

Joshua Ritti
Practice Director and Principal

Professional Profile

Mr. Joshua Ritti is the Director of Exponent's Construction Consulting practice. He advises construction clients on a range of topics including risk management, project governance, project controls, change management, project scheduling, contract review and assessments, process improvement, change order negotiations, dispute avoidance and the development or defense of construction claims.

Mr. Ritti's experience with construction disputes includes the development, analysis and defense of construction claims related to scheduling, inefficiencies, and cost overruns. He has analyzed owner, contractor, and designer performance and allocated responsibility for project impacts on a wide variety of projects. He has developed as-planned schedules, prepared and analyzed as-built schedules, and utilized numerous schedule analysis techniques to quantify delay.

Mr. Ritti has provided risk analysis services to large construction owners and contractors including contract risk assessments, probabilistic scheduling, Monte Carlo simulations, and schedule and cost assessments. He has provided project management oversight and construction management services, structured project control systems, conducted construction audits, and developed project status reviews.

Mr. Ritti's construction project experience includes casinos, vertical construction, commercial structures, residential structures, power plants, offshore and onshore oil and gas facilities, pipelines, wastewater treatment facilities, highways and bridges, tunneling and light rail. Mr. Ritti's clients have included corporate entities, public agencies, contractors and subcontractors, architectural and engineering firms, insurance carriers, and attorneys.

Mr. Ritti has participated in the successful negotiation of numerous disputes, and has testified on construction schedule and cost issues in mediation, dispute resolution board hearings, arbitration and trial.

Prior to joining Exponent, Mr. Ritti worked in the Construction Risk and Dispute Resolution practice for PriceWaterhouseCoopers, LLP, the Capital Project Consulting practice for KPMG, LLP, and the Litigation Consulting practice for FTI Consulting, Inc. Additionally, Mr. Ritti developed a professional services offering for a technology firm in the construction industry and worked for a general contractor on commercial and residential projects.

Academic Credentials and Professional Honors

B.S., Civil Engineering, Pennsylvania State University

Presentations

Ritti J. Nuclear plant construction: From the past to the present and the risks that lie ahead. Construction Industry Webinar, 2009.

Ritti J. The new nuclear build out: An overview and look ahead. Construction Superconference, 2009.

Ritti J. How delay experts game the system. Multiple Continuing Legal Education Presentations, 2008–2009.

Ritti J. Construction management. Critique of common construction delivery methods. Guest Lecturer, UC Berkeley Engineering Masters Program, 2009.

Ritti J. Building information modeling / virtual design & construction. Multiple Continuing Legal Education Presentations, 2008–2009.

Ritti J. Trends in construction scheduling; advanced scheduling techniques. Guest Lecturer, UC Berkeley Engineering Masters Program, 2008.

Ritti J. 4D scheduling & advanced scheduling technologies. Multiple Continuing Legal Education Presentations, 2005–2007.

Ritti J. Case study: Developing a claim for a power plant project. University of California Berkeley, February 2007.

Ritti J. Contract management and dispute resolution: When design build projects go bad. Construction Superconference, December 2007.

Ritti J. CPM scheduling techniques. Multiple Continuing Legal Education Presentations, 2001–2007.

Ritti J. What to do when construction projects go bad. Lorman Seminars, August 2006.

Ritti J. Managing construction projects. Lorman Seminars, May 2006.

Ritti J. New trends and bad results in construction contracting. Distribution Contractors Association Annual Conference, February 2004.

Ritti J. Trends in construction contracts. Construction Financial Management Association / Associated General Contractors Annual Conference, October 2003.

Selected Relevant Projects

Heavy Industry

Oil Processing Facility: Performed schedule, cost, and engineering analysis on behalf of a Malaysian contractor responsible for the fabrication of multiple processing modules for two oil processing vessels being assembled in Singapore. Findings were presented through multiple expert reports and arbitration testimony both in response to the EPC contractor's claim and in support of the fabrication contractor's affirmative claim.

