
ANTHONY MARRARO, PMP, DBIA
Director of Continuing Education and Senior Lecturer,
Texas A&M University

Anthony Marraro brings 35 years of program and project management experience encompassing all aspects of design and construction. He has held positions as a Senior Vice President, Vice President, Director, Office Leader, Unit Manager, Program Manager, Project Manager, Program and Project Controls Manager, Scheduler, Cost Engineer, Estimator and Designer/Draftsman. Mr. Marraro's project experience includes transportation (airport and light rail), vertical, mixed-use, infrastructure, military, Embassy, petrochemical, fine chemical, water and wastewater, and environmental remediation assignments for government, public, and private clients.

Mr. Marraro has worked both domestically and internationally, completing twenty months in Iraq and Afghanistan supporting the reconstruction efforts of the United States Department of Defense.

As a Senior Lecturer at Texas A&M University, he instructs graduate and undergraduate students in Project and Construction Management. Additionally, he has served the Department as the Associate Department Head and is currently the Director of Continuing Education.

Texas A&M University, College Station, TX

Senior Instructor, Department of Construction Science (2016-Present) –

Mr. Marraro is a senior lecturer with the Department. He currently instructs third and fourth year students in Construction Project Management and is a guest lecturer for several courses. He works as a liaison between industry and the Department to promote the program, Department, and University and represents the Department at Industry events. Additionally, Mr. Marraro provides his experience and services as a Project Management consultant and is an active industry lecturer.

Consulting Assignments, Bryan, TX

Mr. Marraro has provided executive training, business process review, data and trends analysis, and presentations for clients including Procore, H.E. Butt Grocery Co., and JB Knowledge.

Hill International, San Francisco, CA

NorCal Regional Manager, Hill International (2013- 2016) –Mr. Marraro led the San Francisco office and was responsible for Hill's Northern California (NorCal) market territory and service sectors. He provided leadership, management, staff development and mentoring to program, project and construction management professionals. He was responsible for the operations, Profit and Loss, business development, marketing and proposal efforts, Power-of-Attorney responsibilities, hiring and right-sizing actions for the Northern California region. Highlights of this assignment included securing five new Bay Area clients representing over \$65M in new consulting contracts, increasing firm backlog. He led the business development activities to increase Hill's footprint in Northern California while right sizing and right staffing the office for long-term growth and sustainability.

HNTB Corporation, Oakland and San Jose, CA

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Education

MS/1997/Construction Management,
Texas A&M University, TX

BS/1982/Marine Biology, Texas A&M
University, TX

Professional Registrations

Design Build Institute of America
Project Management Institute

Years of Experience 35

Entered the profession in 1985

NorCAL Deputy Office Leader, HNTB Infrastructure (2012- 2013) – Mr. Marraro was responsible for assisting the NorCal Officer Leader with Operations, Sales and personnel matters. He provided leadership, management, staff development and mentoring to a group of transportation engineers and planners including Civil, Structural, Utilities, Rail, Program Management, Project Controls, and Planning practitioners. He was responsible for the operations, Profit and Loss, business development, marketing and proposal efforts, and Power-of-Attorney functions for five NorCal offices.

San Jose Office Leader, HNTB Infrastructure (2011- 2012) – Mr. Marraro led the fifty-person office in San Jose, CA. He provided leadership, management, staff development and mentoring for the office of transportation engineers including Civil, Structural, Program Management and Project Controls practitioners. He was responsible for the operations, Profit and Loss, business development, marketing and proposal efforts, government relations, Power-of-Attorney responsibilities, hiring and right-sizing actions for this office.

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Officer-in-Charge Hawaii Projects, HNTB Infrastructure (2010-2013) – Mr. Marraro was the corporate officer responsible for firm-wide design efforts for three Honolulu Rail Transit Project (HART) Design-Build projects in Oahu, Hawaii. He provided leadership, P&L accountability, resource planning and staffing, contract and change management support and reporting, client relations, accounts receivables, and hiring for this program. Total Design Fees for the program were \$87.3M.

District Operations Officer, West Division HNTB Infrastructure, District (2009-2013) - Mr. Marraro served as the California Operations Officer for the largest HNTB district. He was responsible for the operational performance, metrics, and reporting for this 275 person district. His responsibilities included client contract reviews, client contract negotiations, Power-of-Attorney functions, leading monthly project reviews, implementing project-specific recovery actions, claims analysis and settlements, work sharing and personnel assignments across the District and division offices.

