering company (SEECO), Tehran, Iran
- Oct '03 Oct '05: Project Planning and Control Manager. Upgradation Project of ABYEK Cement Production Line no. 1, Abyek Cement Company, Abyek, Iran

Operations Management Services

- Mar '03 Sep '03: Project Manager. Designing and Implementation of Automated Planning & Production Control System, Shahid Ghandi Cable Manufacturing Company (SGCC), Yazd,. Led the optimization modeling and production planning effort.
- Apr '03 Sep '03: Project Supervisor / Engineer. Samand Body Shop Project capacity study, balance, layout and station design, and value engineering and simulation services, Iran Khodro Co. (IKCO)



- Sep '02 Mar '03: Project Supervisor / Engineer. Trim II Assembly Line Project Capacity Study, Balance and Simulation, Iran Khodro Co. (IKCO). Conducted motion, time, and methods study, and value engineering services for preparing a balance scenario. Assisted the simulation team to model the assembly line and perform what-if scenarios to increase the throughput.
- Jun '01 Oct '01 Project Engineer, Design and Implementation of Project Management System based on AM/PM Methodology

Select Publications

- M. Mirhadi Fard, SA. Terouhid, CJ. Kibert, H Hakim, <u>Safety concerns related to the construction of modular and pre-manufactured buildings</u>, International Journal of Injury Control and Safety Promotion, Taylor & Francis, June 2015
- SA. Terouhid, M. Mirhadi Fard, J. Charles Kibert, <u>Construction of manufactured homes: understanding the hazards and risks</u>, Professional Safety: Journal of the American Society of Safety Engineers, May 2017
- SA. Terouhid, <u>Concurrent Delays: Definitional and Procedural Considerations</u>, ABA Forum on Construction Law, Dec 2019
- SA. Terouhid, M. Mirhadi Fard, Recommended Practice PS-19 Linear Scheduling Method (LSM), AACE International (The Association for the Advancement of Cost Engineering), under review
- SA. Terouhid, M. Mirhadi Fard, Recommended Practice CDR-05 Apportionment of Delay Responsibilities as Applied to Concurrent Delays, AACE International (The Association for the Advancement of Cost Engineering), under review
- SA. Terouhid. Effective <u>Facility Closure</u>: A <u>Risk Management Perspective</u>. <u>Project Management Institute (PMI)'s Knowledge Shelf</u>, 2018.
- M. Mirhadi Fard, SA Terouhid, <u>Recommended Practice 91R-16 Schedule development</u>, AACE (Association for the Advancement of Cost Engineering), Published in October 2017
- SA Terouhid, M. Mirhadi Fard, <u>Recommended Practice 92R-17 Analyzing Near-Critical Paths</u>, AACE (Association for the Advancement of Cost Engineering), Published in October 2017
- SA. Terouhid, M. Mirhadi Fard, <u>Recommended Practice 89R-16 Management Summary Schedule</u>, AACE's (Association for the Advancement of Cost Engineering), Published in October 2017

Select Presentations

- Assessing the effects of adverse weather on construction project schedules. CMAA's (Construction Management Association of America) webinars, December 2019 (scheduled)
- Performing project schedule constructability reviews: What to look for. CMAA's webinars, May 2019
- Assessing the adverse effects of schedule deficiencies from the claim management perspective, CMAA's (Construction Management Association of America) webinars, February 2019
- Recommended Practice 92R-17 Analyzing Near-Critical Paths, AACE, The Florida Chapter of the AACE International, Nov 2018
- SA. Terouhid, Chris Carleo, Greg Sampson, The Need for Applying Project Management Strategies to Facility Closures and Acquisitions, AGC of America 2017 Contractors Environmental Conference (CEC), Crystal City, VA, Sep 2017
- Improving the effectiveness of project schedules through an integrated project management approach, CMAA's (Construction Management Association of America) 2017 Capital Projects Symposium, New Orleans, LA, March 2017
- SA. Terouhid, D. Minchella, Well-structured project gating and work breakdown structures: building blocks for effective construction project planning, Selected for presentation at the 2016 CMAA's Capital Projects Symposium, Austin, TX
- SA. Terouhid, M. Mirhadi Fard. CDR2114: Structuring construction claim investigation processes to reduce cognitive bias, presented in the 2016 AACE (the Association for the Advancement of Cost Engineering) Annual Meeting
- M. Mirhadi Fard, SA. Terouhid. Planning and scheduling requirements of subway station rehabilitation/ renovation projects, Selected for presentation at the 2016 AACE (the Association for the Advancement of Cost Engineering) Annual Meeting
- SA Terouhid, Andrew Sargent, Construction claim visuals: an investigation into the common visuals used for preparing or assessing construction delay and productivity claims, AACE International's (the Association for the Advancement of Cost Engineering) 3rd Annual Northeast Total Cost Management Symposium, Valley Forge, PA, March 2016
- Andrew Sargent, SA. Terouhid, Key challenges in demonstrating lost productivity claims based on specialty industry studies, AACE International, 3rd Annual Northeast Total Cost Management Symposium, Valley Forge, PA, March 2016
- Pacing as a delay management mechanism, The monthly meeting of AACE (the Association for the Advancement of Cost Engineering) International's Connecticut Section, Middletown, CT, December 2015
- SA. Terouhid, D. Minchella, A Sargent, Pacing as a delay management mechanism, 2015 AACE (the Association for the Advancement of Cost Engineering) Annual Meeting, June 2015

Software Skills

- · Construction Management: Bluebeam Revu, Revit Structure, Revit Architecture, Revit MEP, Navisworks
- Project Planning / Management: Primavera 6, MS Project, On-Screen Takeoff, Quick Books Pro, Argo, Claim Digger
- Simulation Software: Arena, Show Flow, Vensim, Cyclone, iThink, Stella
- Optimization Software: Lingo, Lindo, Win QSB



Membership (past and present)

- American Bar Association (ABA)
- The Association for the Advancement of Cost Engineering (AACE International)
- Project Management Institute (PMI)