LNG Receipt Terminal: Performed schedule and engineering analysis on behalf of a French contractor responsible for the civil marine construction of an LNG terminal located in Mexico. The contractor's scope included a jetty platform, unloading platform, sea water intake facility, and mooring systems. The evaluation included critical path delay analysis, productivity analysis, and a review of issues related to standard of care and design. The value of the construction of the entire terminal was in excess of \$850 million.

Oil Processing Facility: Performed cost and schedule reviews including Monte Carlo simulations on behalf of the general contractor on a \$300 million oil vessel fabricated in Indonesia, China and Singapore. The contract included engineering, procurement, construction/fabrication, installation, and performance testing of a floating production, storage and offloading (FPSO) vessel, its associated mooring system and flexible risers, as well as all the necessary subsea power, data and communications cables.

Oil Processing Facility: Performed schedule reviews, Monte Carlo simulations and assessments of construction claims on behalf of the general contractor on an \$800 million EPCI contract in Singapore and Brazil. The project consisted of a floating production, storage and offloading vessel (FPSO) and involved the construction of a complex processing system installed offshore.

Pipeline: Performed a CPM schedule analysis on behalf of a contractor for a delay claim on the construction of a natural gas pipeline in Southern California.

Pipeline: Developed a CPM delay analysis and corresponding Time Extension Request for a Contractor on the expansion of an existing force main system including installation of 10,000 feet of large diameter pipe, microtunneling, and construction of associated structures in California. Presented the analysis and opinions in mediation as well as before a dispute resolution board.

Pipeline: Developed a CPM delay analysis and corresponding Time Extension Request for a Contractor on the installation of 11,000 feet of large diameter pipe, construction of associated structures and roadway expansion in California. Presented the analysis and opinions in mediation as well as before a dispute resolution board.

Power Plant: Analyzed and defended against a design-build contractor's \$80 million delay and disruption claim on behalf of the owner, a multinational joint venture power company. The project consisted of an \$800 million, 724-megawatt (net) coal-fired power plant in the People's

Republic of China Developed an expert report and presented findings to the executive management of the client organization.

Power Plant: Performed a series of project status reviews of an \$800 million, 1,200MW combined cycle power plant in the Philippines for a United States-based contractor. On-site reviews included analyses of project controls, review of project schedules and financial reports, interviews with project personnel and the development of project status reports presented to the executive management of the client organization.

Infrastructure

Highway: Developed a termination claim and expert report including both cost and time components for a joint venture design builder on a fixed price \$312 million freeway project in Salt Lake City, UT.

Highway: Developed a \$25M Request for an Equitable Adjustment including a CPM schedule analysis, damages analysis and an inefficiency claim for a joint venture design builder on a \$110 million freeway expansion project in Phoenix, AZ. Presented the analysis and findings in multiple settlement negotiation meetings.

Highway: Developed a delay claim utilizing a CPM schedule analysis on behalf of a joint venture design build contractor on a \$25 million freeway project in Salt Lake City, UT. Presented the analysis and findings in settlement negotiation meetings.

Bridge: Developed an expert report including a CPM schedule and acceleration analysis on behalf of a general contractor on a \$30 million rehabilitation and seismic retrofit of a bascule bridge. Testified in numerous Dispute Resolution Board hearings as well as multiple mediations.

Bridge: Provided various cost and schedule assistance to the joint venture general contractor of a \$115 million composite concrete deck arch bridge in Nevada.

High Speed Rail: Analyzed various claims submitted by the general contractor and developed a \$25 million counterclaim on behalf of a public owner on the \$350+ million electrification of a high-speed rail in the northeast United States.

Tunnel: Developed the Baseline Schedule and Charge Order Submissions for a Joint Venture general contractor for construction of a TBM tunneling project. The project involved construction of 1.2 mile twin tunnels as well as cut and cover tunnels for a station shell. The work will also include utility removal, relocation, support, and replacement, excavation, shoring of the excavated tunneling pits, soil stabilization, monitoring of buildings adjacent to the alignment, placement of the precast tunnel lining, and placement of cast-in-place (secondary) liner.

Tunnel: Performed cost and schedule assessments for the Joint Venture general contractor for a TBM tunnel project that included 40,000 LF of 24' inside finished diameter hard rock TBM

tunnel, a combined sewer pumping station, a series of interconnections to existing combined sewers, and an overflow structure.