Director of Program Management, HNTB Infrastructure, Northern Ca. (2007-2011) - As the Director, Mr. Marraro hired, consolidated, and led multiple, geographically diverse Program Management personnel in NorCal, creating a twenty-five person Program Management group that provided program management support to four Bay Area clients and additional HNTB offices. Services provided included Program Management, Project Controls, Risk Management, Planning, Contracts, and Project Administration support. He regularly participated in client meetings involving project controls and claims issues; evaluated and reported on Program Management and Project Control software; and provided project controls expertise while responding to Requests for Proposals. He led this group of Estimators, Schedulers, Cost Engineers, Earned Value Specialists, Risk Managers, and Document Controllers, while managing the resources, training, personnel development and assignments for the group. Mr. Marraro provided program management and project controls services and products and led a pilot program to implement a ProjectWise Document Control system across the District.

Relevant Project Experience

Hill International, San Francisco, CA

Project Principal, CP Vertical Development Co., LLC, Candlestick Point, San Francisco, Pre-Construction and CM services, (8/15- 7/16) Mr. Marraro was the Principal and interim Project Manager responsible for the client development, proposal preparation, contract negotiations, team performance, resources, and client relationship management for Lennar Urban's Candlestick Point redevelopment project. This project is a master planned mixed-use facility on the former 38-acre site of Candlestick Park. The development includes sixteen blocks of retail shop spaces, parks and open spaces, underground parking, entertainment, a 3500 seat theater/music venue, 478 affordable homes and 755 market-rate homes. Mr. Marraro's team provided full Contract Management support to Lennar including Master Builder procurement, bid analysis and award services for this \$631,798,409 contract. Additional services included programmatic scheduling, alignment and scheduling workshop facilitation, design management and coordination, city permitting and third-party stakeholder coordination, project meeting facilitation and project-specific deliverables. The \$1M contract completed in 2017.

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Project Principal, Genentech – South San Francisco Campus, Project Controls Support Services, (12/14- 7/16) Mr. Marraro was the Principal responsible for the contract negotiations, team performance, resources, client relationship management and staff assignments for the K6 Utilities project. Mr. Marraro's team provided schedulers, cost engineers, document controllers and a risk manager for the campus-wide utilities upgrades at the South San Francisco campus for this \$5.1M contract.

Principal and Project Manager, Santa Cruz Metropolitan Transit District, Judy K. Souza Operations Building, (9/14- 7/16) – Santa Cruz Metro completed a new, \$16M state-of-the-art operations facility to replace a 30-year-old, substandard operations building. The new four-story, 54,132 sf facility is rated as a Category IV Essential Facility and designed to ensure the structure survives and is operational in the event of a large magnitude earthquake. The facility includes parking spaces for 100 buses and crew amenities including a Driver Room kitchenette, quiet room, and outdoor patio. The building houses central dispatching, operations, administrative offices and a driver training room. Hill provided full Construction Management services for this \$3.25M contract. Mr. Marraro was the Principal and interim Project Manager during construction and project close out.

Principal, San Francisco International Airport, Project Management Support Services for Temporary Boarding Area B & Security Screening Checkpoint, (8/14 – 8/15) Mr. Marraro was the Principal responsible for the contract negotiations, team performance, resource management, client relationship management and staff assignments for the Terminal B interim boarding area relocation, ancillary systems upgrades, and additional aircraft gates. This project was the critical project within the renovation of Terminal B requiring tight adherence to schedule so as not to create airside operations impacts or impacts to adjacent and concurrent Terminal B projects. Mr. Marraro's team successfully provided full service Construction Management services to the airport including Construction Managers, Office Engineers, Inspectors, Schedulers, Cost Engineers, Safety Engineers and Document Controllers for this \$7.7M contract.

Project Manager, San Francisco International Airport, On-Call Project Management Support Services, (3/14-7/16) –Mr. Marraro was the Project Manager and primary client contact for this \$2.5M Project Management staff augmentation contract. Personnel provided for the client included an office engineer, electrical and civil inspectors, BIM draftspersons, wayfinding design services, and geotechnical investigation services. Mr. Marraro was responsible for the scope, schedule, budget, contract administration, and client maintenance aspects of the contract.

Project Manager, Northeastern University, New Campus Tennant Improvement Project, Phase I, IDT Building, San Jose, CA, (12/14-3/15) – Mr. Marraro was the Construction Manager for this Tennant Improvement project within the IDT building. Services included coordinating the design effort, leading the procurement of the contractor, analyzing the contractor bids, recommending the bid award, and construction management services for Northeastern University. Work scope included MEP and security modifications, new lighting, A/V additions, structural and custom wall treatments and new signage to increase the awareness and highlight the location of the new facility. The project finished on schedule and below budget.

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Project Manager, Sacramento Regional Sanitation County Sanitation District, EchoWater Project, Elk Grove, CA, (3/13- 7/16) - Mr. Marraro was the Project Manager to the HDR/Brown and Caldwell JV that provided Program Management services for this major capital program. The program consisted of multiple projects including a biological nutrient removal (BNR) facility and Flow Equalization project. The BNR project was the single largest project in the program, encompassing approximately 20 football fields and cost approximately \$600 million. While the upgrade was being built, ongoing operations of the plant continued uninterrupted. The total EchoWater program cost was estimated to be between \$1.5 and \$2.1 billion. Hill provided PMIS software, software training and customization services, constructability reviews, estimating, scheduling, contract administration, and project administration support to the JV in this \$12.5M contract.

