

CONTRACT NOS. 4400031512, 4400031513 AND 4400031514

IDIQ Contracts for Critical Path Method (CPM) Analysis, Statewide

February 05, 2025



Wednesday, February 05, 2025

Louisiana Department of Transportation and Development
1201 Capitol Access Road
Baton Rouge, LA 70802-4438



6100 Corporate Blvd., Suite 325
Baton Rouge, Louisiana 70808
Tel 225 292 1004

Subject: **Contract No. 4400031512, 4400031513 AND 4400031514**
IDIQ Contracts for Critical Path Method (CPM) Analysis, Statewide

Contact: Roy Cooper, P.E.
Phone: 860 836 6364
Email: roy.cooper@arcadis.com

Dear Project Evaluation Team Members:

Over the last two decades, Arcadis and its teaming partners have worked together with Louisiana Department of Transportation and Development (DOTD) through multiple indefinite Delivery/Indefinite Quantity (IDIQ) contracts, most recently the ongoing IDIQ Contract for Statewide Claims Analysis. This has given us a strong knowledge of DOTD processes and procedures. We take the time to work with you, as an extension of your staff, to learn what we ***need to deliver high quality Construction Engineering Services-Critical Path Method Analysis and related scopes***. We bring you a high-performing scheduling team that is well-qualified to work on a wide variety of ongoing and future projects.

Proven Qualified Team

By choosing the Arcadis team, you will be investing in a partnership that ***brings you over 130 years of expertise and is aligned with your goals of promoting quality of life and sustainability***. Our comprehensive ***construction scheduling, cost estimating, and project control services*** have been tailored to address your specific needs. We offer a range of capabilities, including the ability to accurately estimate construction cost and time, review plan constructability, provide value engineering proposals, review procurement documents and specifications, manage project timelines effectively, monitor project budgets, forecast cash flow, prepare detailed estimates, maintain critical project documentation, and expertly resolve construction disputes.

For over 40 years, the Arcadis team has provided on-call scheduling services for many public DOTs including in Connecticut, Tennessee, California, Rhode Island, Colorado, Alaska, North Carolina, Ohio, and Massachusetts. We have continuously served the California and Connecticut Departments of Transportation in this capacity for over three decades, which is a testimonial of our clients' confidence in our competence, reliability and the quality of our services and work product. Based on our work with these agencies across the country, we can bring to DOTD an unparalleled national scheduling perspective.

Our team is composed of qualified, ***recognized thought leaders in CPM Scheduling, Claims Consulting, and Value Engineering, led by certified Planning and Scheduling (PSP), Cost Estimating Professionals (CEP), Certified Value Specialists, Risk Management Professionals (PMI-RMP), and Claims Experts (CFCC)***.

While many consultants may claim to offer similar services, what sets us apart is our unwavering dedication to a bona fide, ***full-time practice focused exclusively on scheduling, estimating, and claims***. We understand the critical importance of safeguarding DOTD's interests and approach this responsibility with the utmost seriousness.

Why Choose Arcadis:

Here are the key reasons why Arcadis is uniquely qualified for this partnership:



Dedicated Practice of Scheduling, Cost Management and Claims Experts. Arcadis' Contract Solutions group is a dedicated scheduling, cost management, risk management and claims practice. Our team members are not borrowed from other projects but are full-time professionals committed to delivering excellence within the scope of this contract.



Our Approach. As acknowledged leaders in scheduling, cost management, risk assessment, and construction claims consulting, we employ industry best practices in reviewing construction schedules, developing accurate estimates, and preventing and resolving disputes. Our role is that of factfinders and advisors, providing objective information and effective solutions. Our approach aims to anticipate challenges and resolve conflicts at the earliest stages, ensuring smooth job closeouts with minimal outstanding issues.



Fresh Scheduling Perspective. Our experts have extensive experience in developing industry standards and best practices. They have authored and co-authored numerous recommended practices and industry guidelines published by professional associations such as AACE, CMAA, and PMI. By choosing Arcadis as your collaborator, DOTD will benefit from a fresh and objective perspective on existing scheduling processes, gaining insights into what is working well and uncovering areas for improvement. We will help develop a roadmap for enhancements while ensuring that your project controls processes are up-to-date and aligned with industry-wide standards and practices.

We are thrilled to submit this proposal to DOTD and eagerly anticipate the opportunity to assist you in the successful completion of your projects. Our team is ready to bring our expertise, commitment, and passion to your organization.

Thank you for your consideration, and we look forward to continuing our relationship with DOTD.

Sincerely,

Arcadis

Roy Cooper, PE
Project Manager

Akhil Chauhan, PE, PTOE, PTP, PMP
Principal-In-Charge

Sections

1-11



DOTD FORM: 24-102

(Revised December 12, 2024)

PROPOSAL TO PROVIDE CONSULTANT SERVICES

Prime consultant shall complete the DOTD Form 24-102 without altering the Form's text; however, the instruction and/or guidance for Sections 12 through 23 can be removed but do not remove Section title and number.

ANY CONSULTANT FAILING TO SUBMIT ANY OF THE INFORMATION REQUIRED ON THE DOTD FORM 24-102, OR PROVIDING INACCURATE INFORMATION ON THE DOTD FORM 24-102, MAY BE CONSIDERED NON-RESPONSIVE.

1. Contract Name as shown in the advertisement	IDIQ Contracts for Critical Path Method (CPM) Analysis, Statewide
2. Contract Number(s) as shown in the advertisement	CONTRACT NO. 4400031512, 4400031513 AND 4400031514
3. State Project Number(s), if shown in the advertisement	N/A
4. Prime consultant name (name must match exactly as registered with the Louisiana Secretary of State (SOS) where such registration is required by law; including punctuation; include screenshot from SOS at the end of Section 20)	
5. Prime consultant license number (as registered with the Louisiana Professional Engineering and Land Surveying Board (LAPELS) if registration is required under Louisiana law)	EF.0002808 DUNS 057690414
6. Prime consultant mailing address	6100 Corporate Blvd., Suite 325 Baton Rouge, LA 70808
7. Prime consultant physical address (existing or to be established, if location is used as an evaluation criteria)	6100 Corporate Blvd., Suite 325 Baton Rouge, LA 70808
8. Name, title, phone number, and email address of prime consultant's contract point of contact	Roy Cooper, P.E. Project Manager P. 860 836 6364 roy.cooper@arcadis.com
9. Name, title, phone number, and email address of the official with signing authority for this proposal	Roy Cooper, P.E. Project Manager P. 860 836 6364 roy.cooper@arcadis.com

10. This is to certify that all information contained herein is accurate and true, and that the team presently has sufficient staff to perform these services within the designated time frame. By submitting this proposal, proposer certifies that it is not engaged in a boycott of Israel and it will, for the duration of its contract obligations, refrain from a boycott of Israel. Proposer also certifies and agrees that the following information is correct: In preparing its response, the proposer has considered all proposals submitted from qualified, potential subcontractors and suppliers, and has not, in the solicitation, selection, or commercial treatment of any subcontractor or supplier, refused to transact or terminated business activities, or taken other actions intended to limit commercial relations, with a person or entity that is engaging in commercial transactions in Israel or Israeli-controlled territories, with the specific intent to accomplish a boycott or divestment of Israel. The proposer also has not retaliated against any person or other entity for reporting such refusal, termination, or commercially limiting actions. DOTD reserves the right to reject the response of the bidder or proposer if this certification is subsequently determined to be false, and to terminate any contract awarded based on such a false response.

Pursuant to Act No. 581 of the 2024 Louisiana Legislature Regular Session, proposer further certifies that it does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association based solely on the entity's or association's status as a firearm entity or firearm trade association. In addition, proposer certifies it will not discriminate against a firearm entity or firearm trade association during the term of the contract based solely on the entity's or association's status as a firearm entity or firearm trade association.

11. If a Disadvantaged Business Enterprise (DBE) goal has been set for this advertisement, indicate which firm(s) will be used to meet the DBE goal and each firm(s)' percentage.



Roy Cooper, P.E.

Signature above shall be the same person listed in Section 9:

Date: February 5, 2025

Firm(s):	Firm(s)' %:
N/A	N/A

Sections
12-13

12 DISCIPLINE TABLE:

As indicated in the advertisement, insert a completed table here. The percentages for the prime and sub-consultants must total 100% for each past performance evaluation discipline, as well as the overall total percent of the contract.

The only past performance evaluation disciplines to be used are listed in the drop down in each row (Appraiser, Bridge, CE&I/OV, CPM, Data Collection, Environmental, Geotech, ITS, Other (must specify), Planning, Right-of-Way, Road, Survey, and Traffic). Remove rows as needed.

Discipline(s)	% of Overall Contract
CPM	100%
Percent of Contract	100%

13 FIRM SIZE:

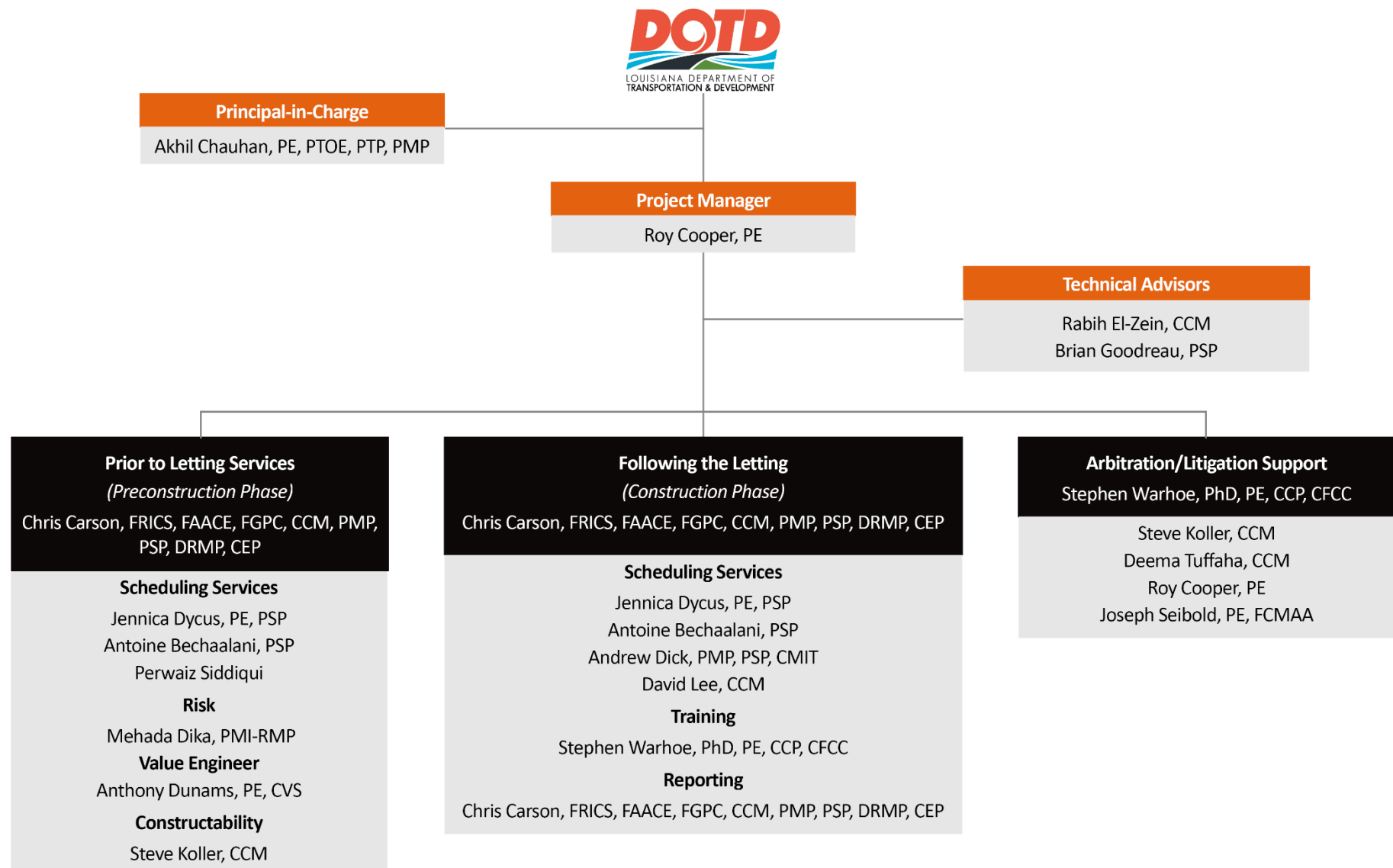
Firm name	DOTD Job Classification	Number of personnel <u>committed to this</u> contract	Total number of personnel available in this DOTD Job Classification (if needed)
	Principal	4	4
	Supervisor - Other	2	6
	Other (Senior Scheduler)	3	4
	Other (Scheduler)	2	8
	Other (Risk Management)	1	3
	Other (Value Engineering)	1	2
	Other (Constructability Review)	1	6
	Other (Claims Analyst)	1	10
	Other (Senior Claims Expert)	1	5

Sections

14-16



14 ORGANIZATIONAL CHART:



15 MINIMUM PERSONNEL REQUIREMENTS:

MPR No. Do not insert wording from ad	Personnel being used to meet the MPR (Individual(s) may not satisfy more than one MPR unless specifically allowed by Attachment B of the advertisement)	Firm employed by	Type of license and discipline meeting MPR/ certification & number (Ex: PE # - Civil)	State of license	License / certification expiration date
1	Roy Cooper, P.E.		PE 0044531 - Civil	LA	09/30/2026
2	<i>36 Years of Experience</i> Akhil Chauhan, P.E, PTOE, PTP, PMP <i>22 Years of Experience</i>		PE 0033703 - Civil	LA	09/30/2026
3	Roy Cooper, P.E.		PE 0044531 - Civil	LA	09/30/2026
4					

Firm employed by: 

Name	Akhil Chauhan, P.E., PTOE, PTP, PMP		Years of relevant experience with this employer	17
Title	Market Sector Leader		Years of relevant experience with other employer(s)	5
Degree(s) / Years / Specialization			MS / 2003 / Transportation, Massachusetts Institute of Technology (MIT) BS / 2001 / Civil Engineering, Indian Institute of Technology (IIT)	
Active registration number / state / expiration date			PE. 0033703 / LA / Exp. 09/30/2026; PTOE 2544 / USA / Exp. 11/30/2026; PTP 246 / USA / Exp. 12/30/2027; PMP 1444676 / USA / Exp. 08/30/2026	
Year registered	2008	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities			Principal-in-Charge / Technical Advisor	
Experience dates	Experience and qualifications relevant to the proposed contract			
	Mr. Chauhan is a Principal Traffic Engineer with more than 20 years of applied research and industry experience in the fields of highway safety, traffic engineering, traffic modeling and simulation, transportation planning, demand modeling/forecasting, intersection/corridor analysis, historical crash data analysis tools, Highway Safety Manual (HSM) Methods, National Environmental Policy Act (NEPA) studies, and access management. He has successfully led, managed, and mentored numerous projects and personnel related to transportation safety, modeling, simulation, and planning for public agency clients located across the nation including several state Departments of Transportation. He is proficient in the use of many macro-, meso-, and microscopic traffic simulation software programs such as HCS, Vistro, Synchro, SIDRA, Vissim, MITSIM, Dynameq, DynaMIT, TransCAD, Visum, and OREMS.			
04/21 – 07/22	Louisiana Strategic Highway Safety Plan (SHSP) Update, Louisiana Department of Transportation and Development (LADOTD), Statewide, LA. Principal Engineer. Responsible for overall contract management and technical advisory. Arcadis performed all crash data analysis tasks for the SHSP update, including a statistical analysis of existing emphasis areas and evaluating potential modifications to emphasis areas.			
03/18 – 06/21	Baton Rouge Pedestrian and Bicycle Safety Action Plan and Road Safety Assessments, LADOTD, East Baton Rouge Parish, LA. Principal Engineer. Responsible for contract management and technical advisory for the project, which involved the development of a Pedestrian and Bicycle Safety Action Plan (PBSAP). Arcadis developed network screening criteria based on crash data and socioeconomic data to identify high-priority locations with a history of pedestrian and/or bicycle crashes, and performed Road Safety Assessments (RSAs) at 10 priority locations to identify safety deficiencies and develop safety countermeasures to improve safety for pedestrians and bicyclists.			
03/18 – 04/20	East Baton Rouge Parish Pedestrian and Bicycle Master Plan, LADOTD, East Baton Rouge Parish, LA. Principal Engineer. Responsible for contract management and technical advisory for the bicycle and pedestrian facility master plan. Master plan creation included evaluating existing conditions, analyzing crash/incident data, receiving input from stakeholders, hosting public forums to receive feedback, listing priority projects to be completed, recommending short/middle/long-term improvements, and identifying potential resources for implementation.			

