Murray S. Yates, P.E.

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Resume
Date: December, 2011

FL PROFESSIONAL ENGINEER:
State License No. 022173 (1978)

EDUCATION:
Associate of Science Degree
Miami - Dade Junior College (1964) – (GPA 2.8)
Bachelor of Science Degree
Florida International University – (BSCET 1978 – GPA 3.5)

PROFESSIONAL AFFILIATIONS:
Member – Florida Engineering Society (2010–Present)
Member – National Society of Prof. Engineers (2010–Present)
Member – FICE Transportation Committee (1991-2010)
Member – FICE Subcommittee for CEI (2010)
Member – FICE Subcommittee for CEI (1993-1995)
Member – FICE Subcommittee for Legal Issues (1994-1995)
Member – Cooper City Planning & Zoning Board (1992-1995)

CURRENT CERTIFICATIONS:
FDOT Advanced Work Zone Traffic Control Course
Qualified/Certified Storm Water Management Inspector
Completed DRBF 2011 Admin. & Practices Workshop

EXPERIENCE SUMMARY:
Mr. Murray Yates possesses over 47 years of transportation construction engineering/management and design experience in Florida. In January 2010, Mr. Yates started an engineering services company with the primary expectation of growing a consulting business with emphasis upon Expert Witness and Disputes Review Board work.

In August, 2011, Mr. Yates retired from the consulting firm: H. W. Lochner, Inc. (Lochner). During the 11.5 years serving Lochner, Mr. Yates directed and supervised the firm's Lochner's Construction Engineering & Inspection (CEI) Program as a Senior Associate and Vice President.

Example areas of Mr. Yates' professional experience include: the FDOT highway design process, having served as District Production Engineer & District Design Engineer for FDOT District Six; construction contract management having served the FDOT as a Project Engineer, Resident Engineer, Assistant District Construction Engineer, District Director of Operations and Statewide Director for the Division of Construction. In addition, served two (2) engineering consulting firms (total of 23+ years) as a CEI Program Director and as Project Resident Engineer or Senior Project Engineer on many major FDOT Construction Projects. Mr. Yates has extensive CEI experience and professional expertise in: maintenance of traffic in work zones; construction contract administration; construction materials sampling & testing; construction cost estimating; project scheduling; specification writing & interpretation; construction contract claims evaluation; negotiations for extra work; reviewing the means, methods & procedures utilized by the State's construction industry for highway & bridge related work.

Mr. Yates possesses the knowledge & experience needed to render professional opinions on compliance with the Standard of Care required of Highway Designers, Construction Engineers & Inspectors and Construction Contractors.

Mr. Yates also possesses extensive experience providing engineering consultant support, professional reviews / evaluations & testimony for accidents in work zones, transportation design or construction related legal cases and also for eminent domain legal hearings and trials.

Represented clients in construction contract claims analysis, negotiations and settlements; preparation and handling administrative hearings and arbitration hearings, preparing for and participation in Disputes Review Board meetings and hearings and as an Engineer fact witness in the courtroom.

EXPERIENCE DETAILS:
H. W. Lochner, Inc. (Lochner) – 11.5 years
02/2000 – 08/2011:
Joined Lochner to be in responsible charge of the Firm's marketing for and management of a Florida Statewide CEI Program. The following projects are examples of the many CEI Contracts that Mr. Yates served as the firm's Consultant Principle-in-Change:
1) OOCEA Projects 601 & 602 for a 4-lane limited access new expressway for SR 420 ($60 million),
2) FDOT District One: Design Build Project to replace 2-bridges and approaches on SR 60 ($4 million) and,
3) OOCEA Project 453A – reconstructed the 6-lane E-W Tollway in downtown Orlando ($60 million).

Lochner Project Experience:
Served as part-time Resident Engineer/Senior Engineer on Construction Engineering & Inspection contracts for FDOT District One, District Five , District Seven and District Eight (Turnpike Enterprise). These services were for nine (9) construction projects having a construction contract value of approximately $335 million. The projects are briefly described as follows:

FDOT District Eight (Turnpike Enterprise): This 3-year assignment was completed in July, 2011. There was one CEI contract to handle two major construction contracts having a total length of ten (10) miles on Florida's Mainline Turnpike (beginning at I-4 and ending just North of Beulah Road in Orange County). The projects widened the Turnpike from a 4-lane to an 8-lane limited access toll facility. The total construction cost of the two construction contracts was approximately $150 million. The work within the limits of the two (2) projects included six (6) local highways crossing (over or under) the Turnpike Mainline, which included requirements for maintaining vehicular, cyclist and pedestrian traffic. The turnpike highway work includes heavy grading, milling and asphalt resurfacing, flexible base, drainage, concrete barriers, highway lighting, guardrail & concrete barriers, up to 22' high decorative sound walls, Intelligent Transportation System (ITS) work, erosion control, sodding and extensive landscaping. The bridge work included widening bridges over I-4, Apopka Vineland Road and Beulah Road; reconstruction of three bridges located on Kirkman Road, Gotha Road, and the SR 50 Interchange ramp over the Turnpike Mainline. The bridge foundation work consisted of either reinforced concrete drill shafts; 18" prestressed concrete piling or Type H steel piling. The superstructure work included both AASHTO prestressed concrete beams and steel girders supporting poured in place reinforced concrete decks.

Participated in Disputes Review Board (DRB) process for the two major construction contracts described in the preceding paragraph. No formal claims were filed by either Contractor and no DRB hearings were required.