Project Manager, San Francisco Municipal Transportation Agency (SFMTA), Capital Program, San Francisco, CA, (3/13-7/16) – Hill provided consulting services to the SFMTA for procuring and implementing a capital program controls software system. With 50 active capital projects ranging in value from \$5 million to \$1 billion at any given time, the SFMTA's most significant program is the Central Subway Project, which included the \$1.6 billion construction of a 1.2-mile subway through San Francisco's downtown core and into Chinatown. To manage the Central Subway Project, the SFMTA needed a program management system capable of tracking capital project budgeting, financing and contractor payments; complex project design scheduling; construction scheduling; and contract claims management. To determine the optimal solution, Mr. Marraro's team reviewed SFMTA's business practices and recommended changes and improvements. Hill conducted a needs analysis to help the SFMTA and SFMTA consultants to identify the functional, business requirements, and specifications for a system that met the program control requirements for the Central Subway Project, other capital projects, and the Agency. Hill services included procuring the software; installation, configuration, testing and implementing the system; and training Agency personnel and other SFMTA consultants to use the system. Hill also provided project control services to the Central Subway Project, including cost and schedule control, document management, estimating and claims management support. Mr. Marraro served as the Project Manager for the contract. He was the primary Hill contact and was responsible for all scope,

schedule and budget elements of the contract. He oversaw the contract deliverables and deliverable schedule, provided project resources and served as a quality assurance resource for the team. Additionally, he provided issues resolution, program planning and meeting facilitation services during the \$22.3M contract.

HNTB Corporation, Oakland and San Jose, CA

Principal-in-Charge, Maintenance Facility Design, Waipahu, Hawaii (2010-2013) – Mr. Marraro was the Principal responsible for the contract negotiations, performance, resources, client relationship management and staff assignments for this Design-Build project. Mr. Marraro's team designed the maintenance and storage facility that included the system control center, a 178,900 sq. foot LEED Silver Certified maintenance building, train vehicle wash facility, and train wheel repair facility. Design services included architectural, structural, mechanical, electrical and industrial equipment design for the four buildings; site work, roadway and paving design; trackwork and third rail; site utilities and storm water retention basin; retaining walls and rail bridge (single-span abutment) design; site lighting and landscaping; and electrical and systems infrastructure. Total Design Fee was \$11.1M. Total project construction budget was \$195M.

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Principal-in-Charge, Kamehameha Guideway Segment Design, Waipahu, Hawaii (2009-2013) – Mr. Marraro was the Principal responsible for the performance, resources, client relationship management and staff development for this Design-Build project. This \$350 million, 3.89-mile segment extends from Pearl Highlands near Leeward Community College to the University of Hawaii's Aloha Stadium. KHG is the second segment of the H RTP. The team designed and provided construction support for the light rail aerial guideway, including associated roadway modifications, utility relocations, infrastructure and the elevated portion of the Aloha Stadium third track. Design services included roadway modifications, utility relocations, maintenance of traffic, intelligent transportation systems services, extensive third party and utility owner coordination, environmental mitigation and monitoring, and public outreach services. The total Design Fee was \$26.2M. Total project construction budget was \$372M.

Principal-in-Charge, West Oahu/Farrington Highway Guideway Segment Design, Waipahu, Hawaii (2009-2013) – Mr. Marraro was the Principal responsible for the performance, resources, client relationship management and staff development for this Design-Build project. WOFH is the first segment of the H RTP — a \$5.3 billion program that consists of a 20-mile elevated guideway rail transit line connecting West Oahu with downtown Honolulu and Ala Moana Center. The \$483 million, 7-mile segment extends from Kapolei to Pearl Highlands near Leeward Community College. The project included designing the elevated precast segmental guideway and foundations; track alignments; track and raceway design; quality management and construction quality control services; systems interface and integration; utility relocation; maintenance of traffic; intelligent transportation systems; and upgrading the road surface along the route. The alignment runs through dense urban environments and in the median of major arterial streets and agricultural settings and included five major highway interchange crossings; six rivers or channel crossings; 6.3 miles of double-track guideway; 0.7 miles of at-grade guideway; and a long-span crossing at H-1. The superstructure was a variable depth single cell post-tensioned cast-in-place concrete box girder erected using a balanced-cantilever method. HNTB's role included design management and independently checking the segmental superstructure, guideway substructure design, traffic management, and the intelligent

transportations systems design. The project conducted a drilled shaft load test program to confirm construction installation techniques and to evaluate design parameters for the guideway foundations. Total Design Fee was \$50M. Total proposed project construction budget was \$483M.