02/17 – 02/18	I-49 Interchange Stage 0 Safety Feasibility Study, LADOTD, Lafayette Parish, LA. <i>Principal Engineer.</i> Responsible for contract management and technical advisory for project tasks including data collection and analysis, traffic and safety analysis, and conceptual design drawings. Purpose of the project was to identify feasible improvement alternatives to address historical safety issues along the I-49 corridor and at three interchanges. Participated in meetings with LADOTD HQ and District 03 team members to understand project needs and develop context-sensitive solutions.
04/16 – 09/18	New Orleans Pedestrian Safety Feasibility Study, LADOTD, Orleans Parish, LA. <i>Principal Engineer and Technical Advisor.</i> Prepared a pedestrian safety study for 20 intersections with high occurrence of pedestrian safety issues - especially between motorized and non-motorized travel modes. Scope of services included data collection (for both vehicles and pedestrians), analysis of existing traffic conditions, historical crash data evaluation, investigation of safety deficiencies at each intersection, recommendation of safety improvements such as traffic signal improvements, intersection striping improvements, signing improvements, lighting improvements, sidewalk/crosswalk improvements, curb extensions, traffic calming, Americans with Disabilities Act compliance including curb ramps, and parking modifications, analysis of alternatives and conceptual layout development, cost estimates, and Stage 0 checklists.
12/13 – 06/15	LA 3235 Stage 0 Safety Feasibility Study, LADOTD, Lafourche Parish, LA. <i>Project Manager and Principal Engineer.</i> Responsible for the preparation of a formal corridor safety study that analyzed alternatives and enhanced safety and mobility on LA 3235. Main tasks included traffic data collection, warrant studies, traffic analysis, safety analysis, development of conceptual layouts, and public outreach. Intersections found to warrant signalization were also modeled in unconventional designs including RCUT, MUT, and Continuous T-intersections. Safety performance of alternatives was estimated using Highway Safety Manual predictive methods. Preliminary cost estimates and conceptual layout drawings were also produced. Stage 0 checklists were completed as part of study documentation.
12/13 – 05/15	Joe Sevario/Roddy Road Stage 0 Safety Feasibility Study, LADOTD, Ascension Parish, LA. <i>Project Manager and Principal Engineer.</i> Evaluated roundabouts at 10 stop-controlled intersections along Joe Sevario/Roddy Road, from US 61 to LA 42, a length of approximately 7.2 miles. Main tasks included traffic data collection, crash analysis, capacity analysis, safety analysis, review of existing pipelines and other municipal utilities, alternatives analysis, design development, and cost estimates.

Firm employed by: **ARCADIS**

Name	Roy Cooper, P.E.	Years of relevant experience with this employer	27
Title	Operations Director	Years of relevant experience with other employer(s)	9
Degree(s) / Years / Specialization		MBA / 1999 / Business Administration, University of Connecticut BS / 1988 / Civil Engineering, Michigan Technological University	
Active registration number / state / expiration date		PE.0044531 / LA / Exp. 09/30/2026	
Year registered	2020	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities		Project Manager and Arbitration/Litigation Support	

Experience dates	Experience and qualifications relevant to the proposed contract
	Mr. Cooper is a Senior Vice President and Leader of Arcadis' Contract Solutions group in North America where he is responsible for all of Arcadis' claims and scheduling related service offerings including providing expert testimony, claims analysis, Critical Path Method (CPM) schedule review services, constructability reviews, cost estimating, and quantitative risk assessment. He is a Professional Civil Engineer registered in Louisiana, Connecticut, Florida, Maryland, New Jersey, New York, Rhode Island and Texas. He has more than 36 years of construction experience, managing complex road and bridge projects, including the analysis and review of complex construction claims from the beginning stages through trial support and expert testimony. Mr. Cooper excels in the role of trusted advisor, bringing clarity to complex technical and financial issues. He has led large-scale claims evaluation assignments of almost every type, including the evaluation of schedule impacts, cost impact analysis, mediation, and claims negotiation, and has been qualified as an expert on both horizontal and vertical type projects. He has testified before District Courts similar to Louisiana on several occasions.
12/18 – 12/19	CPM Scheduling Training, I-440 Widening and Improvement Design-Build Project, Tennessee Department of Transportation (TDOT), Davidson County, TN. <i>Project Controls Specialist.</i> Provided claims avoidance and risk management consulting to the design review team and senior leadership at TDOT on this major project in Nashville. Regularly consulted with team and TDOT as project issues arose. Provided CPM training to TDOT personnel as part of this project.
12/19 – 07/20	Claiborne Pell Bridge, Rhode Island - Turnpike and Bridge Authority (RITBA), Providence, RI. <i>Project Executive/Testifying Expert.</i> Provided schedule, damage and claims analysis to the RITBA. The \$39 million project consisted of steel repairs and painting of this suspension bridge. The painting contractor filed a \$8 million claim alleging that it was delayed and had to accelerate the work because of excessive steel repairs. The case settled during mediation.
09/21 – Ongoing	TDOT AG Jensen Construction, Tennessee Department of Transportation (TDOT), Montgomery County, TN. <i>Testifying Expert.</i> Providing expert services to the Tennessee Office of the Attorney General regarding a dispute on a \$67 million road and bridge project in Montgomery County, Tennessee. The contractor has made a \$2 million delay and direct cost claim. The contractor claimed it encountered a differing site conditions while installing drilled shafts. Evaluating and making assessment of the technical issues, schedule delays and alleged damages.

12/19 – 12/21	District 3 Bridge Repairs, Connecticut Department of Transportation (CTDOT), Stamford, CT. <i>Testifying Expert</i>. Provided schedule, damage and claims analysis to the CTDOT. The \$4 million project consisted of rehabilitating four bridges in Fairfield County. The contractor filed an \$8 million claim alleging that it encountered differing site conditions and that the State delayed the approval of a major temporary support system. The case settled in mediation prior to trial.
01/20 – 02/22	TDOT Jones Brothers Memphis, TDOT, Memphis, TN. <i>Technical Expert and Claims Evaluator</i>. Provided expert services to the Tennessee Office of the Attorney General regarding a dispute on a \$15 million road and bridge project in Memphis Tennessee. The contractor made a \$5 million delay and direct cost claim. The contractor claimed it encountered utility delays, abnormal flooding and additional cost because of TDOT changes to the substructure piles. Arcadis evaluated and made assessments of the technical issues, schedule delays and alleged damages . The case settled during mediations.
10/96 – 10/97	I-95 over Metro-North, CTDOT, Cos Cobb, CT. <i>Project Superintendent</i> on this \$13 million CTDOT project, consisting of a bridge widening on I-95 over the Cos Cobb railroad station. Responsibilities included supervision of all planning of manpower, materials, and construction operations; and the supervision of project engineering designs, CPM scheduling and required contract submittals.
04/96 – 10/96	Bridge Rehabilitation, CTDOT, Suffield, CT. <i>Project Superintendent</i> and Engineer. The project involved a \$5 million rehabilitation of a concrete arch bridge originally constructed in 1929. Responsibilities included design, supervision of shop fabrication, field engineering and erection of the temporary support structure, as well as the supervision of demolition and subsequent concrete replacement activities with prominent adjacent utility considerations.
09/95 – 10/96	Median Safety Improvements, US 15 (Merritt Parkway), CTDOT, New Haven, CT. <i>Project Superintendent</i> and Engineer. The project involved a \$4.5 million median safety improvement on a 3.5-mile stretch of US 15 (Merritt Parkway). Consisted of excavation, re-grading, and drainage systems. Responsibilities included supervision of both day and night shifts. All project planning, engineering, and scheduling functions were also done on-site.
10/94 – 08/95	I-84 Bridge, CTDOT, Danbury, CT. <i>Project Superintendent</i> and Engineer. The project involved a \$2.5 million bridge reconstruction project on I-84. Responsibilities included supervision of both day and night shifts. All project planning, engineering, and scheduling functions were also done on-site. The project consisted of structural deck, bearing, and parapet replacement, along with paving improvements.
09/89 – 04/91	Charter Oak Bridge, CTDOT, Hartford, CT. <i>Project Superintendent</i> and Engineer. The project involved a \$52 million western approaches to the Charter Oak Bridge. The project included the interchange between I-91 and Route 5 and 15. Responsibilities included planning, scheduling, procurement, and direct supervision of numerous construction activities.

Firm employed by: 				
Name	Rabih El-Zein, CCM		Years of relevant experience with this employer	4
Title	Operations Director		Years of relevant experience with other employer(s)	22
Degree(s) / Years / Specialization			BFA / 2000 / Interior Architecture, University of Kansas Associate /1996 / Business & Merchandising, Johnson County College	
Active registration number / state / expiration date			259577 / CA / Exp. 07/09/2027	
Year registered	N/A		Discipline	N/A
Contract role(s) / brief description of responsibilities			Technical Advisor	
Experience dates		Experience and qualifications relevant to the proposed contract		
		Mr. El-Zein leads Arcadis' West Coast scheduling and construction claims practice. His experience includes the management of numerous project types including ports, roadways and highways, bridges, light rail, educational buildings, police stations, fire stations, parks and recreation facilities, condominiums, sports facilities, courthouses, pipelines, and wastewater treatment facilities. These projects were built using traditional and alternative project delivery methods. With two decades of experience as a general contractor project manager, project executive, and operations director, Mr. El-Zein has extensive knowledge of construction means and methods. He brings hands-on experience in managing field crews, preparing bids, reviewing contracts, and delivering projects through execution and closeout.		
04/18 – 05/24		Regional Connector, Los Angeles County Metropolitan Transportation Authority (LACMTA), Los Angeles, CA. <i>Change Control Director and Claims Analyst on the Regional Connector project.</i> Responsible for the \$1.4 billion project includes a 1.9-mile extension in Downtown Los Angeles. Reviewed and provided comments and recommendations on over 100 proposed change orders totaling approximately \$200 million, as requested, and provided change control administration. Coordinated, recommended, and provided contract support for the construction team to facilitate prompt processing of change orders as well as verify contract conformity. Worked closely with the estimator(s) and technical experts to provide cost estimating services to review and recommend action regarding Design-Builder change requests, value engineering change proposals, claims, level of efforts and provisional sum work. Provided input to position papers and findings of fact documents based on the terms and conditions of the contract agreement.		
07/16 – 01/18		Vehicle Undercrossing Construction, Orange County Transportation Authority and City of Fullerton, Fullerton, CA. <i>Project Executive.</i> Responsible for the construction of \$38 million vehicle undercrossing at the intersection of State College Boulevard railroad tracks. Constructed a two-span 113-foot-long, 60-foot-wide undercrossing with concrete precast box girders and steel plate deck. Responsible for the oversight of budget, technical aspects, scheduling, bidding, mitigation of project delays, claims, and staff. Self-performed structural concrete, grading, and utilities. (American Society of Civil Engineers - Orange County [ASCE OC] "Bridge Project of the Year" 2018).		
02/16 – 01/17		Bridge Construction Over Railroad Tracks, Orange County Transportation Authority, Placentia, CA. <i>Project Director.</i> Responsible for the construction of a \$98 million project that entailed raising Tustin Ave/Rose Dr arterial over railroad tracks, Atwood Channel, and Orangethorpe Avenue, via one 450-foot-long, four-span, six-lane-wide bridge founded on ten 96-inch cast-in-drilled-hole piles and 107 driven piles. Responsible for the oversight of budget, technical aspects, scheduling,		

	bidding, mitigation of project delays, claims, and staff. Self-performed structural concrete, grading, and utilities. (ASCE OC “Bridge Project of the Year” 2017). Partnered with project stakeholders on a regular basis and resolved several potential claims amicably and to the benefit of the project.
01/16 – 10/18	Stabilization of Embankment and Roadway, California Department of Transportation (CDOT), Irvine, CA. <i>Project Director.</i> Responsible for the construction of Caltrans Project No. 12-0N1104. Stabilization of embankment and roadway at the CA-133/I-5 interchange. This \$15 million project required substantial shoring of adjacent lanes. Oversight of budget, technical aspects, scheduling, bidding, mitigation of project delays, claims, and staff. Self-performed structural concrete, grading, and utilities. (Caltrans “Success in Motion Award” 2018).
06/17 – 02/19	Roadway Rehabilitation, California Department of Transportation (Caltrans), Orange, CA. <i>Project Executive.</i> Responsible for the construction of Caltrans’ \$15 million Roadway rehabilitation of CA-91. Repair and replacement of freeway slabs with precast panels, grinding and overlaying existing asphalt, and seismic retrofit of bridge columns. Responsible for the oversight of budget, technical aspects, scheduling, bidding, mitigation of project delays, claims, and staff. Self-performed structural concrete, grading, and utilities.
05/15 – 06/16	Water Recycling Demonstration Facility, City of Anaheim, CA. <i>Project Director.</i> Responsible for the \$18 million Water Recycling Demonstration Facility Project, which consists of a state-of-the-art water recycling facility and a distribution system. The project will treat wastewater taken from an existing sewer line in the vicinity of the City Hall complex to meet state reuse standards, and then provide the recycled water for a variety of non-potable uses.
02/12 – 05/15	La Kretz Innovation Center Seismic Retrofit and Tenant Improvements, City of Los Angeles, Los Angeles, CA. <i>Project Director.</i> Responsible for the \$21 million seismic retrofit and improvement of 68,000-square-foot(SF) unreinforced masonry building for City of Los Angeles. Leadership in Energy and Environmental Design Gold certified. Shear walls, moment frames, shoring of building, truss improvements, green wall systems, BIM modeling, and photovoltaic system.
02/19 – 04/21	Park View Estates Assisted Living Community, Fountain Valley, CA. <i>Director and Senior Project Manager.</i> Responsible for the construction of a \$28 million project that entailed the construction of an assisted living community with 152 bedrooms, public spaces and exterior facilities. Oversaw budget, technical aspects, scheduling, bidding, construction and mitigation of project delays, claims, and staff.
06/12 – 08/18	Seismic/Structural Renovation, Tenant Improvements, Los Angeles Trade Technical College, Los Angeles, CA. <i>Senior Project Manager.</i> Responsible for the \$52 million interior and exterior improvements to existing historical auditorium and annex buildings, including major seismic improvements (shear walls, new footings, and seismic separations). Phased project into electrical, mechanical, and structural to minimize conflicts and accelerate schedule.
01/10 – 04/12	Costa Mesa Police Department, City of Costa Mesa, CA. This \$34 million included the construction of one-story addition to an existing two-story building with a basement; the new portion was approximately 11,400-SF in size, connected to the existing building by covered walkways. This project consisted of multiple phases including but not limited to two new police personnel parking lots, major electrical, mechanical, and plumbing renovations. Extensive alterations and seismic retrofit to the existing building provided. The building remained operational during construction; special procedures took place to guarantee there were no interruptions to the 911 call center.

Firm employed by:  **ARCADIS**

Name	Brian Goodreau, PSP		Years of relevant experience with this employer	14
Title	Operations Director		Years of relevant experience with other employer(s)	7
Degree(s) / Years / Specialization			BS / 2009 / Construction Management, Central Connecticut State University	
Active registration number / state / expiration date			Certified Planning and Scheduling Professional, AACE, AIC Level I Certified Constructor	
Year registered	N/A	Discipline	N/A	
Contract role(s) / brief description of responsibilities			Technical Advisor	

Experience dates	Experience and qualifications relevant to the proposed contract
------------------	---



Mr. Goodreau is a Vice President and Operations Leader for the Arcadis Contract Solutions team of experts in project controls. He has 21 years of experience in the construction industry and currently manages scheduling, cost estimating, and claims efforts on behalf of public and private owners for numerous complex infrastructures and building projects across North America. He has a proven record of accomplishment in helping clients deliver projects on time and on budget by implementing techniques such as critical path method (CPM) scheduling and total cost management. He has also effectively resolved numerous disputes on behalf of his clients, providing expert analysis and litigation support.

03/16 – Ongoing	On-Call Schedule, Cost Estimating and Project Controls Support, New York City Department of Environmental Protection (NYCDEP) Bureau of Engineering Design and Construction, New York, NY. The DEP engaged Arcadis under a three-year, \$5 million task order contract to provide dispute avoidance and mitigation, scheduling, estimating and claims resolution. The contract was renewed in 2022, for \$10 million, for an additional six years. Serves as the Project Manager for this project and responsible for all aspects of the contract management and oversees the implementation of project controls tasks including cost estimating, scheduling, claims avoidance and resolution, change management, and risk management.
05/17 – 01/20	171-431 Bridge Rehabilitation Project – Connecticut Department of Transportation (CTDOT), East Hartford and Willington, CT The CTDOT undertook a \$22 million design-build bridge rehabilitation project. The project involved the innovative design and accelerated construction for superstructure replacement, substructure patching and modifications to the existing substructures of four highway bridges. Arcadis served as the Construction Consultant for the project, providing contract administration services and scheduling support. Brian reviewed and analyzed the baseline schedule updates for the project with a focus on project execution. He also reviewed the cost loaded Primavera Project Management (P6) schedule submissions monthly. Reported findings to CTDOT and contractor during meetings and produced a comprehensive report listing his analysis, findings, and recommendations. Led the team of Arcadis project controls experts responsible for reviewing and analyzing the baseline and monthly update CPM schedules and communicating findings on a monthly basis. Led the team that reported on planned versus actual progress, delays and mitigation measures, schedule performance and earned value. This project was completed on time and within budget and is viewed as a major success in the development of CTDOT's alternative project delivery program.