Airport: Analyzed the mechanical contractor's delay and acceleration claims on the expansion of Dulles Airport's utility system utilizing a time impact analysis.

Wastewater Treatment Facility: Analyzed a delay and damages claim submitted by a General Contractor on the expansion of a Wastewater Treatment Facility in Northern California. Provided testimony in trial regarding schedule delay and damages.

Utility: Consulted with a distribution and transmission division for one of the largest natural gas and electric utilities in the United States to improve group's overall performance and management of its program of work. The scope of work included expanding the use of existing management tools, the development and implementation of a series of repeatable process and procedures and enhanced project controls and reporting tools, including over 400 resource loaded project schedules. The process and procedures and other project controls developed by Exponent were used for reporting overall project progress and identifying projects that were at risk of being delivered late or over budget during the planning and execution stages. Varying levels of project and program level reporting were developed for project stakeholders based on individual level of involvement and included schedule and resource forecasting.

Dam: Performed a series of project status reviews of a \$1.2 billion, multi-purpose dam project in the Philippines for a United States-based contractor. On-site reviews included analyses of project controls, review of project schedules and financial reports, interviews with project personnel and the development of project status reports presented to the executive management of the client organization.

Copper Mine: Managed the defense of a \$145 million breach of contract claim in connection with a Copper Mine in Nevada on behalf of an International Engineering and Construction company.

Environmental

Environmental: Analyzed financial claims submitted by the Environmental Protection Agency and California Department of Substance Control involving a superfund site in Northern California on behalf of an international contracting and engineering firm.

Environmental / Lost Profits: Assisted a large US based railroad company in the defense of a \$40+ million claim for environmental remediation efforts and lost profits in an urban mixed-use development project in Oregon.

Hotel / Casino / Mixed-Use

Hotel: Managed the development of a \$130 million general damages claim including a change order analysis for the general contractor on a \$1.5 billion, 35 story, 5.3 million square foot hotel and casino in Las Vegas, NV. The case involved a 10 month jury trial.

Hotel: Prepared the defense of a \$13+ million delay and disruption claim submitted by a concrete subcontractor on behalf of a large international general contractor in Las Vegas, NV.

Hotel: Assisted the general contractor in the preparation of a delay and disruption claim on a tower addition and casino renovation project in downtown Las Vegas, NV.

Hotel: Prepared a Termination for Convenience Claim including both schedule and cost components for the general contractor on a \$105 million mountain resort hotel in Jackson Hole, UT.

Residential: Managed the construction schedules, negotiated change orders and developed a series of delay and cost claims on behalf of the construction manager on a \$200 million high-rise residential tower in San Francisco, CA.

Residential: Reviewed project schedules submitted by the construction manager, defended against a series of delay and cost claims and presented in mediation on behalf of the Owner on a \$25 million multi-story residential building in San Francisco, CA.

Residential: Developed a termination claim and expert report that included a schedule and damages analysis on behalf of the general contractor on a multi-family residential development in California. Provided testimony in arbitration regarding schedule delay and damages.

Retail: Performed contract audits of the general contractor on the construction of a chain of retail stores throughout the United States. Reviewed the general contractor's change order pricing and pay requests to ensure contract adherence.

Miscellaneous

Prison: Analyzed the delay claim submitted by the general contractor and prepared a counterclaim on a medium security prison in Ohio on behalf of a public owner.

High Tech: Assisted in the development of an expert rebuttal report on behalf of a large consulting firm involved in the construction management of multiple internet data centers valued at over \$250 million.

Performing Arts Center: Analyzed delay, disruption and cost claims totaling over \$80M developed by the general contractor and owner, and presented the findings in mediation on behalf of the Architects & Engineers. The construction project was a \$200M+ Performing Arts Center in Southern California.

Hospital: Analyzed the performance of the general contractor and lead architect and developed a delay, disruption, and financial damages claim related to the expansion of a hospital in Hawaii on behalf of the owner.

Professional Affiliations

- American Society of Civil Engineers
- Project Management Institute, College of Scheduling
- American Bar Association, Construction Forum