Principal-in-Charge, Peninsula Corridor Joint Powers Board (2007-2013)

– Mr. Marraro was the Principal responsible for the performance, resources, client relationship management and staff development for this contract. HNTB was the General Engineering Contractor (GEC) for the Peninsula Corridor Joint Powers Board (JPB) providing engineering, planning, program management, and construction management services for seven years. Under this contract, HNTB completed 149 work directives. Services provided included preliminary and final engineering for bridges, structures, track improvements, grade separations, civil improvements, signals, security and communications related designs, value engineering, and constructability reviews. HNTB provided numerous planning, program management and construction professionals to fulfill requests for JPB staff augmentation assignments. The total Design Fee was \$65.6M.

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Principal-in-Charge, City of Fairfield Train Station Design (2009-2013) –

Mr. Marraro was the Principal responsible for the performance, resources, client relationship management and staff development for the project. The Fairfield/Vacaville Train Station Project included a new train station for the Capitol Corridor train route in Fairfield to serve commuters in eastern Fairfield and Vacaville. HNTB provided professional and technical engineering services and site investigations, studies, reports, technical memoranda, plans, specifications, and cost estimates (PSE) for preparation of bid documents for the project. Engineering plans, calculations, specifications, staging and sequencing plans and related reports were prepared. HNTB supported property acquisition efforts by providing legal descriptions of property and plats and supporting negotiations with 3rd party property owners. The total Design Fee was \$4.04M. Total proposed project construction budget was \$46M.

Principal-in-Charge, San Francisco Municipal Transportation Agency Central Subway Project (Third Street Light Rail Transit Project Phase 2) (2009-2013) -

Mr. Marraro identified, developed the client service plan for, and served as the Principal during the pursuit and design for this client. The HNTB-led joint venture provided architectural and engineering services for Design Package #3 for the final design and construction support of the Central Subway Project. The new 1.7 mile light rail line services Union Square, Moscone Convention Center, Yerba Buena, and AT&T Park, and connects directly to BART and CalTrain. Preliminary design included four stations, two of which are underground. HNTB provided design of track, street and drainage improvements, mechanical systems, surface station and associated utility relocations, quality control and assurance, Project Management including project controls, value engineering, design integration of all design packages, and community coordination. The total Design Fee was \$33.1M. Total proposed project budget is \$1.58 billion.

Program Management Consultant, San Mateo County Transportation Authority (SMCTA), CA, Program Management Support (2008-2009) -

Mr. Marraro served as a Program Management consultant to the San Mateo County Transportation Authority. He provided programmatic advice and planning, RFP development, program-level cost estimates, Project Management Plan development, and developed contracting and procurement strategies for the Director and staff. The SMCTA is implementing a \$1 Billion highway and Capital Improvement Program.

Senior Technical Advisor, Santa Clara Valley Regional Transit, (SVRT) Civil Line Segment, Santa Clara County, CA (2008) -Mr. Marraro provided advisory and senior technical assistance to SVRT executive leadership during final design of the 10.3 mile BART extension from Fremont to San Jose. The project included the design of significant retained cut and aerial guideway structures, utility relocations, including relocation of two large bore gasoline pipelines, several grade separations, street improvements, creek and channel improvements, hazardous material disposal, and five miles of UPRR freight railroad relocation. The design centered on the complex interface of Mission Boulevard, Warren Avenue and an UPRR truck/rail transfer facility. The work also included public outreach efforts in Milpitas, San Jose and Fremont as well as ROW planning and acquisition for the VTA. Mr. Marraro provided alignment exhibits, construction staging documents, quality assurance and auditing, meeting facilitation, financial oversight, report writing and editing, and client management during this project. Total Design Fee was \$60M. Project Construction Cost: \$700M.

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ECC International, Burlingame, CA

Director of Planning and Development Iraq, Afghanistan, Africa (2005-2007) - As the Director, Mr. Marraro led a staff that included design managers, planners, Program and Project Managers, engineers, and business development personnel. He identified two new federal clients and led the team that won a \$1.2 billion Multiple Award Task Order Contract (MATOC) Design-Build contract in Afghanistan. He developed and implemented standard design processes, defined and wrote procedures, and was responsible for all deliverables related to engineering, planning, client management, and business development. Mr. Marraro planned, wrote, edited and produced over 40 proposals for organizations including; Air Force Center for Engineering and the Environment (AFCEE); United States Army Corps of Engineers (USACE); United States State Department; Naval Facilities Engineering Command (NAVFAC); US Overseas Building Operations (Embassy), and the United Nations Operations Program. For planning, business development, and program operations purposes, Mr. Marraro led trips to Afghanistan, Burkina Faso, Egypt, Georgia, Germany, Israel, Iraq, Jordan, and Kuwait. Additional duties included implementing Value Engineering studies, strategic planning and Strategic Plan development, new market identification, client Program Review presentations, logistics, proposal team member selection, subconsultant prequalification, contract management, and planning and staffing of industry events.