12/09 – 12/11	Bradley International Airport - Terminal A Renovations, CTDOT, Windsor Locks, CT. Arcadis evaluated a \$4.1 million extra work, productivity loss and delay claim against the State of Connecticut by the contractor that expanded and renovated Terminal A of Bradley International Airport under a \$28 million lump sum contract. Assisted the testifying expert by developing an as-built schedule derived from contemporaneous project documentation. The schedule analysis was utilized to support the State's position during the negotiations with the general contractor.
11/10 – 11/15	Route 128/I-95 Add-A-Lane and Reconstruction of Seven Bridges – Massachusetts Department of Transportation, Dedham, MA. Reviewed and analyzed schedule updates for this \$99 million highway expansion and reconstruction of seven bridges. The project consisted of full depth paving for the addition of one travel lane in either direction for a span of approximately four miles. Seven bridges were reconstructed, one of which was a multi-span bridge crossing the Charles River. The contractor utilized Primavera Project Management (P6). The schedule was fully cost and resource-loaded. Reported his findings and provided recommendations to the Department on a monthly basis.
06/12 – 12/14	CTFastrak Program – CTDOT, New Britain to Hartford, CT. The CTFastrak program (formerly known as the New Britain-Hartford Busway) is a 9.4-mile dedicated roadway developed by the State of Connecticut to facilitate the use of bus rapid transit to and from Union Station in Hartford and Downtown New Britain in central Connecticut. The total construction cost was \$569 million. The project also included the construction of ten landscaped bus stations, seventeen bridges, over 78 retaining walls and five miles of multi-use trail. This project was constructed on a two-and-a-half-year accelerated construction schedule. Arcadis' role on CTFastrak was to review and analyze the cost-and-resource-loaded CPM schedule and provide recommendations to the Construction Engineering & Inspection (CE&I) firms. Arcadis teamed with the CE&I firms in a proactive effort to bring this project in on time and avoid potential contractor claims against the Department of Transportation. Scheduling challenges for this project included numerous change orders, restrictions associated with working within close proximity to live railroad tracks, a focus on minimizing the impacts to traffic and several other limitations on operations. This project finished on time and within budget.

Firm employed by: **ARCADIS**

Name	Chris Carson, FRICS, FAACE, FGPC,CCM, PMP, PSP, DRMP, CEP		Years of relevant experience with this employer	11
Title	Director of Project Controls		Years of relevant experience with other employer(s)	39
Degree(s) / Years / Specialization			MS / 1972 / Mechanical Engineering, University of Virginia-Main Campus	
Active registration number / state / expiration date			PSP 206 / USA / Exp. 05/01/2027; DRMP 15 / USA / Exp. 05/01/2027; CCM 1212 / USA / Exp.02/28/2027	
Year registered	N/A	Discipline	N/A	
Contract role(s) / brief description of responsibilities			Lead (Preconstruction and Construction Phase) and Reporting (Construction Phase)	
Experience dates	Experience and qualifications relevant to the proposed contract			
	Mr. Carson has 50 years of experience in road and bridge, tunnel, airport, seaport, underground utilities and site development, parking garage, municipal, commercial, industrial, rail, buildings, and energy projects. He has a strong background in all phases of construction management, specializing in scheduling, estimating, risk, and claims avoidance, forensic analysis, negotiation and resolution. Mr. Carson was a primary Author/Editor for the PMI book, “CPM Scheduling for Construction - Best Practices and Guidelines”, 2014, contributing author for “Construction Project Scheduling and Control”, by Saleh Mubarak, 2010, and contributing author for the “Time Management Guidelines” and “Claims Management Guidelines” by CMAA. He has contributed to over 90 peer reviewed publications as an primary author, co-author, or contributing author. Mr. Carson has testified before District Courts similar to Louisiana on several occasions.			
07/13 – 12/16	Route 17 Yorktown Road and Bridge, Virginia Department of Transportation (VDOT), Yorktown, VA. <i>Director of Project Controls.</i> Provided schedule review and analysis of requests for extensions of time, as well as recommendations for recovery and review of the contractor’s plan to recover lost time. The improvements increased the capacity of George Washington Memorial Highway from four lanes to six lanes, with three lanes in each direction. The roadway included a raised median, curb and gutter, with a shared-use path and two existing bridges over the Poquoson River were replaced with one bridge carrying six lanes of traffic and a shared-use path. Helped mitigate five months of delay by proactive optimization analysis during updates.			
05/15 – 07/17	Route 301 Bridge over CSX Railroad, VDOT, Emporia, VA. <i>Director of Project Controls.</i> Oversaw schedule review, analysis of requests for extensions of time , as well as recommendations for recovery and review of the contractor’s plan to recover lost time. The proposed improvements included construction of new Southbound bridge, construction of new MSE walls, abutments, and approaches, relocation of SB traffic to new bridge, and demolition of existing bridge, new alignment.			
04/16 – 12/18	Courtland Interchange, VDOT, Courtland, VA. <i>Director of Project Controls.</i> Overseeing schedule review and analysis of requests for extensions of time , as well as recommendations for recovery and review of the contractor’s plan to recover lost time. The proposed improvements include construction of new bridge interchanges, signalization, as well utility relocation.			
03/16 – 11/18	Meherrin Bridge over Route I-95, VDOT, Emporia, VA. <i>Director of Project Controls.</i> Oversaw schedule review and analysis of requests for extensions of time , recommendations for recovery and review of the contractor’s plan to recover lost time. The improvements included construction of new SB bridge, relocation of traffic to new bridge, construction of new NB bridge, relocation of NB traffic to new bridge, and demolition of existing bridges, including new alignments for both bridges.			

03/15 – 07/16	Master Utility Relocation and Construction Schedule for Route I-64/ 264/ Newtown/ Witchduck Roads Bridge & Roadway Improvements, VDOT, Virginia Beach, VA . <i>Director of Project Controls.</i> Oversaw Master Schedule development, Contract Time Determination Schedules, Schedule Constructability Review. Services included meeting with client acquisition personnel, utility relocation team, engineering designers to identify partial and total takes of property, required utility relocation, impact of utilities on project start and phasing, reviewing phasing, maintenance of traffic (MOT), sequencing of operations, establishing project duration, and calculating road closure costs for incentives and disincentives. The Master Schedule identified the opportunity to subdivide the project into two projects, I-64/264 and I-264/Newtown/Witchduck Roads, which allowed construction to start 12 months earlier than expected due to utility relocation revised sequencing. The Project consisted of a major realignment of interstate highway, new bridges, closing major interchanges, relocation of interchanges, creeks, and access roads.
04/09 – 06/12	Hampton Boulevard 6 Lane Roadway Depression, VDOT, City of Norfolk, VA. <i>Director of Project Controls.</i> Provided oversight for review of project schedule updates, facilitated Risk Management Workshops and reviewed of update risks, as well as analyzed progress through Critical Path analysis and Earned Value Management System developed to track non-Critical Path progress. Reviewed Time Impact Analyses for unforeseen conditions encountered during construction. Project included temporary relocation of all six lanes, construction of new bridges for road and rail, installation of heavy concrete piling foundation and retaining walls, relocation of major pumping station and utilities, and new signaling, streets and intersections. Facilitated a Recovery Workshop to successfully mitigate 45 calendar days of delays and completed project on time.
03/08 – 04/09	Hampton Roads District Program Management System, VDOT, Hampton Roads District, VA. <i>Project Controls Manager.</i> Provided support in the development and implementation of a Primavera P3e-based integrated master scheduling system to track approximately 30 individual project schedules, analyzed and reported on costs and resources through Earned Value Management, produced metrics for analysis of progress and predictions of completion for various District projects.
07/13 – 12/16	Review of Scheduling Specifications, Colorado Department of Transportation (CoDOT), CO. <i>Director of Project Controls.</i> Provided review of CoDOT scheduling specifications, including providing experience from other DOTs, recommendations for industry-proven best practices, lessons learned from forensic analysis. Participated in review meetings to discuss all best practices. Final product was a new scheduling specification.
11/10 – 06/11	Route 60 (Warwick Boulevard) Project, Phase 3 Claims Analysis Review, VDOT, Newport News, VA. <i>Schedule Analyst.</i> Reviewed the multi-million dollar claim submitted by the Contractor for delay and disruption. Responsibilities included reviewing contractor analysis and report, developing review strategy, assigning analysts to relevant portions of the claim, providing review of the claim to determine validity of methodology chosen, implementation of methodology, accuracy of facts and legitimacy of schedules used in analysis. Project included relocation of existing four-lane road traffic, installation of new main sewer, water, and storm sewer lines and manholes, pumping station, location of existing underground utilities and relocation, rework of all traffic signaling, new excavation and fill, and installation of new asphalt paving, site concrete and appurtenances.
03/11 – 08/11	Chincoteague Bridge 4D Schedule Analysis, VDOT, Chincoteague, VA. <i>Director of Project Controls.</i> Responsible for the evaluation and rectification of the as-planned and as-built schedules, developed an As-Planned versus As-Built schedule analysis to develop 4D modeling of the baseline schedule and as-built schedule in order to assess the effects of pile driving hammer issues and contractor production problems on the completion of the project.

Firm employed by:  **ARCADIS**

Name	Jennica Dycus, PE, PSP	Years of relevant experience with this employer	5
Title	Principal Claims Analyst	Years of relevant experience with other employer(s)	10
Degree(s) / Years / Specialization	BS / 2010 / Construction Engineering, Purdue University		
Active registration number / state / expiration date	PE 120830 / TN / Exp. 01/31/2026; PSP 02625 / USA / Exp. 03/04/2027		
Year registered	2017	Discipline	Civil Engineering
Contract role(s) / brief description of responsibilities	Scheduling Services (Preconstruction and Construction Phase)		

Experience dates	Experience and qualifications relevant to the proposed contract
------------------	---



Ms. Dycus has 15 years of experience working on large, heavy civil alternative contract type projects. Having worked in both the transportation and energy sectors, Ms. Dycus has been involved in the planning and construction of complex scopes including the coordination of design, construction, and commissioning. Ms. Dycus is a member of the following professional organizations: American Society of Civil Engineers (ASCE), Association for the Advancement of Cost Engineers (AACE) Tennessee Society of Professional Engineers. Other professional qualifications include: Planning and Scheduling Professional (PSP), ACI Concrete Field Testing Technician - Grade 1, ATSSA Traffic Control Technician and Supervisor, NCCCCO Certified Rigger Level 1, NCCCCO Certified Signal Person, and Safety Certified Transportation Project Professional (SCTPP).

06/21 – Ongoing	Alcoa Highway (CNX074) SR-115 from Woodson Dr to Cherokee Trail Interchange TDOT, Region 1, Knox County, TN. <i>July 2021 - June 2022, Constructability Review & Construction Time Determination Scheduler.</i> Arcadis reviewed the complex design of a 1.5 mile corridor widening project including the review of design drawings, and completing a constructability assessment to assist TDOT in evaluating alternative designs, risks to the project, and contract provisions. Reviewed the plans, provided feedback on the design to the designers and provided a Construction Time Determination (CTD) schedule for the project team to assist in determining contract time, phase durations, and intermediate milestones. <i>November 2024 – Present, Senior Construction Schedule & Claims Avoidance & Mitigation Analyst.</i> Arcadis is providing monthly schedule review services with claim mitigation consulting for this 1.5 mile corridor widening project. The project consists of several phases of traffic control which must coordinate with a large local hospital located adjacent to the project and necessitating close coordination for utility relocations, ramp and lane closures, and paving activities. Additionally, the project has incurred several design changes to more than 20 retaining walls on the project which have impacted the overall completion date. Worked to review the schedule submissions and time extension requests from the Contractor.
08/19 – 11/22	Construction Engineering and Schedule Training, TDOT, Statewide, TN. <i>Senior Project Controls & Scheduling Trainer:</i> CPM Scheduling Training and Workshop for TDOT Construction employees. The focus of the training was to help grow TDOT employee's understanding of a CPM schedule baseline review, update review, and delay analysis conforming to TDOT specifications. More than 300 hours of additional training was provided to provide a database of recordings which incorporate change management and claims mitigation into the baseline schedule review, monthly schedule review, and project delay analysis.

09/20 – 10/23	CNP-230 US-27 Dement Claim, TN AG Office, Hamilton County, TN. <i>Construction Principal Claim Analyst.</i> The Tennessee Office of Attorney General engaged Arcadis to analysis a claim for alleged delays and additional costs for a road widening project on US-27 over the Tennessee River in Hamilton County (\$152 million). Analyzed and consulted on damages and delays including the analysis of project schedule and delays, and cost data. Participated also in the claim mediation and settlement.
06/20– 05/22	Design-Build Standard Guidance Revision and TDOT Training, TDOT, Statewide, TN. <i>Senior Project Controls & Scheduling Trainer.</i> Worked closely with TDOT to revise and update the Design-Build Standard Guidance(Contract Books) for the Design-Build program. This included reviewing the existing guidance, working with TDOT personnel on lessons learned, and reviewing DB programs in other states to update the current DBSG, and populating example forms. The roll out of the revised DBSG also included full day training sessions for each of TDOT’s four regions which included more than 200 individuals.
12/24 – Ongoing	Progressive Design Build Nolichucky Bridge Emergency Replacement Project, TDOT, Alternative Delivery, Washington & Greene Co., TN. <i>Senior Construction Schedule & Claims Avoidance & Mitigation Analyst.</i> Arcadis is providing expert services to the Alternative Delivery Office regarding a Progressive Design-Build project for the emergency replacement of two bridges which were destroyed by Hurricane Helene. This is only the second Progressive Design-Build for the state and the project is proposed to complete the reconstruction in less than one year after the storm occurred. Reviewing the pre-construction and construction schedules and any future delays.
06/24 – Ongoing	I-90/US-52 (SP 5580-99) Widening & Safety Improvement Project, MNDOT, Rochester, MN – <i>Senior Construction Schedule and Claims Avoidance and Mitigation Analyst.</i> Arcadis is providing CPM review services to the Minnesota Department of Transportation for this \$27 million, 1.8-mile improvement project at the interchange of I-90 and US-52. Serves as the Arcadis Project Manager and responsible for evaluating the technical issues, monthly schedule submission and any alleged delays.
11/22 – 06/24	Build It Back – Volmar Construction Claim, Build it Back Program NYC Law Department, NYC, NY – <i>Construction Principal Claims Analyst.</i> The NYC Mayor’s Office of Housing Recovery Operations engaged several contractors to rehabilitate private one-to-four-family homes that had been destroyed or damaged by Hurricane Sandy. Using a Job Order Contract program, the City issued individual Job Orders to one of these contractors for repairs to over 1,300 properties. This included approximately 124 more substantial projects that involved raising or elevating the dwelling as a preventative measure for future flooding. The contractor submitted a \$30 million claim for alleged contract balance and extra work. The NYC Law Department engaged Arcadis to evaluate liquidated damages and provide an expert report. Served as a Senior Claims Analyst and Project Manager, coordinating Arcadis’ team of analysts, providing quality oversight and consistency, and regularly coordinating with the Law Department and City personnel.
02/24 – Ongoing	SR-149/SR-13 Road Widening TDOT, Clarksville, TN – <i>Principal Claims Analyst.</i> Arcadis is providing expert services to the Tennessee Office of the Attorney General regarding a dispute on a \$67 million road and bridge project in Clarksville, Tennessee. The contractor submitted a \$600,000 delay and direct cost claim, alleging utility delays while widening the roadways that are connected to the bridge. Evaluated the technical issues, schedule delays and alleged damages. Participated in fact finding interviews with Subject Matter Experts and presented the findings to the State.

Firm employed by:  **ARCADIS**

Name	Antoine Bechaalani, PSP	Years of relevant experience with this employer	5
Title	Project Controls Practice Lead	Years of relevant experience with other employer(s)	8

Degree(s) / Years / Specialization	MS / 2014 / Construction Management, New York University BS / 2012 / Civil and Environmental Engineering, Saint Joseph University		
Active registration number / state / expiration date	PSP 1921 / USA / Exp. 07/06/2027		
Year registered	N/A	Discipline	N/A
Contract role(s) / brief description of responsibilities	Scheduling Services (Preconstruction and Construction Phase)		

Experience dates	Experience and qualifications relevant to the proposed contract		
------------------	---	--	--



Mr. Bechaalani is the Program and Project Controls Practice Lead for the Arcadis Contract Solutions team of scheduling and estimating staff. He has a strong background in all phases of construction management, combined with extensive experience in cost estimating, cost benchmarking, critical path method (CPM) scheduling, and time impact studies. Mr. Bechaalani has held positions as Project Manager, Scheduler, Cost Estimator, Project Controls Manager, and Claims Consultant.