Representative Projects within this Program:

American Embassy, Thailand, Design-Build of Anti-Terrorism Force Protection Upgrades, Bangkok, Thailand- Under this \$4.9 million Design-Build contract with the Department of State, Mr. Marraro's team increased security with anti-terrorism/force protection (ATFP) construction at the US Embassy in Thailand. The project team designed, constructed, and upgraded the main and rear Compound Access Control (CAC) facilities with ATFP upgrades at three locations at the Embassy's existing compounds. Work scope encompassed all Embassy physical security requirements, perimeter anti-climb fencing, and 5 and 15 minute rated forced entry grilles over all compound windows. Civil improvements included design and placement of new CAC facilities to eliminate exposure to flooding during the rainy season, and a new fuel facility and safe area. The team designed new architectural elements, matching those of the existing facilities. Phased construction was coordinated around this fully operational Embassy during the demolition and construction of all

modifications, additions, and security upgrades. Construction elements included perimeter walls and fences; active and passive anti-ram barriers; forced entry (FE) and forced entry/ballistic resistant (FE/BR) doors, windows, and grilles; communications, data, emergency electrical, and main electrical systems tie-ins; and security perimeter lighting.

ASPs and ACPs, ATFP and Security Upgrades within Afghanistan-Various Locations

Mr. Marraro led this team during the pursuit, design, construction and turnover phases of these Design-Build projects. The United States Army Corps of Engineers, Afghanistan Engineer District (USACE AED), selected ECC to design and construct eight Ammunition Supply Points (ASPs) and three Consolidation Supply Points (ACP) concurrently at eight dispersed sites throughout Afghanistan. Mr. Marraro assembled the team that provided the project/construction management, design, quality, construction, and safety oversight for this \$23 million anti-terrorism, contingency-type contract. Mr. Marraro led the 35, 95, and 100 percent design efforts, the construction, and the turnover of the ASPs and ACPs, including utility and storm water designs, power generation and management systems, roads, and security/force protection facilities. The teams cleared a total of 193,754 square meters of unexploded ordnance within the eight locations. Construction at each site included two guard towers, a main entry control point, a guardhouse, an office and records storage facility, and security/perimeter lighting. The team installed 4,288 meters of fencing (2.5 meter high) and 11 kilometers of HESCO baskets, including 33,000 concrete capped HESCO barriers with slurry coating. Each ACP and ASP was constructed using connex containers and connected by 5,896 meters of heavy-duty roadway.

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Repair of Schools, Governorates of Muthanna, Thi-Qar, Missan, and Wasit, and Ministry of Education Headquarters Building Baghdad, Iraq- For this \$29.2 million Air Force Center for Environmental Excellence (AFCEE) Design-Build contract, ECC served as both the prime contractor and the construction manager, responsible for providing all design and construction components of the project. Mr. Marraro's team completed the assessment and reconstruction of 274 geographically diverse schools throughout Southern Iraq. The contract was amended to include the historic preservation of the exterior and full redesign and modernization of the Ministry of Education building in downtown Baghdad to embassy-level quality. To assess the condition of the schools, the team conceived and implemented a four-category facility rating system to prioritize repair and renovation needs consistent with limited available funding to schedule and sequence work. During design, the team engaged the Iraqi National Construction and Engineering Consultancy as advisors to assist in meeting local Iraqi building requirements. The teams' security managers worked with Iraqi community leaders, subcontractors, and tribal leaders to address security issues and minimize hostile actions while implementing rotational schedules to lessen predictability of activities and travel routes. The team constructed and/or renovated over 4.2 million square feet of educational spaces during these projects. Over 750 field personnel were provided training in construction techniques on concrete placement, solid block footing installation, roof truss installation, hollow block wall construction, electrical, plumbing, HVAC installation, and safety protocols. This team completed these projects ahead of schedule and within budget, receiving the AFCEE Blue (highest) rating for contractor performance.

Air Force Center for Environmental Excellence, US Department of Defense, Construction Manager Ministry of Education Headquarters Building Baghdad, Iraq- For this initial \$29.2 million Air Force Center for Environmental Excellence (AFCEE) Design-Build contract, Mr. Marraro's team served as both the prime contractor and the construction manager, responsible for providing all design and construction components of this project. Mr. Marraro's team completed the assessment, reconstruction, and the historic preservation of the exterior and full redesign and modernization of the Ministry of Education building adjacent auditorium in downtown Baghdad to embassy-level quality and security features. Construction elements included all supporting infrastructure including repair and/or replacement of sanitary and storm sewers, MEP, facility structure and security systems. During design phase, the team engaged the Iraqi National Construction and Engineering Consultancy as advisors to assist in meeting local Iraqi building requirements. This team completed the project ahead of schedule and within budget, receiving the AFCEE Blue (highest) rating for contractor performance.

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Habbaniyah Military Base, Habbaniyah, Iraq

Mr. Marraro's team completed this \$107 million (TO 22 \$64.7M, TO 28 \$42.3M) Design-Build project under two separate task orders at the Habbaniyah Military base for AFCEE. Work included the renovation and construction of more than 70 buildings comprising 113,000 square meters including company, battalion, and brigade headquarters; barracks and dining facilities; fire station, medical clinic, shopette, maintenance buildings, machine shops, and eight office buildings. Infrastructure improvements included design and construction of water and sewer systems, electrical utilities, and perimeter security features including an entry control point; seventeen guard towers, perimeter fencing, anti-tank ditches, and perimeter lighting. During design, the team engaged the Iraqi National Construction and Engineering Consultancy as advisors to assist in meeting local Iraqi building requirements. The team utilized eight Iraqi subcontractors and more than 380 Iraqi workers. Mr. Marraro completed multiple field surveys and planning trips to define the work scope, develop work and staffing plans, construction planning, and the optimal construction methodologies. Additionally, he was responsible for developing the curriculum, identifying instructors, and implementing a six-week apprentice-training program to train young men 16-22 years of age in construction skills for work on this project. This team delivered a superior safety record of more than 1.4 million man-hours with only six OSHA recordable incidents.

Construction Manager, ECC International, An Numaniyah, Iraq, Air Force Center for Environmental Excellence, US Department of Defense - Mr. Marraro completed a \$57.8 million Design-Build project for AFCEE at the An Numaniyah Military Base in Iraq. He led a ten-person construction management team focused on completing renovations and additions to the primary military base in the Wassit Province. The project comprised constructing or renovating of 82 structures comprising 732,237 sq. ft. Work elements included a medical clinic, detention facility, mosque, civil improvements, utility upgrades and additions (power, water, and communications), roadway construction, a 14 kilometer water pipeline and pump station, two institutional kitchens and dining facility, warehouses, a water treatment plant, and a waste water treatment plant. He was directly responsible for managing the scope, schedule, budget, personnel, and all reporting functions related to this project. Prior to his arrival, this project was noncompliant with client expectations of performance. He successfully brought

this project to closure on budget and repaired client relationships. The project completed one month ahead of schedule, and Mr. Marraro received two letters of commendation from the client for his leadership and performance.

Jacobs Carter-Burgess (JCB), Inc., Oakland, CA

Unit Manager (2000 – 2004) – As the PM/CM Unit Manager, Mr. Marraro's duties included staffing and hiring of program and project managers, project controls practitioners, and construction personnel for the unit; direct client sales and business development; managing JCB and sub-consultant personnel; managing the unit budget; invoicing and account collections; and reporting the unit status to the Office Leader and corporate management. Mr. Marraro practiced building client relationships, business development, meeting facilitation, proposal writing, and proposal presentations for multiple Bay Area clients.

CalTrain CEMOF Project, San Carlos, CA, Project Manager- As the Owner's Project Manager, Mr. Marraro led a twenty-five-person interdisciplinary consultant design team and five sub-consultant firms during the Engineering, Procurement and Construction (EPC) effort for the CalTrain Centralized Equipment and Maintenance and Operations Facility (CEMOF) in San Jose. This project included a 108,000 sf maintenance building, train vehicle wash facility, emergency communications and operations center, fuel storage and metering, inspection/service pits, a train wheel repair facility, and storage building. Mr. Marraro's responsibilities included finalizing the environmental documents and permits; directing the design team; developing the Contract Implementation Plan; representing CalTrain during public and private meetings to the community and the City of San Jose; developing and implementing the environmental mitigation plan; resolving and coordinating right-of-way and real estate issues; developing 3rd party agreements; leading the process of Safety Certification for the facility; and managing the scope, schedule and budget issues related to the CEMOF project including formal Value Engineering sessions. Concurrently, Mr. Marraro led an on-site nine-person team providing project controls, grants and funding, and contracts administration support for CalTrain. CEMOF Project costs: \$150M.

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Project Manager, Bay Area Rapid Transit (BART), Hayward Component Repair Shops Expansion, Oakland, CA (2002) – Owner's Project Manager during the construction of a major expansion (8,300 sq. ft.) and seismic retrofit of the existing BART repair facility in Hayward, CA. The project included night and weekend construction shifts and very tight scheduling constraints due to the operational hours of the repair facility. The project completed on time and within budget. Project costs: \$5.9M. Total construction cost: \$3.2M.

Project Manager, Oakland International Airport, Oakland, CA (2002) - As the Project Manager, Mr. Marraro provided project controls support and fuel line inspection services for the Remain Overnight Parking Apron infrastructure improvement contract at the Oakland Airport. The project included upgrades and additions to existing aircraft parking areas, taxiway overlay, engine run-up/test area, electrical, water, and storm drain improvements, and the addition of 1700 feet of fuel piping and associated control and monitoring systems. Project fees: \$1.2M. Project Construction cost: \$15.7M.