07/18 – 08/19	SH-130 Segments 5.1/5.2 6.1/6.2, CTH Constructors, Lockhart, TX. Extended from just north of Mustang Ridge at SH 45SE to I-10 in Seguin, SH 130 segments five and six connected to the northern segments of SH 130 that began in Georgetown, TX, forming a 91-mile safe, fast and reliable alternative to congested I-35 through Central Texas. SH 130 segments five and six had the highest legal speed limit in the nation at 85 mph and the use of open tolling allowed tolls to be charged without drivers having to slow for a toll booth. Assisted the general contractor in a \$300 million construction defects evaluation and dispute. Provided estimates for the structural repairs of over 40 bridges and 50 miles of roadways. The findings resulted in \$180 million of savings to the client in claimed damages by the opposing party. Advised the client of the cause, solution and estimated costs associated with the corrective actions and provided expert opinions during negotiations and resolution.
10/21 – 03/22	Claiborne Pell Bridge, Rhode Island - Turnpike and Bridge Authority (RITBA), Providence, RI. The East Approach section of the Newport- Pell Bridge included steel repairs and painting on the east approach consisting of 41 spans totalling 6,000 linear feet (LF). Assisted the owner in a forensic delay analysis as part of a delay dispute and performed a contemporaneous period analysis to determine the cause and extent of the delays that occurred on the project.
04/22 – Ongoing	0079-0244 I-691 Improvements, Connecticut Department of Transportation (CTDOT), Various, CT. Arcadis will provide CPM schedule analysis and claims avoidance support for the design-build program associated with CTDOT. This project includes work for resurfacing, bridge rehabilitation and safety improvements on a section of I-691 in the town of Southington and City of Meriden in Connecticut. Major project elements include pavement rehabilitation, roadway drainage and cross culvert investigation/repairs, minor bridgework, guardrail upgrades, illumination, contractor quality control, and environmental permits. Senior Project Scheduler responsible for the review of the contractor's baseline schedule and monthly updates for compliance with the contract specifications and adherence to general industry standards for CPM scheduling. Working with the Owner and project team by summarizing findings in written Schedule Analysis Reports and attending progress review

	meetings with the contractor, developer and subcontractors to discuss technical findings and any potential schedule issues to strategize on ways to avoid and mitigate potential delays.
03/21 – 12/21	Harlem River Electrical Feeder Crossing Regulatory Compliance, Confidential Client, New York, NY. This project consisted of the installation of two horizontal directional drilling boreholes below the Harlem River between Manhattan and The Bronx. The project also included pullback of high-density polyethylene conduit bundles in each borehole, construction of two terminal manholes at each site, and civil work and site restoration. Assisted in the development of a deterministic schedule which demonstrated one possible approach to constructing the project for the purpose of determining a reasonable duration during which a contractor can complete the work based on the 80 percent design drawings.
01/22 – Ongoing	Spring Street Garage (DSNY 1/2/5 Garage), New York City Law Department (NYC LD), New York, NY. The project consists of the construction of a new garage facility, comprising five levels of vehicle storage and repair facilities, with personnel support facilities serving Manhattan Sanitation districts M1, M2, and M5. Due to delays, the project was declared substantially complete 21 months late and the contractor submitted its notice of delay seeking a contract extension and \$57 million in additional compensation. Senior Consultant to the NYC LD assisting in a forensic delay analysis as part of a delay dispute and performing a contemporaneous period analysis to determine the cause and extent of the delays that occurred on the project. Assisting with the settlement negotiations with the contractor. The findings were reported in an expert report summarizing the extent and the responsible parties for the delay incurred.

Firm employed by:  **ARCADIS**

Name	Perwaiz Siddiqui	Years of relevant experience with this employer	6
Title	Project Scheduler	Years of relevant experience with other employer(s)	28
Degree(s) / Years / Specialization	BS / 1990 / Civil Engineering, Jamia Millia Islamia University, New Delhi, India		
Active registration number / state / expiration date	N/A		
Year registered	N/A	Discipline	N/A
Contract role(s) / brief description of responsibilities	Scheduling Services (Preconstruction Phase)		

Experience dates	Experience and qualifications relevant to the proposed contract
------------------	---



Mr. Siddiqui is a scheduling professional with 34 years of international and multicultural experience in various types of construction projects. His education qualification is B.Sc. Engineering (Civil) with Software expertise is Primavera P6, and MS Project. Mr. Siddiqui is CPM Scheduling expert specializing in complex construction projects for Arcadis' high-profile clients. His key abilities include developing complex integrated schedules from preconstruction to handover, analyzing Critical Path, and creating hard and soft logic for scheduling. Has deep expertise in construction and operational systems, cost and resource loading, risk identification and mitigation, and analyzing what-if scenarios to address schedule impacts.

04/24 – Ongoing	Seismic Retrofit of Hall of Administration (HOA) Building, Los Angeles, CA – is an 8-story, 980,000-square-foot building constructed in 1960 that serves as the seat of government for the county. Over decades of public use and exposure to seismic activity, the facility has required a seismic retrofit to ensure the safety and structural integrity of the active building. The seismic retrofit employs state-of-the-art base isolation technology and is being delivered through a Construction Manager at Risk (CMAR) contract, fostering a collaborative effort between the design team (A/E) and the construction team. The project is being executed in phases, allowing the building to remain occupied throughout construction. The preconstruction phase, which includes design development, site investigation, early trade procurement, and the establishment of the Guaranteed Maximum Price (GMP), concluded in the fourth quarter of 2024. Construction is anticipated to be awarded in the first quarter of 2025, with project completion targeted for the fourth quarter of 2029. Project Cost: \$600 million
05/24 - Ongoing	Waste Water Treatment Plant Upgrades Project, West Rock Solvary, NY – Project is Upgradation of Wastewater Treatment Plant which involves Relocation of Utilities & Candle Stick Flare, Sludge Tank & HR Reactor replacement etc. Project Cost: \$ 200 million
06/24 - Ongoing	ExxonMobil Pasadena Design and Beneficial Reuse Project, West Rock Solvary, NY - Project involves Design of Beneficial Reuse, CAP Design, Stack Evaluation etc. and Construction of Stacks. Project Cost: \$120 million
04/13 - Ongoing	Bullard Heavens Technical High School Project, Technical High School, Middletown, CT - Project consist of demolish existing building and construction of New School Building Complex includes Gym, Playfields, Track and Stadium etc. Project Cost: \$60 million
04/24 – 12/24	Fairburn Site Security Project, Google, Fairburn - Project consist of Upgradation of Site Security Fence, Retention Pond, Security Gate, Road and related Infrastructure. Project Cost: \$75 million
10/23 – 04/24	SPC4 Data Centre Project, Google, Clarksville, TN - Project is construcion of new data centre building including all related infrastructure. Project Cost: \$400 million

04/23 – 09/23	Ministry of Culture (MOC) and NCD Carpark Project, Dirriyah Gate, Riyadh, KSA - The project consists of the following: Ministry of Culture Building (3 Basement + Ground + 3 Levels) - 10,000 square meter (sqm), NCD Car Park - a multi-storey underground building with a capacity of 2,000-space car park, and a tunnel connecting the development. Project Cost: \$400 million
08/22 – 03/23	Misk City development, Misk , Riyadh, KSA - The project is a mixed-use development spanning 344 hectares of escarpment and includes the following components: site-wide infrastructure, a district cooling tower, the LWSP Park and Pavilion, a commercial residential building called Al Mishraq, and an art gallery and institute. Project Cost: \$ 800 million
04/20 – 07/22	Bujairi and Samham District development Project, Dirriyah Gate, Riyadh, KSA – The project consists of: Infrastructure and Public Realm, Art Centre, Bujairi F&B, Bujairi Car Park, and Samhan Car Park. Project Cost: \$600 million
03/18 – 03/20	Al Faisaliah Redevelopment Project, Dallah Healthcare, Riyadh, KSA - The project consists of: Upgrade of the Existing Al Faisaliah Retail Mall, Fit-out Works for Yautacha Restaurant located on the roof of the Retail Mall, Renovations for the 5-star hotel restaurant (La Brasserie Restaurant) in the Al Faisaliah Complex, Upgrade of the Existing Al Faisaliah Hotel (5-Star Hotel), and Fit-out Works for MAMO, LPM, and MERAKI Restaurants located in the Faisaliah Hotel and Faisaliah Complex. Project Cost: \$ 600 million
03/14 – 03/18	Dallah Hospital Project, Dallah Healthcare Project, Al Khozama Management Co. Ltd., Riyadh, KSA - Project comprise of construction of new hospital buildings - 2 Buildings (2B+G+8 Floors) with 200 Outpatient Clinics and 300 Beds Inpatient. Project Cost: \$375 million
03/11 – 03/14	Middle Corniche and Falasteen Street Project, DURC, Jeddah, KSA - Project consist of Corniche (4.4 Km) and Connecting Road development Project. Project Cost: \$ 600 million
12/10 – 12/11	ADCOP Staff Accommodation Project, IPIC (International Petroleum Investment Company), Fujairah, U.A.E - Project Consist of basement, ground floor, two podium levels, and a residential tower with 14 levels. Project Cost: \$ 600 million
06/09 – 11/10	Sanctuary Fall Villas Project, Shaikh Holding, Dubai, UAE - Project Consist of group of 56 Luxurious 2 Storey Villas facing Golf Course including all related infrastructure works. Project Cost: \$80 million
12/08 – 06/09	Nation Towers Project, International Capital Trading (ICT) Abu Dhabi, UAE - Project Consist of two towers 65 and 52 Storey – Commercial and Hotel tower with connecting Podium of eight Storey houses Retail outlets, F& B areas, entertainment etc. Project Cost: \$600 million
06/06 – 12/08	Tiara United Towers Project, Zabeel Investment, Dubai, U.A.E - Project Consist of a twin tower 60 Storey – Office & Hotel tower with connecting Podium of 6 Storey houses Conference and Meeting facilities, commercial and retail outlets, F& B areas etc. Project Cost: \$ 500 million

Firm employed by:  **ARCADIS**

Name	Mehada Dika, PMI-RMP	Years of relevant experience with this employer	2
Title	Principal Risk Manager	Years of relevant experience with other employer(s)	16
Degree(s) / Years / Specialization	BS / 2006 / Computer Engineering, Manhattan College		
Active registration number / state / expiration date	3710425 /CA/ 11/29/2026		
Year registered	N/A	Discipline	N/A
Contract role(s) / brief description of responsibilities	Risk (Preconstruction Phase)		

Experience dates	Experience and qualifications relevant to the proposed contract
------------------	---



Ms. Dika is a highly accomplished Principal Risk Manager leading Arcadis Risk Management practice on the West Coast. With extensive experience in developing and implementing comprehensive plans, she is adept at safeguarding organizational assets and optimizing business performance. She is skilled in conducting thorough risk assessments, analyzing potential threats and vulnerabilities, and providing strategic recommendations to senior management. Her collaborative leadership style, excellent communication, and interpersonal skills enable her to build strong relationships with stakeholders at all levels. She is committed to continuously monitoring and adapting risk management practices to drive collaboration, resolve conflicts, and promote effective decision-making. Passionate about delivering exceptional results, she aligns with the client's vision and values.

07/23 – Ongoing	California High Speed Rail, Construction Package 2/3, Fresno, CA – Risk Manager. Development of seven Responsible for updating and maintaining risk registers to reflect evolving settings. Skilled in identifying emerging risks, analyzing their impact, and implementing proactive strategies. Hosts major risk workshops and produces detailed cost and schedule risk analysis. Expertise includes continuous monitoring, risk mitigation, and ensuring the risk register remains accurate and relevant to support informed decision-making.
02/24 – Ongoing	Risk Management IDQ Contract, Metropolitan Transportation Authority (MTA), New York, NY- Lead Risk Manager. Led a comprehensive quantitative cost and schedule risk analysis on a variety of major MTA Design Build Projects (all >\$100 million). These projects include Sandy Power Repairs to 12 circuit breaker houses, three substations and three Fan Plants, installation of CCTV at 106 stations and suspender rope rehabilitation. As part of the risk assessment process, a separate mitigation workshop was also held for each project
03/24 – Ongoing	GDOT I-285 Western Express Lanes, Georgia DOT – Atlanta, GA – Risk Manager. Responsible for leading the implementation of risk management across the Western portion of GDOT's I-285 Express Lanes Program, where Arcadis is the GEC. Mehada developed the Risk Management plan and has led multiple quantitative cost and schedule risk assessments.
07/23 – Ongoing	MTA GEC Program, Metropolitan Transportation Authority (MTA), New York, NY – Risk Manager. MTA's GEC Program includes more than 50 Line Structure, Power, Rail Facility, and Bus projects planned for procurement in 2023 and 2024. Each of these projects requires two risk assessments (early design and pre-procurement). This involves reviewing key project stakeholders, delivery dates and the identification and scoring of project risks. From July 2023 through present, assessed cost and schedule risks and presented findings. Led or supported risk workshops and the development of risk registers for the following projects: • Overcoating – 225 St to 240 St. Broadway – 7th Ave • Overcoating – Queensboro Plaza to 33 Street, Flushing

	• Overcoating – Portal to Kings Hwy / Culvert • Overcoating – 75 St - Lefferts Blvd / Liberty Ave • Overcoating – 5 Steel Trestle Bridges - Culver Viaduct • Overcoating – Sutter Ave Portal to End of Line / New Lots • Coney Island Shop – Roof Repairs • Jamaica Yard Expansion • Rail Facility Elevators • Substation Roof and Enclosures • Ducts' Reconstruction
01/21 – 01/23	AT&T Mobility Project – EPC, West Coast, US - Project Controls Manager. Established Plans of Execution, designed financial forecast models, and implemented performance tracking methodologies for a project valued at more than \$500 million. Introduced data-driven efficiencies in construction and procurement, resulting in improved client scorecard performance across the project, spanning five different markets. Successfully renegotiated unit price client agreements, leading to an increased gross margin for the project. Analysed market trends and competitive pricing to identify opportunities for negotiation, collaborating with cross-functional teams to develop new pricing strategies. Championed annual project controls symposiums, facilitating knowledge sharing and collaboration among project managers, engineers, and other stakeholders. Led discussions on best practices and lessons learned, enhancing project execution and efficiency.
01/18 – 01/21	AT&T Mobility Project – EPC, West Coast, US - Project Controls/Cost Manager. Optimized workflows and achieved successful program delivery throughout the entire project lifecycle, including preconstruction activities, progress monitoring, change order management, risk mitigation, and streamlined closeout processes. Improved monthly reporting efficiency by implementing dashboards and utilizing data analysis techniques. Acted as an expert in market scope and commercial structure, serving as the liaison with the national program team. Conducted commercial awareness training sessions across multiple markets to enhance understanding of commercial structures and improve cost control capabilities. Effectively managed internal and external audit responses within established timelines, mitigating potential risk factors.
01/14 – 01/18	AT&T Mobility Project – Northeast, US - Project Controls/Scope SME. Established conceptual scope of estimates, format, and content of summaries and reconciliations, while ensuring alignment of all activities with project objectives. Prepared proposed work authorizations pricing and local client negotiations/agreements. Analysed and qualified competitive subcontractor bids prior to estimation of projects. Maintained performance baseline by leveraging approved change control procedures. Deployed reporting enhancements and new reconciliation procedures. Prepared and provided trainings to all stakeholders accordingly.

Firm employed by:  **ARCADIS**

Name	Anthony Dunams, P.E, CVS	Years of relevant experience with this employer	12
Title	Principal Management Consultant	Years of relevant experience with other employer(s)	20

Degree(s) / Years / Specialization	Change Management Certification / 2010 / Advanced Practitioner, Georgetown University; MBA / 2004 / Finance and Marketing, University of Oregon, MS / 1997 / Environmental Engineering – Hazardous Waste Management, University of Cincinnati (Yates Fellow); BS / 2001 / Civil Engineering, Indian Institute of Technology (IIT)
------------------------------------	---

Active registration number / state / expiration date	PE. 58453 / CA / Exp. 12/31/2026; CVS 202104030 / USA / Exp. 04/30/25
--	---

Year registered	1998	Discipline	Civil Engineering
-----------------	------	------------	-------------------

Contract role(s) / brief description of responsibilities	Value Engineering (Preconstruction Phase)
--	--

Experience dates	Experience and qualifications relevant to the proposed contract
------------------	---

	Mr. Dunams is Arcadis' US Places Director of Value Engineering and an infrastructure asset management professional with over 32 years of experience in capital asset management (infrastructure and utilities), cost engineering, value engineering and management, infrastructure planning and component renewal forecasting, options analysis, financial engineering, strategy, and change management. His expertise has enabled large commercial, institutional, government and municipal organizations to realize their fiscal goals focused on addressing sustainment and modernization planning, environmental and sustainability concerns, infrastructure life-cycle cost management, business/process reengineering and rate setting/financial planning. He is leading multiyear contracts on programs such as New York State – Environment Facility Corporation Water and Wastewater Environmental Justice Program, Fairfax County – Storm Water Planning and Dam and Flood Mitigation Programs, and many contracts with the Army Corp Program, to name a few. He also leads the Arcadis Global Value and Risk Management Community of Practice.
---	---

04/24 – Ongoing	SR 67 from Lickskillet Road to US 49 Pavement Restoration and Safety Improvement VE Study, MDOT, Harrison County, MS. <i>Value Engineering Team Lead:</i> The roadway project along MS 67/SR 67 from Lickskillet Road to US 49 implements Restricted Crossing U-Turns (RCUTS) and the superstreet concept to improve traffic flow, address anticipated growth in the area, and increase safety by minimizing conflict points. The project also includes two signalized turnarounds at local roads and lighting improvements. Pavement improvements along the corridor and a mill and overlay project will be performed separately but were included as a part of the baseline concept for the overall Value Engineering (VE) study. Arcadis conducted a three-day VE study for the project, and the VE team was tasked with applying the SAVE International® eight-phase Value Methodology Job Plan to evaluate the Office Review Design Submission prepared by Garver for MDOT. The VE team developed thirteen proposals for consideration that provided cost savings, improved mobility, increased capacity, enhanced safety, and/or mitigated conflicts. The most significant alternatives address cost savings associated with eliminating unused J-turns along the corridor that are planned for indeterminate future developments. We believe a potential cost-savings of \$8 million could be gained by these VE proposals.
-----------------	---

04/24 – Ongoing	I-55 from SR 463 to Gluckstadt Road, Interstate Widening and Interchange Addition VE Study, MDOT, Madison County, MS. <i>Value Engineering Team Lead:</i> The roadway project along I-55 from MS 463/SR 463 to Gluckstadt Road in Madison County
-----------------	---

	includes the widening of I-55 by two lanes between SR 463 and Gluckstadt Road, interchange ramp modifications, an arterial multi-use path, four bridges and/or box culverts being impacted and/or created grade separations, drainage improvements, and other miscellaneous construction requirements. High-volume change (HVC) clay (CH) soils in the project footprint drive the need for 3 to 5-foot undercut and larger borrow excavation quantities. Arcadis conducted a 4.5-day VE study for the project, and the VE team was tasked with applying the SAVE International® eight-phase Value Methodology Job Plan to evaluate the Office Review Design Submission prepared by Neel-Schaffer, Inc. for MDOT. The VE team developed thirteen proposals for consideration that provided cost savings, improved mobility, increased capacity, enhanced safety, and protected the environment. The most significant alternatives address cost savings associated with modifying the traffic control approach to minimize temporary shoring used during construction; utilizing differential height median barriers to improve drainage and roadway operations and maintenance; and modifying the span arrangement at Bear Creek and its tributary to reduce the size of the bridge or utilizing box. We believe a potential cost-saving of \$15 million could be gained by these VE proposals.
01/22 – 06/22	Newton Commuter Rail Accessibility Improvements, Massachusetts Bay Transportation Authority (MBTA), Newton, MA - Value Engineering Team Lead: Facilitated a five+-day study addressing accessibility and revising the style and look of three commuter rail stations – Auburndale, Newtonville and West Newton. Improvements includes three new fully ADA-accessible stations, NFPA 130 compliant ingress and egress pedestrian circulation movements, new station amenities and barrier wall improvements separating the stations from Highway 90. ECC is \$91.8 million with majority of the major cost drivers targeting FRP decking, concrete improvements to barrier walls and structural concrete, pedestrian bridges, track improvements, and polycarbonate canopy roofs. Recommendations presented include consolidating stations from three down to two or one station (ridership does not merit three upgraded stations with five new buildings), modifications to façade style and utilizing standing seam roofs, and revising design of underground stormwater detention system. Proposed recommendations reduce overall project costs by up to \$57.5 million if reduction in stations is pursued. Outside of reducing stations, overall station design modifications could reduce initial capital cost by \$12 million while still meeting functional intent of the project. cost reductions and other betterments accepted that increase cost but improve project functionality and operations.
06/11 – 12/11	Lynn Commuter Station Access Improvements Project, MBTA, Lynn, MA - Value Engineering Team Lead: Facilitated a three-day study addressing reliability and modernization needs for a station experiencing severe weathering and neglect along the Massachusetts coastline. Project will extend the useful life of the station by 40 years and will bring the station into compliance with all applicable codes and standards. Improvements evaluated include FRP platforms refurbished, pedestrian underpass, upgraded stairs and elevators, architectural and MEP improvements. Overall project cost is \$31.7 million and key solutions presented addressed optimized station access/egress improvements, standardizing track improvements, and providing an interlocking to improve operations during and after construction. Furnished recommendations reduce overall project costs by \$3.9 million.

Firm employed by:  **ARCADIS**

Name	Steven Koller, CCM		Years of relevant experience with this employer	24
Title	Senior Claims Analyst		Years of relevant experience with other employer(s)	14
Degree(s) / Years / Specialization			BS / 1991 / Industrial Technology, Central Connecticut State University	
Active registration number / state / expiration date			28029 / CT / Exp. 11/18/2027	
Year registered	N/A	Discipline	N/A	
Contract role(s) / brief description of responsibilities			Constructability (Preconstruction Phase)	

Experience dates	Experience and qualifications relevant to the proposed contract
------------------	---

	Mr. Koller is a Claims Analyst with more than 35 years of experience on DOT projects including work for the DOTD. He has spent the last 24 years analyzing and reviewing construction claims from the beginning stages through trial support. He has been involved with the evaluation of claims on numerous types of projects, including the evaluation of schedule impacts, analysis of damage claims and calculations, cost estimating, defective construction, and mediation and claims negotiation. He has provided claims analysis to numerous state departments of transportation. He has a strong educational and technical background along with practical construction experience and knowledge of construction means and methods, industry practices and construction management. His numerous years of field experience has allowed him to develop very strong skills to interpret project plans, project specifications, and interpret statistical information required to make critical decisions to successfully manage complex construction projects and evaluate claims.
---	--

09/21– 01/22	LADOTD: I-10 Atchafalaya Basin Bridge, Louisiana Department of Transportation & Development (LADOTD), Baton Rouge, LA – Claims Support Analyst. An error in the DOTD’s staging plans arose on the \$19 million project to resurface 6 miles of interstate highway, and resulted in the contractor submitting a change order request totaling \$1.2 million. Arcadis was engaged to review the contractor’s purported increased costs. After evaluating the relevant drawings and specifications, Arcadis communicated directly with the contractor about its predicted additional paving costs. Points of contention involved the number of extra shifts to perform the work, the contractor’s anticipated expenses related to a new asphalt batch plant, whether there would be added trucking costs, and if the contractor was entitled to a different markup than included in its bid estimate. Arcadis’ report was used by the DOTD as a basis for equitable adjustment to the contract (at a dollar amount that was significantly below the contractor’s request).
03/23 – Ongoing	Track Replacement Phase IV, Metropolitan Atlanta Rapid Transit Authority (MARTA), Atlanta, GA – Senior Claims Analyst. The \$133 million track renovation project requires the replacement of crossovers and turnouts, concrete tie and fastener, and running rail along MARTA’s 48-mile-long track system. The project was planned to take place over six years, however, but has fallen a year behind schedule. The contractor submitted a \$15 million delay claim. MARTA engaged Arcadis to evaluate prior delays and assist in reviewing contractor schedules and providing project management support.
12/21 – 08/22	Red Wing Bridge Replacement, Minnesota Department of Transportation (MnDOT), Redwing, MN – Claims Support Analyst. The contractor on a \$64 million contract MnDOT, in cooperation with WisDOT, is constructing the Red Wing Bridge Project. The project includes the Eisenhower Bridge over the Mississippi River and the Highway 63 Bridge over Highway 61, as well as the highway connections to Highway 61, Minnesota Highway 58, and approach roadways in Wisconsin. MnDOT engaged

	Arcadis to perform a forensic schedule analysis and evaluate damages claims. Worked on a Arcadis' team to perform a forensic schedule analysis and provide an assessment of the alleged damages.
12/22 – 11/23	Downtown Chattanooga Interstate – CNP230, Tennessee Department of Transportation (TDOT), Chattanooga, TN –Claims Analyst. Provided claims analysis services to the Tennessee Office of the Attorney General regarding a dispute on a major interchange project in downtown Chattanooga. The contractor made a \$3.5 million delay and disputed extra work claims. The contractor claimed issues related to alleged unconstructable traffic control plans, differing site conditions and unpaid extra work. Arcadis is assisted TDOT and the Attorney General's Office in the analysis of the claims and litigation support.
12/18 – 12/19	I-440 Widening and Improvement Design-Build Project, TDOT, Davidson County, TN – Construction Claims Support Analyst. Member of the Arcadis team who reviews schedules for claims avoidance, prior to performing a joint review with TDOT. TDOT engaged Arcadis to assist TDOT as the owner's representative on the I-440 reconstruction project in Nashville, TN. The project was a \$152.9 million design-build contract awarded to Kiewit Infrastructure South Co. This complex project has a 2-year duration that requires I-440 to remain open during construction. This is the largest design-build contract that TDOT has administered.

Firm employed by:  **ARCADIS**

Name	Andrew Dick, PMP, PSP, CMIT		Years of relevant experience with this employer	8
Title	Principal Claims Analyst/Project Controls		Years of relevant experience with other employer(s)	30
Degree(s) / Years / Specialization			BS / 2016 / Industrial Management, Trustforte Corporation	
Active registration number / state / expiration date			PMP 1905067 / CA / Exp. 01/11/2025; PSP 02107 / CA / Exp. 01/06/2026	
Year registered	2020	Discipline	Project Management	
Contract role(s) / brief description of responsibilities			Scheduling Services (Construction Phase)	

Experience dates	Experience and qualifications relevant to the proposed contract
------------------	---



Mr. Dick is an experienced senior project controls specialist for complex infrastructure projects. He has more than 30 years of progressive and diversified experience in project schedule analysis, delay analysis, claims analysis, risk analysis, and schedule optimization services on a diverse range of domestic and international projects. His strong record of accomplishment in project delivery includes involvement on project from the early study phases to construction and commissioning in both the private and public sectors. He has engaged extensively with stakeholders including designers, constructors, operators, maintainers, and the public sector. With extensive experience with schedule, cost, and risk management, he has assisted several firms in the redevelopment of their project controls frameworks and then implemented these frameworks for delivery of projects.

10/20 – 09/22	Route 125 905 Southbound, Caltrans District 11, San Diego, CA. Scheduling Support Analyst. Provided scheduling services including baseline, updates, and Time Impact Analysis (TIA) reviews for this project. The project was for the construction of a connector from Route 125 Southbound to I-905 Westbound in San Diego County. This was a \$17 million, 405-workday project. Arcadis provided construction scheduling support for this project, which started in November 2020. The contractor is Flatiron West. The Baseline Schedule was reviewed, and monthly schedule updates was underway.
05/19 – 04/22	Route 11/125/I-905 Connectors, Caltrans District 11, Otay Mesa, CA. Scheduling Support Analyst. Provided scheduling services including baseline, updates, and TIA reviews for this project. The State Route (SR) 905/SR 125/SR 11 Northbound Connectors Project in Otay Mesa, California is an important component of the border infrastructure system designed to help ease border congestion and facilitate goods movement between the United States and Mexico. This project included two major bridge connectors and four other bridge structures. This is a \$101 million, 575-workday project. Arcadis provided construction scheduling support for this project, which started in July 2019. The contractor is Skanska. The Baseline Schedule was reviewed and accepted. The review of schedule updates was underway.
09/19 – 10/21	US-395 Phase I Widening, San Bernardino County Transportation Authority (SBCTA), San Bernardino, CA. Scheduling Support Analyst. Arcadis provided scheduling services for this \$57.8 million project. The first phase will widen approximately five miles along US 395 between SR 18 (Victorville) and Chamberlaine Way (Adelanto) from two lanes to four lanes and install turn lanes and signals at various intersections within the corridor. Provided scheduling services by reviewing and analyzing construction baseline, reviewing monthly schedule updates, and attending weekly construction meetings as needed.

01/22 - Ongoing	High Speed Rail Project Construction Management Services, CP 2-3, California High Speed Rail Authority, Sylmar, CA. <i>Senior Scheduler/Claims Analyst.</i> In July 2012, California Legislature Senate Bill (SB) 1029 (Budget Act of 2012) approved almost \$9 billion in federal and state funds to construct the first high-speed rail segment in the Central Valley. Arcadis was selected to provide PCM Services to oversee the design-builder for Construction Package (CP) 2-3 of the California High-Speed Rail System in California's Central Valley. CP 2-3 is located within the Fresno to Bakersfield project section and includes bypasses around the communities of Hanford, Corcoran and Allensworth. Arcadis has been involved from the beginning of the project to assist in handling the resolution of disputed issues on the project and to provide Critical Path Method (CPM) scheduling oversight by reviewing the design-builder's baseline schedule, updates, revisions, and Time Impact Analyses. At the request of the Construction Project Manager for the California High Speed Rail Authority, Arcadis evaluated change orders and disputes valued in the tens of millions arising out of Construction Package 2-3 for \$1.2 billion to design and build a 65-mile segment between Fresno and the Tulare-Kern County line, part of the overall high-speed rail network, including 36 grade separations in the counties of Fresno, Tulare and Kings, including viaducts, underpasses and overpasses, as well as areas of elevated tracks and bridges. The design-builder requested changes, differing site conditions, right-of-way delays, railroad impacts, unidentified/misidentified utilities, and subsidence.
01/19 – 08/23	Crenshaw/LAX Transit Project, Los Angeles County Metropolitan Transportation Authority (LACMTA), Los Angeles, CA. <i>Senior Scheduler/Claims Analyst.</i> The project is an 8.5-mile light rail design-build project connecting the Expo Line to LAX. It includes one mile of tunnel, eight stations and five bridges with \$1.3 billion estimated budget. On behalf of LACMTA, Arcadis is providing claims analysis and resolution services including analyses of more than 40 issues including many multi-million-dollar disputes. Arcadis has presented to the contractor and Metro executive management staff and coordinated with the field staff on merit and quantum determination including participation in various DRBs. Arcadis is also reviewing and assisting with the responses to 10+ Time Impact Analyses submitted.

Firm employed by: 				
Name	David Lee, CCM, PSP		Years of relevant experience with this employer	7
Title	Senior Claims Analyst		Years of relevant experience with other employer(s)	9
Degree(s) / Years / Specialization		MS / 2010 / Construction Management, Washington University; BA / 2004 / General Studies focused in Architecture and Business, Washington State University		
Active registration number / state / expiration date		CCM 9892 / CA / Exp. 05/2027; PSP 2789 / CA / Exp. 01/2028		
Year registered	N/A	Discipline	N/A	
Contract role(s) / brief description of responsibilities		Scheduling Services (Construction Phase)		
Experience dates	Experience and qualifications relevant to the proposed contract			
		Mr. Lee has more than 16 years of experience in the construction industry. He has served and has experience as a Scheduler, Assistant Project Manager and Assistant Construction Manager on various projects which enriched him to manage scheduling and project activity coordination with sub-contractors from his strong background in project controls, construction management, and claims analysis. He has extensive experience in construction management measures (document control, submittals processing, change order analysis, time and cost planning and monitoring). He has analyzed numerous potential project delay issues, evaluating these issues for merit and quantifying the impacts to the schedule. He has provided/reviewed numerous Time Impact Analyses used in the resolution of schedule delay issues and has prepared delay claims for mediation. He has experience with a variety of delay analysis techniques, including time impact analysis, as-planned vs. as-built, and collapsed as-built. He also has expertise with a variety of scheduling software tools including Microsoft Project, Acumen Fuse, Primavera P6, and Schedule Analyzer.		
03/20– 10/20		I-5 Widening Project Between SRE 73 and OSO Parkway – Seg. 1, Orange County Transportation Authority/Caltrans District 12, Orange County, CA – Construction Claims Support/Scheduling Analyst. This \$120 million project to construct I-5 state highway widening, bridges, roadway improvements, and demolition of existing bridges. The contract was awarded to Ortiz Enterprises, Inc. in 2019. This is 1,110-workday project. Arcadis is providing construction scheduling and claims support for this project which started in March 2020. These serviced include review of contractor's baseline schedule submittals, schedule updates, and schedule revisions. Provided an analysis with a review report of the contractor's TIA with recommendations on apportioning the delay days as compensable and non-compensable. Following a hearing, which Arcadis provided the position paper and presentation, the DRA ruled in favor of Caltrans.		
04/17 – 12/19		Route 710 LA River Widening, Caltrans District 7, Los Angeles, CA – Construction Claims Support/Scheduling Analyst. Arcadis provided dispute and claims assistance for this \$102 million project in response to contractor's claims valued at \$40 million on a 5.6 mile pavement reconstruction, shoulder widening and ramp realignment project. Arcadis has analyzed and presented findings and recommendations on various potential claims. Evaluated several claims submitted by the contractor.		

08/17 – 12/17	I-5 North Segment 2, Caltrans District 7, Burbank, CA – <i>Construction Claims Support/Scheduling Analyst</i> . Caltrans District 7 (Los Angeles) engaged Arcadis to perform construction claims analysis of a \$13 million exceptions to the Proposed Final Estimate (PFE) submitted by the contractor on the I-5 North Segment 2 in Burbank, CA (07-1218V4). This \$61.4 million project added High Occupancy Vehicle (HOV) lanes, retaining walls, sound walls and replaced concrete pavement in Burbank. The claim seeks for the following types of alleged costs: extended overhead based on Caltrans' Time Related Overheads (TRO) provisions, material, escalation costs, inefficient equipment costs, time related costs, labor inefficiency costs, and unpaid extra work bills. Reviewing and analyzing the exceptions to determine the merits and damages for Caltrans.
02/22 – 09/23	Highway 101 Widening, Caltrans District 4, Petamula, CA – <i>Construction Scheduling Analyst</i> . Caltrans is widening Highway 101 in Petaluma between Lakeville Highway (Route 116) and Corona Road by adding a carpool lane in each direction. Upon completion, Highway 101 will be three lanes in each direction, including the new northbound and southbound carpool lanes. Ghilotti Construction is the contractor on the \$78 million project. The project is scheduled for completion in late December 2023.
03/19 – 10/19	Interstate 5/Genesee Ave Interchange, Caltrans District 11, San Diego, CA – <i>Construction Claims Support/Scheduling Analyst</i> . Arcadis assisted the Resident Engineer (RE) with Dispute Review Board position paper and presentation for Potential Claim Record No. 13 – Slope Repair. This dispute between the Contractor and the State concerns the settlement of the embankment and Retaining Walls (RW) No. 9 and 10 that support the approach to Abutment No. 3 of the Pedestrian Overcrossing. RWs 9 and 10 have settled approximately 12 inches and the cracks have appeared along the top of the slope just west of the abutment since they were constructed in 2015.