Project Manager, Bay Area Rapid Transit (BART), Oakland, CA (2000-2002) - Project Management and Program Controls consultant providing support for the BART Automatic Fare Collection, Advanced Automated Train Controls, Concord Shops, and Daly City Yards and Leads projects. Duties included project management, meeting facilitation, scheduling, schedule

analysis, claims analysis and subcontractor management. Project costs: \$150M.

Zachry Construction Company, San Antonio, TX

Project Controls Manager, Rohm and Haas SEP4 Project, Deer Park, TX (1998-1999) – As the Project Controls Manager, Mr. Marraro was responsible for leading and controlling all efforts and deliverables for a seven-member field based Project Controls team for this fast-track Design-Build project. Mr. Marraro supported the Engineering, Procurement and Construction (EPC) activities to install a 200 foot Acrylic Acid Separations tower, tank farm, piping and associated offsite construction and tie-ins. Mr. Marraro developed, implemented, and maintained an integrated Program Controls system incorporating Primavera P3, Expedition, Zachry Earned Value/Progress System, and client’s legacy accounting system. Project construction cost: \$30M.

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Project Controls Manager, Rohm and Haas F4 Project, Deer Park, TX (1998-1999) - Project Controls Manager responsible for managing and controlling the efforts and deliverables of a seven-member field based Project Controls team for this fast-track, Design-Build project. Mr. Marraro supported the Engineering, Procurement and Construction (EPC) activities to install two flocculation towers, tank farm, piping and associated offsite construction and tie-ins. He developed, implemented, and maintained an integrated Program Controls system incorporating Primavera P3, Expedition, Zachry Earned Value/Progress System, and client’s legacy accounting system. Project construction cost: \$17M.

Fluor Corporation, Sugarland, TX

Arco Alliance International, China Projects, State (1997-1998) - Lead Cost Engineer responsible for creating and maintaining monthly cost reports, calculating project profit, and completing project financial status reports. Mr. Marraro identified and calculated impact of trends, prepared and issued "as-sold" project pricing models, and provided weekly man-hour tracking. He prepared project review presentations and created and maintained work release logs. Additionally, he initialized and maintained the “EZTrac” Earned Value system for the ARCO Alliance. Project design fee: \$5M.

Citgo Petroleum Corporation, C-4 Recovery Project, Lake Charles, LA (1998) – Mr. Marraro was the Lead Scheduler responsible for creating and maintaining the engineering and procurement schedule for the debutanizer and depentanizer units to maximize C-4 recovery. The schedule included 250 targeted activities, including all long-lead procured items. Duties included field verification trips to St. Charles, LA, attending task force meetings, creating and issuing schedule status reports, and reporting progress through the Earned Value system. Project construction cost \$8M.

Citgo Petroleum Corporation, Deheading/Debottlenecking Project, Lake Charles, LA (1998) – Mr. Marraro was the Lead Scheduler responsible for creating and maintaining the schedule for the detailed engineering and procurement schedule of a Coker Unit deheading project in Lake Charles, LA. Project construction cost: \$9M.

Mobil Production, Nigeria, YOHO 1B Project, Nigeria (1998) – Mr. Marraro was the Lead Scheduler responsible for creating and maintaining the schedule for the Engineering Design Phase of an offshore platform development project in Nigeria, Africa. Duties included scheduling, attending task force meetings,

and reporting of progress through the Earned Value progress system. Project design fee: \$2M.

TCE: Crab Orchard Environmental Remediation Project, Marion, IL (1998)
– Mr. Marraro was the Lead Scheduler responsible for creating and maintaining the schedule for the detailed engineering of an environmental remediation effort at Crab Orchard Superfund site in Marion, IL. Project design fee: \$1.5M.

Valero Energy Company, Fluid Catalytic Cracking Unit, Houston, TX (1997) – Mr. Marraro was the Lead Scheduler responsible for creating and maintaining the schedule for a fluid catalytic cracking unit that included revamping, a new electrical substation, and vessel and equipment additions. 675 targeted activities, including all long-lead procured items. Mr. Marraro loaded this schedule into “EZTrac” software for automated Earned Value calculations. Project construction cost: \$65M.

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Marathon Alliance: Fluid Catalytic Cracking Unit Refit Project, Garyville, LA (1997-1998) – Mr. Marraro was the Scheduler/Cost Engineer responsible for creating and maintaining the engineering design schedule for a fluid catalytic converter unit refit and expansion. His duties included attending field task force meetings and reporting progress through the Fluor Earned Value (“EZTrac”) and progress system. He created and maintained monthly cost reports, calculated project profit and completed project financial status reports. He identified and assessed impacts of trends, prepared and issued “as-sold” project pricing models and weekly man-hour tracking reports.