Firm employed by: 				
Name	Stephen Warhoe, PH.D., P.E., CCP, CFCC		Years of relevant experience with this employer	1
Title	Senior Director		Years of relevant experience with other employer(s)	38
Degree(s) / Years / Specialization		PhD / 2012 / Strategy, Project and Program Management, Skema Business School, Paris France; MBA / 1993 / Colorado State University, Denver; BS / 1986 / Civil Engineering, University of Colorado, Denver		
Active registration number / state / expiration date		No. 29909 / CO / Exp. 08/31/2025		
Year registered	1994	Discipline	Registered Professional Engineer (Civil)	
Contract role(s) / brief description of responsibilities		Training (Construction Phase) and Lead Arbitration/Litigation Support		
Experience dates	Experience and qualifications relevant to the proposed contract			
		Dr. Warhoe is a Senior Consultant located in Seattle, Washington with a proven record as a Testifying Expert on delay, productivity loss, cost damages, project audit, and construction and project management. His background is rooted in years of practical experience planning, controlling, and managing major design and construction projects as well over \$4 billion in value. With more than 39 years of experience in project controls, risk management, project management, construction management, and dispute resolution, he is a recognized expert in schedule delay analysis, productivity loss, damage assessment, project controls, and construction dispute avoidance and resolution. He is also a recognized construction expert on complex, disputed projects valued over US\$6 billion and individual disputes worth over US\$3 billion. Dr. Warhoe also specializes in productivity loss analysis and quantification determination. He has modeled productivity loss, including the use of system dynamics modeling, on which he wrote his Ph.D. dissertation. In recognition of his expertise and respect in the project controls field, he was elected president of Association for the Advancement of Cost Engineering (AACE) International from 2008 to 2009 and was made an Honorary Life member in 2019. He was the primary author or co-author of three of AACE's industry-recognized Recommended Practices relating to 1) the change management process, 2) identification of the elements necessary for practitioners to demonstrate entitlement to a change order request or claim, and 3) demonstrating entitlement to cumulative impact claims. He has also contributed to several other Recommended Practices published by AACE International and is currently the Vice President of AACE's Technical Board. Dr. Warhoe has testified before District Courts similar to Louisiana on several occasions.		
07/06 – 07/08		WSDOT: SR-520 Floating Bridge Replacement, Washington Department of Transportation (WSDOT), Seattle, WA. <i>Business Manager (Program Manager).</i> Responsible on this \$4 billion program, which included the replacement of the world's longest floating bridge and several interchanges located over the length of a six-lane freeway. Responsibilities included creating the program's business vision through consensus-building methods and leading the program's development and implementation regarding business processes, project controls, and related procedures and performance measures.		
03/09 – 03/10		WSDOT: State Route 99 Seattle Tunnel, WSDOT, Seattle, WA. <i>Risk manager.</i> Responsible on a fast-tracked US\$4 billion tunnel/freeway design and construction program. Duties included developing and implementing risk management processes and procedures tailored to WSDOT's risk management procedures to meet the risk management needs of one of the most complex programs executed in the state's history.		

11/08 – 03/09	First Claim: WSDOT State Route 518 Renovation Projects, WSDOT, Seattle, WA. On behalf of WSDOT, reviewed and analyzed delay and other claims presented by the contractor.
11/13 – 05/14	Second Claim: Colorado Route 36, Boulder Turnpike, Renovation and Reconstruction Project, Kiewit Infrastructure, Broomfield, CO. Analyzed and developed quantum analysis accounting for the contractor's indirect cost damages.
02/11 – 03/12	Panama Canal Expansion Program, Panamanian Government, Panama. On behalf of the Panamanian government, performed a project and construction management assessment of the contractor responsible for managing the \$5.25 billion Panama Canal Expansion program. Responsibilities included assessing the contractor's performance regarding risk management, schedule management, budget management, cost control, document controls, change and claims management, and reporting to the Panamanian government. Also worked with the Panamanian government and its counsel to strategize how to address claims submitted by construction contractors.
03/06 – 07/07	Kuala Lumpur International Airport, Malaysian Government, Malaysia. Represented the Malaysian government as a Construction Manager and Project Controls Expert. Oversaw 21 civil and process projects cumulatively valued at over US\$1 billion at the Kuala Lumpur International Airport, a greenfield mega civil construction program valued at over US\$3.6 billion.
03/10 – 09/10	Heathrow International Airport, British Airports Authority (BAA), United Kingdom. Worked with representatives of BAA to create a risk management program for the US \$6 billion Heathrow International Airport capital improvement program. Was on the team assigned to develop a risk management program that integrated BAA's updated policies and procedures with new software infrastructure.
05/04 – 08/04	Interstate 405 (Seattle), WSDOT, Seattle, WA. On behalf of concrete subcontractor, Cemex, analyzed project and developed delay analysis for claim that was to be forwarded to the project owner, WSDOT.
01/03 – 07/06	Denver International Airport, City and County of Denver, Denver, CO. On behalf of City and County of Denver, was primary claims consultant tasked to review and defend against any claims presented by the airport's construction contractors.
03/14 – 12/14	McDonald Bridge, U.S. Steel, Halifax, Nova Scotia. On behalf of bridge general contractor, developed a delay and loss of productivity claim.
02/23 – 09/23	Harbor Bridge, Flatiron Construction and Dragados (FDLLC), Corpus Christi, TX. On behalf of bridge general contractor, evaluated and analyzed project disputes and performed quality control of delay consultant's report.

Firm employed by: 				
Name	Deema Tuffaha, CCM		Years of relevant experience with this employer	6
Title	Senior Claims Analyst		Years of relevant experience with other employer(s)	25
Degree(s) / Years / Specialization			MS / 2008 / Construction Law and Arbitration, Robert Gordon University, 2008 BS / 1997 / Civil Engineering, University of Jordan	
Active registration number / state / expiration date			9984 / CA / Exp. 10/08/2027	
Year registered	N/A	Discipline	N/A	
Contract role(s) / brief description of responsibilities			Arbitration/Litigation Support	
Experience dates	Experience and qualifications relevant to the proposed contract			
	Ms. Tuffaha is a scheduler and claims analyst with more than 22 years of experience in construction projects internationally and in the United States. She holds a master's degree in construction law and arbitration, complementing her civil engineering background. Her expertise encompasses a wide range of project types and delivery methods, including roadways, bridges, airports, and commercial buildings. Ms. Tuffaha has served as an Owner's Representative and Consultant, conducting expert analysis of construction claims, CPM schedule delays, and cost impacts. She is adept at presenting reasoned findings to management teams, enabling efficient issue resolution. Her extensive experience has equipped her to mitigate risks and avoid claims at the outset of projects. Ms. Tuffaha also has experience in project controls and quantity surveying, and is involved in volunteer work for the Construction Manager Association of America Education Committee.			
04/20 - Ongoing	On-Call Scheduling and Claims Contract Caltrans District 11, San Diego, CA - Consultant Contract and Deputy Contract Manager. Caltrans District 11 engaged Arcadis to perform construction claims and scheduling analyses on an on-call basis in San Diego and Imperial Counties (Contract No. 11A3060). Arcadis' tasks include analyses of differing site conditions claims, review of contractors' delay and damages claims; review of contractors' baseline schedules and updates; and review and analysis of time impact analyses to assess alleged and potential delays. Upon expiry of this contract, Arcadis was engaged as a subconsultant (Contract #11A3661) fo the same services and continued to perform construction scheduling/CPM services for ongoing and new projects. Arcadis' tasks include review of baseline schedules and monthly updates and the review of contractors' delay claims and analysis of time impact analyses to assess alleged and potential delays.			
06/20 - Ongoing	On-Call Claims Contract Caltrans District 7, Los Angeles and Ventura Counties, CA - Consultant Deputy Contract Manager. Caltrans District 7 engaged Arcadis to perform construction claims analyses on various projects through the district on an on-call basis. Since 2020, Arcadis provided claims and scheduling/CPM services on Contracts No. 07A5677, 07A4986, and 07A4238. Tasks performed by the Arcadis team have included providing specialized expertise in reviewing and assessing potential claims and assisting Resident Engineers (REs) with DRB position papers and meetings, performing detailed analysis of complex construction claims and provide assessment for merit, entitlement and compensation, and propose claim resolution based on analysis of construction contract Standard Specifications and Special Provisions, analyzing and comparing both Caltrans' and the contractor's records pertaining to construction claims and provide technical advice to the Resident Engineer of the merit of entitlement, assisting REs to respond to preliminary claim findings and preparation for Dispute Review Board, performing audit and quantification of labor and material escalations, auditing of the construction contractor's records to define allowable overhead and any escalation costs, performing financial reviews and analysis of contractor's			

	records including the calculation of overhead, being an expert witness, analyzing construction “delay” claims by performing detailed and complex CPM schedule time impact analysis, developing as-built construction schedules, and performing other support services related to construction claims support services
04/17 – 07/20	Route 710 LA River Bridge to Ramona Caltrans District 7, Los Angeles, CA - Construction Claims Support Analyst. This is a \$102 million project for 5.6 mile pavement reconstruction, shoulder widening and ramp realignment works. Since 2017, Deema as part of Arcadis team provided ongoing claims assistance during project in response to the contractor’s potential claims resulting in a net increase of more than \$6 million. Also provided ongoing dispute and claims assistance and has analyzed and presented findings and recommendations on entitlement for various claims, provided exposure assessment and supported the State in settlement negotiations with the contractor.
03/17 – 05/18	I-5 North Segment 2 Caltrans District 7, Los Angeles, CA - Construction Claims Support Analyst. Caltrans District 7 engaged Arcadis to perform construction claim analysis on this I-5 North Segment 2 project. The project consists of constructing High Occupancy Vehicle (HOV) lanes, retaining walls, soundwalls and replacing concrete pavement in Burbank 0.3 kilometer (km) South of Cohasset Street undercrossing to 0.1 km North of Sheldon Street overcrossing for \$52.7 million. Part of a team of analysts reviewing and analyzing the contractor’s \$13 million claim for Time Related Overheads (TRO), disruption, interest, and miscellaneous items.
05/14 – 12/17	Baldwin Park I-10 HOV Caltrans District 7, Los Angeles, CA - Construction Claims Support Analyst. Caltrans District 7 (Los Angeles) engaged Arcadis to perform construction claims analysis of the \$15.7 exceptions to the PFE submitted by the contractor on the Baldwin Park I-10 Widening Project near Los Angeles, CA (07-117074). The project was initially valued at \$76.5 million and scheduled for four years; there were over 130 Contract Change Orders with a net increase of \$14 million issued on the project and almost three years of delay. The claim sought money for the following types of alleged costs: extended overhead based on Caltrans’ “TRO” provisions; material, labor, fuel and equipment escalation; overtime; idle/inefficient equipment costs; extended materials costs interest on late monthly payments; and “lost business opportunity.” Part of a team of analysts reviewing and analyzing the contractor’s claims.

Firm employed by. 				
Name	Joseph Seibold, P.E, FCMAA		Years of relevant experience with this employer	19
Title	Operations Director 2		Years of relevant experience with other employer(s)	31
Degree(s) / Years / Specialization		MS / 2003 / Transportation, Massachusetts Institute of Technology (MIT) BCE / 2001 / Civil Engineering, Indian Institute of Technology (IIT)		
Active registration number / state / expiration date		PE. 37745/ CA / Exp. 12/30/2026; PE. 56760/ NY / Exp. 10/30/2025; PE. 28522/ CO / Exp. 10/30/2027		
Year registered	2008	Discipline	Civil Engineering	
Contract role(s) / brief description of responsibilities		Arbitration/Litigation Support		
Experience dates	Experience and qualifications relevant to the proposed contract			
	Mr. Seibold's combined years of leadership and experience in construction management and claims allow him to provide unique insight into each project. Throughout his more than 50 years of experience, he has served as a construction manager, senior claims analyst, and an expert witness on a variety of public works projects such as highways and bridges, healthcare facilities, public/institutional buildings, airport facilities, ports, railways and transit, and water supply and wastewater treatment facilities. He has provided expert testimony in all forums of dispute resolution on behalf of both owners and contractors; including testimony regarding the standard of care for construction management practices. Mr. Seibold's experience includes preparing and supervising the evaluation and calculation of construction-related delay and disruption damages on more than 100 projects. He has participated in all forums of dispute resolution including mediation, Dispute Review Boards (DRBs), arbitration, mini-trials and litigation. His specific efforts have included providing assessments of potential exposure, recommending strategies to resolution and providing expert testimony for both private and public-sector owners. Mr. Seibold has testified before District Courts similar to Louisiana on several occasions.			
04/09 - Ongoing	On-Call Scheduling and Claims Contract Caltrans District 11, San Diego, CA - Consultant Contract Manager. Caltrans District 11 engaged Arcadis to perform construction claims and scheduling analyses on an on-call basis in San Diego and Imperial Counties. Since 2008, Arcadis' tasks include analyses of differing site conditions claims, review of contractors' delay and damages claims; review of contractors' baseline schedules and updates; and review and analysis of time impact analyses to assess alleged and potential delays			
07/10 - Ongoing	On-Call Claims Contract Caltrans District 7, Los Angeles and Ventura Counties, CA - Consultant Contract Manager. Caltrans District 7 engaged Arcadis to perform construction claims analyses on various projects through the district on an on-call basis. Since 2010, tasks performed by the Arcadis team have included providing specialized expertise in reviewing and assessing potential claims and assisting Resident Engineers (REs) with DRB position papers and meetings, performing detailed analysis of complex construction claims and provide assessment for merit, entitlement and compensation, and propose claim resolution based on analysis of construction contract Standard Specifications and Special Provisions, analyzing and comparing both Caltrans' and the contractor's records pertaining to construction claims and provide technical advice to the Resident Engineer of the merit of entitlement, assisting REs to respond to preliminary claim findings and preparation for Dispute Review Board, performing audit and quantification of labor and material escalations, auditing of the construction contractor's records to define allowable overhead and any escalation costs, performing financial reviews and analysis of contractor's			

	records including the calculation of overhead, being an expert witness, analyzing construction “delay” claims by performing detailed and complex CPM schedule time impact analysis, developing as-built construction schedules, and performing other support services related to construction claims support services.
04/18 – 07/18	Legal Department, Route 8 Alpine Caltrans District 11, San Diego, CA - Senior Construction Claims Analyst. Caltrans District 11 engaged Arcadis to provide expert witness services for Caltrans in an arbitration case related to a claim by the contractor. The project consists of rehabilitation of the existing lanes by cold plane and overlay with HMA and RHMA, as well as guard railing along the with joint sealing of bridges on State Highway 8 in San Diego County near Alpine from 0.2 mile east of Harbison Canyon Road undercrossing to 0.4 mile east if Viejas Creek bridge. Joe assisted in reviewing project documents such those listed below and analyzing the technical issues and project schedules forming part of the contractor’s claims regarding Bulk Specific Gravity Test, Timeliness of Submittal Approval, Time Impact of the Alleged Delayed Verification, and Additional Costs/Damages Resulting from Delay.
04/15 – 12/17	Baldwin Park I-10 Widening Caltrans District 7, Los Angeles, CA - Consultant Contract Manager. Caltrans District 7 (Los Angeles) engaged Arcadis to analyze a \$29.5 million construction claim submitted by the contractor on the Baldwin Park I-10 Widening Project near Los Angeles, CA. The project, initially awarded at \$76.5 million and scheduled for four years, experienced over 130 Contract Change Orders with a net increase of \$14 million and almost three years of delay. The contractor's claim included costs for extended overhead, material/labor/equipment escalation, overtime, idle equipment, extended materials, late payment interest, and "lost business opportunity." In May 2016, the revised claim was reduced to \$15.7 million in exceptions to the Proposed Final Estimate. Arcadis supported Caltrans by drafting response letters, managing a team of analysts, evaluating the claim, presenting findings, and assisting with exposure assessment and settlement.
11/11 – 12/16	I-405 Sepulveda Pass Design-Build Los Angeles County Metropolitan Transportation Authority (LACMTA), Los Angeles, CA - Consultant Contract Manager. Since 2011, at the request of the LACMTA, intimately involved on the project and leads the team that has evaluated 25 Differing Site Conditions valued at more than \$17.8 million arising out of a \$537 million Design-Build project that added a 10 mile High Occupancy Vehicle lane on the northbound I-405 between the I-10 and US-101 freeways, removed and replaced 3 bridges, realigned 27 on and off-ramps, widened 13 existing underpasses and structures, constructed 18 miles of retaining and sound walls on the I-405 freeway in Los Angeles, California. This project is of strategic importance to Caltrans as a vital element in the state transportation system. Caltrans involvement in this project is as a third party in conjunction with the local agency who is directly administering the design-build contract. Caltrans will ultimately take responsibility for the completed facility. The design-builder has alleged numerous Differing Site Conditions including unanticipated groundwater, water seepage, landslides, hard rock, slope unraveling, changes in the soil properties and conditions, geosynthetic fabric, erosion control and drainage, unidentified substances, and unsuitable material. Tasks have included performing detailed analysis of complex construction claims and provide assessment for merit, entitlement and compensation, and propose claim resolution based on analysis of construction contract documents, preparing DRB position papers, presenting on behalf of LACMTA at DRB hearings, preparing affirmative claims, and presenting claims updates to the LACMTA Board of Directors.

Section 17



Firm name	ARCADIS		Past Performance Evaluation Discipline(s)*	CPM / Other (Claims)
Project name	I-10: ATCH Basin BR – W. Baton Rouge		Firm responsibility (prime or sub?)	Prime
Project number	H.012588.6	Owner's name	Louisiana Department of Transportation & Development (DOTD)	
Project location	W.Baton Rouge	Owner's Project Manager	Dallas Ballmer	
Owner's address, phone, email	POBOX 94245, Baton Rouge, LA 70804-9245, 225-379-1575 dallas.ballmer@la.gov			
Services commenced by this firm (mm/yy)	10/21	Total consultant contract cost (\$1,000's)		\$27
Services completed by this firm (mm/yy)	01/22	Cost of consultant services provided by this firm (\$1,000's)		\$27

Firms Role: Claims Analysis**Firm Members Involved:** Roy Cooper, P.E.; Steven Koller, CCM

As part of our IDIQ contract for Statewide Claims Analysis with the DOTD, we were selected to provide **claims analysis** related to phasing of asphalt pavement shown in plans for State Project No. H.012588.6. An error in the DOTD's staging plans arose on the \$19 million project to resurface 6 miles of interstate highway, and resulted in the contractor submitting a change order request totaling \$1.2 million. Arcadis was engaged to



review the contractor's purported increased costs. After

evaluating the relevant drawings and DOTD specifications, Arcadis communicated directly with the contractor about its predicted additional paving costs. Points of contention involved the number of extra shifts to perform the work, the contractor's anticipated expenses related to a new asphalt batch plant, whether there would be added trucking costs, and if the contractor was entitled to a different markup than included in its bid estimate. Arcadis' report was used by the DOTD as a basis for equitable adjustment to the contract (at a dollar amount that was significantly below the contractor's request).

Client Challenge: DOTD needed an independent, third party review and recommendation regarding potential entitlement of the contractor's requested change order.

Our Role & Solutions: Assisted LADOTD with analysis and **resolution of contractor's proposed change** order pricing resulting from a significant change in the character of work.

Relevant Services

- CPM Analysis
- Claims Analysis
- Construction Cost Estimating
- Merit & Damage Analysis

Firm name	ARCADIS		Past Performance Evaluation Discipline(s)*	CPM, Other (Claims)
Project name	On-Call Scheduling and Claims Support Services			Firm responsibility (prime or sub?) Prime
Project number	N/A	Owner's name	Caltrans District 11	
Project location	San Diego, CA		Owner's Project Manager	Victor Yoon, PE, District 11 TE
Owner's address, phone, email	4050 Taylor Street, San Diego, CA 92110, 858 829 6147, victor.yoon@dot.ca.gov			
Services commenced by this firm (mm/yy)	06/20	Total consultant contract cost (\$1,000's)		\$6,000
Services completed by this firm (mm/yy)	02/24	Cost of consultant services provided by this firm (\$1,000's)		\$553

Firms Role: Scheduling services and delay claims services on multiple task orders and projects

Firm Members Involved: Roy Cooper, P.E.; Joseph Seibold, P.E., FCMAA; Andrew Dick, PMP, PSP, CMIT; David Lee, CCM; Deema Tuffaha, CCM

On-Call Claims and Scheduling Services Overview

Arcadis provides **claims and scheduling services** for Caltrans District 11, supporting various infrastructure projects in San Diego and Imperial Counties since 2004. Key projects include:



- **I-5 North Coast Corridor Program:** Scheduling services for a \$1.1 billion Construction Manager/General Contractor project involving highway improvements and 13 miles of high-occupancy vehicle lanes in San Diego. Arcadis reviewed Baseline Schedules, monthly updates, and **Time Impact Analyses** for Caltrans.
- **Imperial I-8 Pavement Rehabilitation Program:** Scheduling support for \$200+ million pavement replacement over 48 miles of I-8 in Imperial County. The program spanned four years and involved two contractors: Coffman Specialties and Security Paving Company.
- **Route 8 Alpine:** Expert witness services for Caltrans in arbitration regarding rehabilitation of lanes, guard railing, and bridge joint sealing on State Highway 8 near Alpine.

Arcadis also reviewed documents for various contracts, including:

- Traffic control and civil inspections on Routes 52, 805, and 94.
- Replacement of 3,700 signs across San Diego County.
- Highway and bridge improvements on Routes 8 and 805.

This work highlights Arcadis' extensive experience in scheduling, claims support, and collaboration with Caltrans on major transportation projects.

Relevant Services

- CPM Analysis
- Schedule Management
- Claims Analysis
- Merit & Damage Analysis
- On-call Services
- Task orders required familiarity with Caltrans specifications and requirements
- Expert services and advice in relation to court cases or arbitration panels

Firm name			Past Performance Evaluation Discipline(s)*	CPM, Other (Claims)
Project name	Virginia Department of Transportation (VDOT) IDIQ CEI Contract		Firm responsibility (prime/sub)	Sub
Project number	MY000715.0000	Owner's name	Virginia Department of Transportation	
Project location	Yorktown, Virginia		Owner's Project Manager	Eric Kevitz, PE, Project Controls Mgr.
Owner's address, phone, email	7511 Burbage Drive, Suffolk, VA 23435, 757-478-7976, Eric.Kevitz@VDOT.Virginia.gov			
Services commenced by this firm (mm/yy)	07/13	Total consultant contract cost (\$1,000's)		\$120
Services completed by this firm (mm/yy)	12/16	Cost of consultant services provided by this firm (\$1,000's)		\$350

Firms Role: Scheduling and claims support

Firm Members Involved: Roy Cooper, P.E.; Chris Carson, FRICS, FAACE, FGPC, CCM, PMP, PSP, DRMP, CEP, Director of Project Controls

Arcadis provided **CPM Scheduling services** to assist in monitoring contractual obligations associated with this \$25 million road and bridge widening from 4 lanes to 6 lanes replacing the Northbridge (NB) and Southbridge (SB) bridges with a single bridge.



Arcadis supported the Area Construction Engineer with **baseline and update schedule review along with analysis of requests for extensions of time and claims**, as well as providing monthly recommendations for recovery and review of the contractor's plan to recover lost time. The improvements increased the capacity of George Washington Memorial Highway between Hampton Highway and Wolf Trap Road, from four lanes to six lanes, with three lanes in each direction. The roadway includes a raised median, curb and gutter, with a shared-use path parallel to the northbound lane from Mill Road to Showalter Road. The two existing bridges over the Poquoson River were replaced with one bridge carrying six lanes of traffic and a shared-use path. The project was a high-profile project in a congested location with intricate involvement in retail and residential neighborhoods along this non-limited access

highway. The three-year project was predicting five months late when Arcadis was awarded the schedule review role, and over the remaining two and a half years, **the monthly recommendations helped the project finish one month early with no claims**. This was the first project built by this contractor that completed on time with no claims in twenty years.

Arcadis took over schedule and optimization review and helped turn the contentious Route 17 Yorktown Road and Bridge Four-to-Six Lane Widening Project that was predicting a five-month late completion date into a project successfully finishing on time. The project had multiple large claims which were withdrawn as improved progress eliminated the need for any extensions of time.

Relevant Services

- CPM Analysis
- Claims Analysis
- Merit & Damage Analysis
- Schedule Optimization/
Mitigation
- Risk Analysis

"VDOT has partnered with the Arcadis team on several complex, high-profile projects. Arcadis has helped us proactively identify risks, mitigate potential delays and disruptions and identify solutions that can be implemented to keep projects on time and on budget. They are trusted partners and we would welcome them to assist on future projects."

"Arcadis utilizes several strategies involving both software and personnel expertise to ensure projects remain on-time and to recover time for projects that are behind schedule. Their methods for schedule recovery and partnering were successful in helping a high-profile project in our area that was behind schedule, to recover and complete on time."

Eric A. Kevitz II, District Project Controls Engineer / Hampton Roads District, VDOT

Firm name	ARCADIS		Past Performance Evaluation Discipline(s)*	CPM, Other (Claims)
Project name	On-Call Cost Estimating, Scheduling, and Project Controls Support		Firm responsibility (prime or sub?)	Prime
Project number	Various Projects	Owner's name	New York City Department of Environmental Protection (NYC DEP)	
Project location	New York (Statewide)		Owner's Project Manager	Michael Hoahing (Chief of Schedule Controls)
Owner's address, phone, email	59-17 Junction Blvd, Flushing, NY 11368, (347) 563-2704 ; mhoahing@dep.nyc.gov			
Services commenced by this firm (mm/yy)	03/18	Total consultant contract cost (\$1,000's)		\$10,000
Services completed by this firm (mm/yy)	Ongoing	Cost of consultant services provided by this firm (\$1,000's)		\$3,000

Firms Role: Project Controls Services across across portfolio of projects facilitated by the Bureau of Engineering Design and Construction Program Management Office

Firm Members Involved: Roy Cooper, P.E; Antoine Bechaalani, PSP; Brian Goodreau, PSP, ENV SP

From 2018 to 2021, Arcadis held a three-year, \$5 million task order contract with the New York City Department of Environmental Protection (DEP) to provide project controls services for the Bureau of Engineering Design and Construction (BEDC) Program Management Office. **Services include cost estimating, scheduling, claims avoidance and resolution, change management, and risk management.** Leveraging data gathering and lessons learned, Arcadis has become a trusted advisor, helping BEDC address complex organizational challenges.



The NYC DEP's mission is to protect public health and the environment by supplying high-quality drinking water, managing wastewater and stormwater, and reducing pollution. As one of Arcadis' largest municipal clients, DEP constructs some of the nation's most complex projects. While Arcadis has supported DEP for decades, recent efforts have focused on mitigating delays in behind-schedule projects.

Arcadis has consistently delivered **reliable cost estimates** for DEP's capital program, developing an updated Cost Estimating Guide used for all project estimates. These best practices, combined with advanced estimating technology, have enabled Arcadis to predict contractor bids within 1.5%-3% of engineer estimates. For example, during the Rehabilitation of the Rikers Island North and South Pump Stations,

Arcadis provided accurate estimates and schedules through all design stages, resulting in an engineer's estimate within 1.3% of the winning bid. Similarly, at the Newtown Creek Wastewater Treatment Plant, Arcadis facilitated change order negotiations, ensuring timely resolution without project delays.

Over the course of this contract, **Arcadis has led cost estimating, scheduling, and risk management for more than 40 capital projects**, ranging from \$3 million to over \$400 million. Arcadis' success has led to a follow-on 6-year \$10 million contract with NYC DEP, further cementing its reputation for delivering quality schedule management services and accurate project cost estimates within 2-3% of actual bids.

Relevant Services

- CPM Analysis
- Claims Mitigation and Analysis
- Construction Cost Estimating
- Schedule Management
- Bid Variance Analysis
- Risk Management
- Data Analytics

Firm name			Past Performance Evaluation Discipline(s)*	CPM, Other (Claims), Other (Training)
Project name	Tennessee DOT Construction Claims & Scheduling Services		Firm responsibility (prime or sub?)	Prime
Project number	N/A	Owner's name	State of Tennessee, Office of the Attorney General	
Project location	Statewide, Tennessee		Owner's Project Manager	Melissa Brodhag Assistant Attorney General
Owner's address, phone, email	Tennessee Office of the Attorney General, P.O. Box 20207 Nashville, TN 37202-0207, 615 741 6029, melissa.brodhag@ag.tn.gov			
Services commenced by this firm (mm/yy)	09/06	Total consultant contract cost (\$1,000's)		\$10,000
Services completed by this firm (mm/yy)	Ongoing	Cost of consultant services provided by this firm		\$10,000

Firms Role: Claims Analysis, Scheduling Services & Training

Firm Members Involved: Roy Cooper, P.E.; Jennica Dycus, P.E., PSP; Steve Koller, CCM

Since 2006, Arcadis has been a trusted partner in delivering **expert claims services**, supporting Tennessee Department of Transportation (TDOT) and Tennessee Office of Attorney General in resolving delays, extra work, and termination claims



on a variety of major projects. Additionally, Arcadis has provided **scheduling expertise for numerous projects across the state**, leveraging its deep technical expertise and industry experience to help TDOT mitigate project delays, resolve disputes, and reduce costs. This partnership has consistently resulted in more efficient and successful infrastructure projects. Arcadis has been engaged to perform **claims analysis on nearly 20 projects and provide scheduling support on over 30 projects**.

By **developing and conducting Critical Path Method (CPM) scheduling workshops** for supervisory and field staff, Arcadis has improved TDOT's employees' ability to effectively review baseline schedules, updates, and delay

analyses in accordance with project specifications. Additionally, Arcadis has assisted in revising scheduling specifications to ensure clarity and alignment with industry best practices. These efforts have emphasized schedule optimization and claims mitigation, empowering TDOT to address potential disputes proactively before they escalate.

For TDOT's high-profile and large-scale "special" infrastructure projects, Arcadis has provided specialized scheduling and claims expertise. This has **included pre-construction risk management, evaluating construction alternatives, facilitating risk workshops, and preparing risk registers to address key challenges**. During construction, Arcadis has provided scheduling services, claims avoidance and resolution services and strategic contract advice. Additionally, for complex disputes involving delay and cost claims, Arcadis has provided **detailed analyses of contractor claim submissions, constructability reviews, expert court and mediation support**. These efforts have consistently helped the state of Tennessee protect their interests, achieve fair resolutions, and ensure the successful completion of critical transportation projects.

Relevant Services

- CPM Analysis
- Claims Mitigation and Analysis
- Claims Analysis
- Expert services and advice in relation to court cases or arbitration panels
- Training
- Risk Management

Section 18



With extensive experience providing **CPM schedule review services through IDIQ contracts for DOTs across the country**, our team members have dealt with a myriad of scheduling challenges, potential impacts, and related claims and have developed effective and efficient approaches to resolving them as early as possible. In addition, our **Certified Value Specialists have performed value engineering studies on hundreds of DOT projects across the nation**.

Our approach starts with a foundation of scheduling and claims best practices and an understanding of the unique requirements of the project. We will assess the current status of the project to identify potential problems before they occur. In this regard, our strength lies not only in what we help you accomplish, but also in what we help you avoid. We will provide DOTD with clear, specific recommendations for the best course of action, and support their recommendations with appropriate documentation in order to facilitate discussions and resolution with the Contractor. **We have a strong track record of working with our clients and their legal counsel** throughout an assignment – from baseline schedule reviews, through schedule updates, **Time Impact Analysis (TIA)** as well as initial claims to arbitration/litigation support.



Schedule Support during Pre-Construction

During the Pre-Construction Phase of the project's lifecycle and upon your request, we will bring our experience to you to develop the schedule as the scope is defined.

Once there is basic scope information, we will help establish the project duration and evaluate alternatives for cost and schedule savings. This schedule becomes a Critical Path Method (CPM) schedule with activities representing design phases and work scope by trade and phases, at a high level.

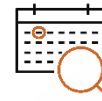
We will confirm that the schedule encompasses all contract work including submittals, fabrication, procurement, construction and coordination with stakeholders and third-party providers. We will determine the reasonableness of the schedule logic and durations, **using the schedule to identify, avoid and mitigate the inherent project risks that you will face throughout the lifecycle of the project.**

Pre-Construction Schedule Focus

- Accurate design and construction durations
- Evaluation of optimal design, procurement and delivery options
- Monitor/manage design progress
- Coordinate value engineering, risk analysis and constructability reviews

While the schedule is evolving through the various stages at the Pre-Design and Design Phases, it is also updated frequently with progress. This effort allows for analysis of completion predictions, monitoring of performance, and analysis of trending that might forecast delays to the

project deadlines. We will provide you with an effective **schedule for design that will avoid slippage in the design phase and minimize impact to all the other work phases such as procurement and construction.**



Schedule Analysis during Construction

During the Construction Phase, Scheduling and Schedule Review services include reviews of contractor baseline and update schedules, review of time dependent cost loading, trending and completion prediction analysis, and analysis of delays, and change management. **We use a formal technical schedule review process using the as-built data to help identify and predict future delays. We will use the latest software technologies, including P6 and Deltek Acumen Fuse/Risk.**

Our team is skilled in recognizing the tricks and plays contractors often employ within their CPM schedules. These include issues such as float suppression, unreasonable durations, extraneous or missing logic, missing activities, improper constraints or project calendars. We provide a thorough analysis to **confirm the schedules are developed in accordance with your specifications** and industry best practices so that the schedule can be used as a tool to drive the construction activity and analyze potential impacts and mitigation measures for delay.

Baseline Review: The Baseline Schedule illustrates how the contractor plans to perform the work to achieve the contractual milestone dates. Furthermore, the Baseline Schedule is vital to the tracking of progress, ensuring all scope is accounted for, and the determination and quantification of delays.

Construction Schedule Review Focus

- Compliance with contract requirements
- Complete scope of work, accurate activity durations, sequencing, constraints, milestones, and critical path reasonableness
- Cost and resource loading
- Interfaces with stakeholders

The Arcadis Team will, in the same way they develop Pre-Construction Schedules, perform a thorough review of the contract documents to properly determine if the entire scope of work is depicted in the submitted baseline Schedule, as well as if the durations and logic sequencing are appropriate.

To ensure the Baseline Schedule and anticipated monthly update reviews occur in an efficient manner, the Arcadis Team will manage schedule review staff assignments to ensure that all reviews are completed promptly without delay.

Update Review: The changing nature of the project schedule requires a very careful and thorough update schedule review and we use a structured process to provide early warning of potential delays as well as identifying opportunities to mitigate delays.