Butinga Nafta JSC: Butinge Oil Terminal Project, Butinge, Lithuania (1997-1998) – Mr. Marraro was the Scheduler responsible for creating and maintaining portions of the detailed schedule for a marine terminal and pipeline project in Butinge, Lithuania. The schedule included 4000 activities, targeted and resource loaded. Project construction cost: \$280M.

Exxon: Natuna Offshore Development Proposal, Natuna, Indonesia (1997-1998) – Mr. Marraro was the Scheduler responsible for creating and maintaining portions of the Natuna development proposal schedule for an offshore platform, pipeline, and marine terminal development project in Natuna, Indonesia. The schedule consisted of 3200 activities, targeted, resource loaded with master and subprojects. Project construction cost: \$1.5B.

Nabisco Biscuit Company: Houston OREO Line Project, Houston, TX (1997) – Mr. Marraro was the Scheduler responsible for creating and maintaining portions of the detailed and summary schedules for a plant expansion and reengineering project in Houston, Texas. Project construction cost: \$20M.

One Witco Alliance (1997) – Mr. Marraro was the Scheduler responsible for creating and progressing twenty engineering schedules for multiple projects for the Witco Occupational Safety and Hazard Administration compliance effort throughout the United States. Project Design Fees: \$500,000-1M each.

Texas A&M University: LaSalle Hotel Project, Bryan, TX (1996-1997) – Mr. Marraro was the Scheduler/Cost Engineer/Estimator responsible for creating the construction estimates and schedules to support a feasibility study for a hotel conversion to student housing facilities. He performed the preliminary and detailed scoping and required space planning. Mr. Marraro also completed a financial analysis and sensitivity model to support the decision to

proceed with or terminate the project. He created artwork and drafting required for floor layouts and public presentations.

Dovetail Design and Construction Company, Morehead City, NC (1991-1995) – As President/Owner/Operator of the commercial and residential construction company, Mr. Marraro's duties included sales, design, management, estimating, scheduling, planning, production and supervision of labor and sub-contractor forces during construction and remodeling activities. He successfully completed thirty-two projects.

Coast Realty and Construction Company, Emerald Isle, NC (1987-1991) - As President, Mr. Marraro owned and operated a commercial and residential construction and real estate firm in this oceanside community. Duties included management of construction and real estate sales forces, development of marketing strategies, strategic planning, estimating and scheduling of projects and workforces. He successfully completed over one hundred projects.

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Specialized Training

- USACE Construction Quality Management for Contractors (8 hrs)
- University of Denver Leadership Development Training (80 hrs)
- CII, Best Practices Course (48 hrs), Instructor of Record
- DBIA Boot Camp (40 hrs)
- FedPub International Government/Commercial Contracting (11 hrs)
- ECC Managing Government Contracts (24 hrs)
- ECC Government Contracts Audit Training (8 hrs)
- DBIA High Performance Contracting (8 hrs)
- OSHA Construction Safety Training (10 hrs)
- CalTrain Project Manager Training (12 hrs)
- Caltrans Project Development Courses:
 - ✓ Getting Projects Started (8 hrs)
 - ✓ Right-of-Way Acquisition (8 hrs)
 - ✓ Design to Construction (8 hrs)
- Facilitative Sales Training (16 hrs)
- JCB Leadership Development Training
- JCB Project Management Training
- Risk Management Seminar (8 hrs)

Professional Awards

2018- Fluor Educator of the Year Award, Department of Construction Science, Texas A&M University

Project Awards

Happy Hollow Bridges, San Jose, CA

2012– Engineering News-Record, Best 2012 Project, Small Project under \$10M

2012– Engineering Excellence Honor Award, American Council of Engineering Companies

2012– National Recognition Award, American Council of Engineering Companies

2012– Project of the Year- APWA, Silicon Valley Chapter

2012– Outstanding Parks and Recreation Project, American Council of Engineering Companies, San Francisco Section

2011– Outstanding Bridge Project of the Year, American Council of Engineering Companies, Region 9

Stevens Creek Corridor, San Jose, CA

2012- Engineering Excellence Merit Award, American Council of Engineering Companies

Wrigley Creek Improvements, San Jose, CA

2012- Environmental Project of the Year, American Council of Engineering Companies, San Francisco Section

Mary Avenue Bridge, Cupertino, CA

2011- Structural Engineering Excellence Award, Landmark Structures-Small Project, Structural Engineers Association of California

San Francisco Bay Bridge, San Francisco, CA

2011 – Project of the Year, California Transportation Foundation

ANTHONY MARRARO, PMP, DBIA

Caltrain Centralized Equipment and Maintenance and Operations Facility, San Jose CA

2009- Engineering Excellence Merit Award, American Council of Engineering Companies

2008- Transit Project of the Year, California Transportation Foundation