The checklists we have developed over the years prompt our schedulers to report on items which include:

- | | |
|--|----------------------------------|
| ✓ Milestones dates against contract/bid dates | ✓ Logic relationships |
| ✓ Completeness of work including milestones, procurements, submittals/approvals, construction and commissioning/closeout | ✓ Open-ended logic |
| ✓ Compliance with contract requirements | ✓ Constraint use |
| ✓ Activity duration and description | ✓ Lags and leads |
| ✓ Longest path and critical path | ✓ Project calendars |
| | ✓ Float Analysis |
| | ✓ Cost Analysis |
| | ✓ Resource Analysis |
| | ✓ Validation of narrative report |

We will also use the scheduling software to identify revisions, additions and deletions to the current schedule and pay particular attention to the

assignment of responsibility for delays and identification of concurrent delays.

This is performed as a technical schedule analysis, which yields critical information and analysis to predict completion and potential barriers to on-time completion.

We will conduct schedule review meetings with the contractors to facilitate a shared understanding of the technical requirements and contractor's approach. We will utilize the contractor's schedules to report on the validity, merits and extent to which an extension of contract time may be warranted and make recommendations to you regarding extensions of time.

Update Schedule Review Focus

- Critical path, near-critical path and trending
- Float consumption, missed starts and finishes
- Impact of Update revisions
- Earned value management to monitor reported progress
- Resource analysis and trend analysis

TIA Review: The Arcadis Team has extensive experience reviewing contractor submitted TIAs in on-call scheduling services contracts. When reviewing a TIA, the Arcadis Team will first determine if the submission is in accordance with the DOTD scheduling specifications and industry best practices. The Arcadis Team will continue to review the TIA by analyzing the fragnet inserted by the contractor. This includes the activities that make up the fragnet and whether they are required due to the alleged delay and claimed impact.

The Arcadis Team will also review project documentation such as Requests for Information (RFIs) and daily reports to verify the accuracy of the durations and dates as shown in the fragnet.

If the Arcadis Team believes the submitted TIA is inaccurate, we will create an independent TIA to illustrate the impact to the project as we believe properly reflects the facts around the alleged delay. This will be included in our TIA review report.

Once the TIA review is completed, the Arcadis Team will recommend, within its report, whether the DOTD should accept or reject the TIA.

Reporting: Our team will provide written reports, attend periodic progress meetings and communicate our findings on schedule phasing, sequencing, resource loading and potential scheduling issues with recommendations on the avoidance, mitigation and resolution of project delays. We present

our findings in a written and graphical report with an executive summary that outlines all of the major features of our findings, with a clearly defined list of actionable comments and recommendations. The report is tailored to be easily understood by individuals of varying technical expertise.



Arbitration/Litigation Support

Claims Analysis and Resolution

Our approach to claim analysis aims to resolve issues at the earliest stage so job closeout can occur with no, or minimal, outstanding issues. We realize that a dispute often originates without an apparent risk or probability of a significant claim – an RFI, submittal review comments, and the like. At your request, our staff can begin reviewing documentation and interviewing project staff to investigate a potential claim or dispute and provide recommendations as soon as possible. This will enable early resolution of issues as they arise, long before the contractor may formally submit the dispute for formal dispute resolution.

The Arcadis team is well versed in all the potential causes of claims, the analyses necessary to determine the merit of such claims, and most importantly, the formal resolution processes used to adjudicate or resolve the disputes including mediation, early neutral evaluations, dispute resolution boards, arbitration and litigation. Arcadis has extensive experience helping clients with all aspects and at all junctures of these processes by performing the following tasks:

- Draft Position Papers.
- Draft rebuttals to Contractor papers.
- Draft PowerPoint presentations.
- Present findings in expert presentations.
- Assisting Client employees in preparing for their own presentations and testimony.
- Draft and present rebuttals to Contractor claims interface with mediators.

Entitlement Analysis: All analyses begin with an initial review to ensure that the Contractor's claim submittal conforms to the contract requirements. This initial review is followed by careful scrutiny of the Contractor's position and supporting documentation to evaluate the merit of the Contractor's claim. In addition to reviewing the Contractor's claim documents, our staff will review DOTD's records and talk to pertinent parties to confirm facts and clarify each party's position before completing our analysis and recommendations regarding entitlement.

Delay Analysis: Many of the issues encountered on projects will be schedule related and most Specifications require the Contractor to submit a TIA. Performing a TIA or other delay analysis is not solely a review of the

schedule, but an analysis of the delay issue, the issues leading up to the delay, and the impact of the issues on other schedule activities and the projected project completion. Time impacts are often documented and analyzed on each one's individual merit. Once cause and effect have been determined, we assist in assigning responsibility for the delays.

Damage Analysis: Even in cases where DOTD may be responsible for an issue or event, exposure can be significantly reduced by scrutinizing the costs claimed by the Contractor. Submitted cost requests often include direct extra costs, markups, delay-related costs, home office overhead, loss of productivity, labor and material escalation, and idle or extended equipment cost. Claimed "soft costs" may include lost profit, interest, claims consulting and legal costs. The Arcadis team has extensive experience in determining entitlement and schedule impacts, analyze the myriad of costs, and agree on a damage amount equitable to both parties. Some claim issues, such as alleged loss of productivity, may not be submitted until the end of the project when it's too late to initiate mitigation measures. Should there appear to be a circumstance forming where such a claim is anticipated, we will work diligently to ensure that everything is being done to get the details "out on the table" as early as possible. We will recommend the client implement a plan of monitoring discrete areas of work and perform ongoing independent assessments to document potential productivity loss, disruption, and impacts.



Training

Throughout our 30-year relationship with many of our clients such as Caltrans and the Connecticut DOT, we have trained more than 2,500 staff members on various scheduling and claims related topics. We have prepared and presented special claim awareness and mitigation training and have minimized disruption to the workday by delivering this training through a series of brown bag lunches. The Arcadis team can respond to your specific training requests and develop a suitable curriculum which addresses your training needs.

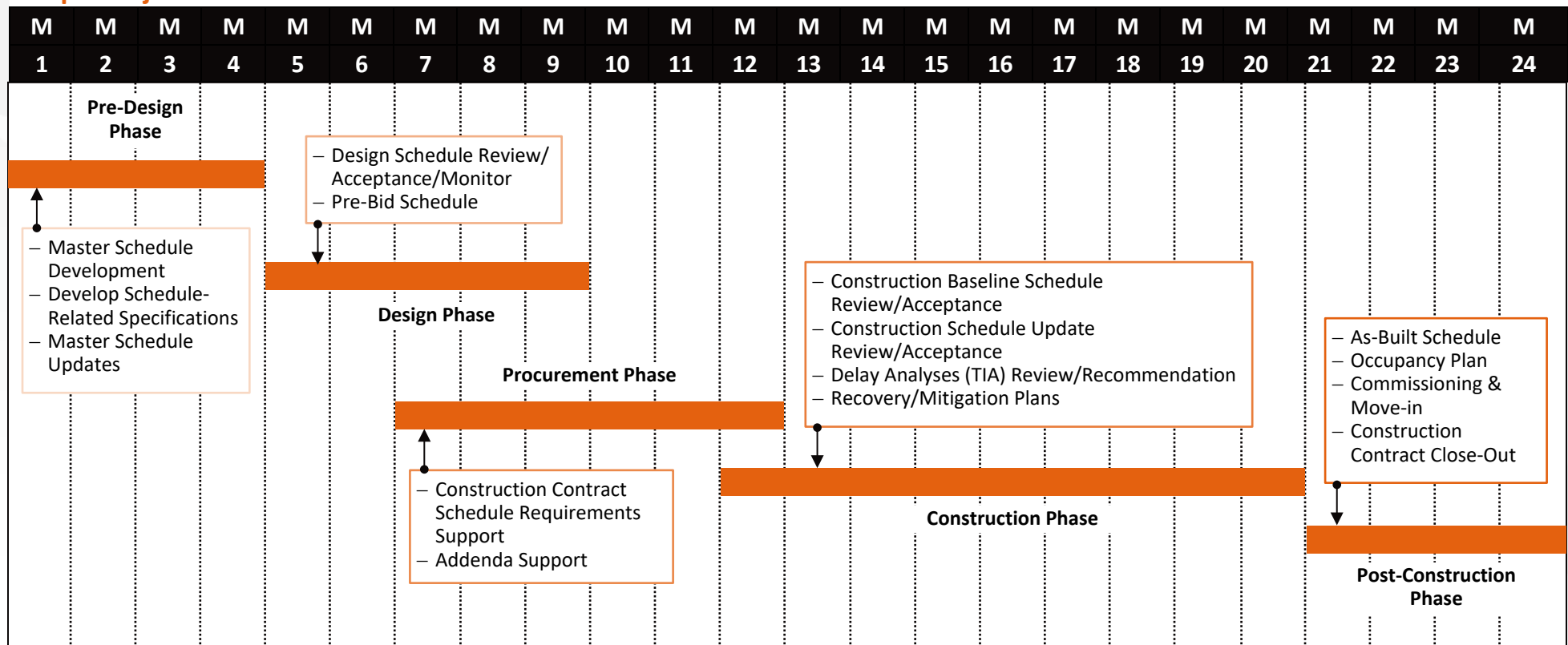
The Arcadis Approach in Project Controls Provides DOTD

- **Experts** in scheduling programs, projects, design, procurement and construction
- **Experience** as contractors, construction managers, designers and owners
- **Best practices** in review of contractors' baseline and update schedules, time extension requests and potential claims
- **Enforcement** of DOTD CPM specifications

DOTD Benefits from the Arcadis Approach

- Timely, comprehensive schedule reviews and accurate project schedules
- Reliable project management tool to avoid delays and claims
- Provides DOTD successful project completion

Sample Project Schedule:



Sections
19-23

19 WORKLOAD:

Firm(s) ALL FIRMS MUST BE REPRESENTED IN THIS TABLE	Discipline(s) *	Contract Number and State Project Number	Project Name	Remaining Unpaid Balance**
	ITS	4400026457 / H.013868.5	ITS MGMT, OPERATIONS, & MAINT	747,076
	ITS	4400026457 / H.013868.6 (A)	ITS MGMT, OPERATIONS, & MAINT	457,565
	ITS	4400026457 / H.013868.6 (B)	ITS MGMT, OPERATIONS, & MAINT	136,370
	Environmental	4400009703 / H.000688.2	US 11 Norfolk Southern Railroad	3,008
	Environmental	4400007175 / H.011328.2	I-49 South (Ricohoc to Berwick)	876,959
	Environmental	4400019338 / Multiple State Project Nos	Rural Bridge Replacement Initiative Phase II	53,885
	Environmental	4400009281 / H.009932	US 80 Widening: Vancil Road to Well Road EA	5,343
	Environmental	4400025022 / H.015498.5 Recall 102225	Park Road Over Lagoon	35,000
	Environmental	4400025022 / Multiple State Project Nos	IIJA Off System Bridge Program – Env. Task Orders	186,749
	Environmental	4400024307 / H.015052	I-20: Widening/Ovrly (Vancil Rd-LA 34)	20,693
	Traffic	4400007175 / H.011328.2	I-49 South (Ricohoc to Berwick)	34,579
	Traffic	4400029193 / H.004100.5 and H.004100.6	I-10: LA 415 to Essen Lane on I-10 and I-12	1,028,375
	Traffic	4400019379 / H.013797	LA 30: EBR PL – I-10	232,048
	Traffic	4400024307 / H.015052	I-20: Widening/Ovrly (Vancil Rd-LA 34)	55,872
	Traffic	4400021325 / H.012837.5	I-10 New Orleans Master Plan	116,283

	Traffic	4400023690 / H.015590.5	LA 494: LA 6 To Blanchard Rd	240,303
	ITS	4400025921 / H.015938.1	Transportation Systems Management and Operations (TSMO) Program	264,977
	Road	4400029193 / H.004100.5 and H.004100.6	I-10: LA 415 to Essen Lane on I-10 and I-12	1,890,884
	Road	4400024307 / H.015052	I-20: Widening/Ovrly (Vancil Rd-LA 34)	26,902
	Bridge	4400027361 / H.011220.6, H.012901.6,	US 90 Engineering Support	261,305
	Bridge	4400016923 / H.012901.6, H.010634.6	US 90Z (Bodenger Blvd. – Stumpf Blvd.)	166,492
	Road	4400019010 / H.010116.5	LA 1088: Soult and Trinity Roundabouts	33,307
	Traffic	4400024084 / H.009300.5	CMAR Contract for Hooper Road Widening (LA 3034 – LA 37)	12,348
	Bridge	4400025022 / Multiple State Project Nos	IIJA Off System Bridge Program – Road Task Orders	26,082
	Bridge	4400029193 / H.004100.5 and H.004100.6	I-10: LA 415 to Essen Lane on I-10 and I-12	398,081
	Bridge	4400025022 / Multiple State Project Nos	IIJA Off System Bridge Program – Bridge Task Orders	20,498
	Planning	4400021325 / H.015193.1	LA 22: Tchefuncte Bridge Feasibility	4,889
	CE&I/OV	4400025046 / H.013710.6	I-10: US 61 to LaPlace ITS Deployment (CE&I)	60,307
	CE&I/OV	4400025665 / H.013482.6	I-10 WBR Queue Warning System	225,920
	Data Collection	4400021325 / H.012837.5	I-10 New Orleans Master Plan	7,655
	ITS	4400023812 / H.015377.5	Weigh Station Assessment	454,079



Certifies that

Stephen P Warhoe

having given satisfactory evidence of qualifications

and fitness, is hereby certified as a

Certified Forensic Claims Consultant (CFCC)

Certificate Number: CFCC-12

In Witness Whereof Our Hand and Seal

This certification was earned on 7/15/2007 and will expire on 9/14/2025

A stylized, handwritten signature in black ink, consisting of several loops and flourishes.

Charles E. Bolyard, Jr., CFCC PSP FAACE Hon. Life
Chair, Certification Board

Issue Date: 2/4/2025 to Customer ID: 02817

certification@aaacei.org | +1.304.296.8444

Certifies that

Antoine Bechaalani

having given satisfactory evidence of qualifications

and fitness, is hereby certified as a

Planning & Scheduling Professional (PSP)

Certificate Number: PSP-1921

In Witness Whereof Our Hand and Seal

This certification was earned on 7/6/2018 and will expire on 7/6/2027



Charles E. Bolyard, Jr., CFCC PSP FAACE Hon. Life
Chair, Certification Board

Issue Date: 9/26/2024 to Customer ID: 401786

certification@aacei.org | +1.304.296.8444

This certifies that

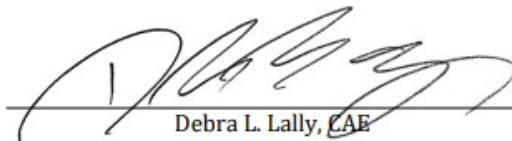
Jennica Dycus

having given satisfactory evidence of qualifications

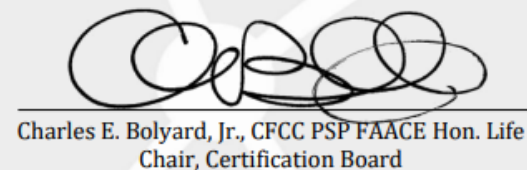
and fitness, is hereby certified as a

Planning & Scheduling Professional

Originally certified: March 4, 2024 • Certificate Number: 02625



Debra L. Lally, CAE
Executive Director/CEO



Charles E. Bolyard, Jr., CFCC PSP FAACE Hon. Life
Chair, Certification Board

Issue Date March 4, 2024
In Witness Whereof Our Hand and Seal
This Certificate Expires: March 4, 2027
AACE ID: 418663

certification@aacei.org | +1.304.296.8444

This certifies that

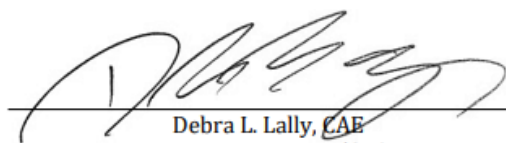
Christopher (Chris) Willis Carson

having given satisfactory evidence of qualifications

and fitness, is hereby certified as a

Certified Estimating Professional

Originally certified: April 15, 2013 • Certificate Number: 215



Debra L. Lally, CAE
Executive Director/CEO



Charles E. Bolyard, Jr., CFCC PSP FAACE Hon. Life
Chair, Certification Board

Issue Date May 2, 2024

In Witness Whereof Our Hand and Seal

This Certificate Expires: May 1, 2027

AACE ID: 35191

certification@aaeci.org | +1.304.296.8444

This certifies that

Christopher (Chris) Willis Carson

having given satisfactory evidence of qualifications

and fitness, is hereby certified as a

Planning & Scheduling Professional

Originally certified: July 7, 2006 • Certificate Number: 206



Debra L. Lally, CAE
Executive Director/CEO



Charles E. Bolyard, Jr., CFCC PSP FAACE Hon. Life
Chair, Certification Board

Issue Date May 2, 2024

In Witness Whereof Our Hand and Seal

This Certificate Expires: July 7, 2027

AACE ID: 35191

certification@acei.org | +1.304.296.8444

22 SUB-CONSULTANT INFORMATION:

Firm Name (Name must match exactly as registered with Louisiana's Secretary of State (SOS): including punctuation, include screenshot(s) from SOS at the end of Section 20)	Address	Point of Contact and email address	Phone Number
N/A	N/A	N/A	N/A



Arcadis

6100 Corporate Blvd., Suite 325

Baton Rouge, LA 70808

T 225 292 1004

www.arcadis.com

Connect with us



arcadis.com



Arcadis North America



Arcadis



@Arcadis_NA