FDOT District Seven: Two (2) construction contracts consisting of three construction projects having a total length of approximately 33 miles and a construction cost of approximately $8 million. The work scope included furnishing and installing an Intelligent Transportation System (ITS with traffic monitoring cameras) along US 19 in Pasco and Pinellas Counties. The Pinellas County project included refurbishing equipment for eight traffic signals. The Pasco project work also included furnishing and installing fiber optic ducts and cables connecting to the County Traffic Management Center (TMC). Structural improvements and equipment upgrades were also made to the TMC. The work also included furnishing and installing two large cantilevered changeable message signs.

FDOT District Five – CEI Group 80: The CEI contract covered three-project groups having a construction cost of $101 million. The construction projects are briefly described as follows:

Project No. 1 - Replaced the CR 545 two-lane bridge and the roadway approaches over I-4 in Osceola, Co. The replacement bridge is 680' long having a continuous skewed superstructure consisting of 72" skewed WF steel girders (with a standard bracing system) that supports a poured in place reinforced concrete deck. This CR 545 bridge has 4-intermediate piers with footers founded on 18 inches prestressed concrete piling. The CR 545 Bridge spans over I-4 and two ramps for the I-4 interchange with SR 429 (the Western Beltway).

Project No. 2 - Rehabilitated and strengthened the existing 4-traffic lanes of structural asphalt pavement (milled & resurfaced) and also widened to add an additional median traffic lane (with paved shoulders) along both traffic directions, widened 4-bridges and several culverts to increase the traffic capacity on 5.7 miles of I-4 in Osceola County.

Project No. 3 - Reconstructed the I-4/US 192 interchange to accommodate I-4 highway widening. Traffic lanes were added to the interstate within the interchange limits. The project design improved the ramps and bridges to bring those features in alignment with current interstate design standards. The project also scope included replacing an outdated I-4 Intelligent Transportation System (ITS) with a new system that provided replacement CCTV cameras, overhead changeable message (DMS) signs, peripheral SMIS equipment and new System Control Hubs. The project bridge work includes construction of 4-new bridges crossing over I-4. All 4-bridges included continuous reinforced concrete decks on structural WF steel girders. All the bridge bents and piers are founded on 18 inch prestressed concrete piles. Bridge 920193 has 2 spans (approx. equal lengths) totaling 445' on a curved alignment; bridge 920192 has 2-equal spans totaling 450'; bridge 920194 has 2-spans (approx. 180' & 198') totaling 577.5', partially on a curved alignment. In addition, the project includes a new Flyover Bridge (920195) that has 9-spans (span length vary from 163' to 215.7') totaling 1,676.6' in length on a curved alignment. This bridge superstructure design includes twin 7.7' deep steel box girders supporting

Participated in Disputes Review Board (DRB) process for the three major construction contracts described in the preceding paragraph. No hearings were required for two of the projects. One hearing was conducted for the third project and resulted in a favorable recommendation for the owner. The DRB recommendation was accepted by the Department and the minor outstanding issue(s) was resolved through negotiations.

FDOT District Five – CEI Group 75: This CEI contract included four construction contracts totaling $35 million. The construction projects are briefly described as follows:

Project No. 1 - Widen and reconstruct SR 44 in Sumter County from the Citrus County line to CR 470, including bridge widening across the Withlacoochee River. The Withlacoochee River Bridge widening is founded on 18" prestressed concrete piling. The superstructure is Type III AASHTO prestressed concrete beams supporting a poured in place reinforced concrete deck.

Project No. 2 - widened and reconstructed SR 44 in Sumter County from CR 470 to just west of I-75.

Project No. 3 - Widened and reconstructed US 27 in Marion County from the Levy County line to CR 426.

Project No. 4: Consisted of improvements and new construction for a comfort and truck inspection station located on I-75, south of SR 484 in Marion County. Existing comfort stations were improved and the parking lots were reconfigured as well as adding the new truck inspection facilities.

FDOT District Five – CEI Group 64: A $20 million, three construction project contract. The construction projects are briefly described as follows:
Project No. 1 – Widening the I-75 Panasoffkee Creek Bridge, in Sumter County. This design/ build project consisted of the median widening of two existing bridges on I-75 (OAL = 0.855 miles), resulting in a single bridge. The work included associated approach roadway widening, milling and resurfacing work.
Project No. 2 – Repaired ten (10) I-75 bridges located in Sumter County. The work included spall repairs and expansion joint replacements.
Project No. 3 – Repaired three (3) I-75 bridges located in Marion County. The work included spall repairs and expansion joint replacements.

FDOT District Eight (Florida Turnpike Enterprise): Provided CEI services for six (6) construction contracts located in Orange & Osceola Counties (valued at $25.2 million). The construction projects are briefly described as follows:
Project No. 1 – Milling and resurfacing the north and south bound Turnpike Mainline traffic lanes between MM 250 to MM 274 in Orange County.
Project No. 2 – Milling, resurfacing, and road widening for auxiliary lanes along both roadway directions from the East/West Expressway (SR 408) to Maguire Road (CR 439) in Orange County.
Project No. 3 - I-4/Turnpike interchange improvements consisting of Turnpike ramp improvements, adding traffic lanes and rehabilitating the pavement on SR 400 (I- 4) from east of Kirkman Road to east of the Turnpike in Orange County. The bridge work included replacing the two Turnpike bridges over SR 400 (I-4). Each replacement bridge has 2-spans totaling 300' long and a combined total width of approximately 180'. The bridges are founded on 18" prestressed concrete piling. The superstructure includes 150' long AASHTO Type VI prestressed concrete beams supporting a poured in place reinforced concrete deck.
Project No. 4 - The roadway reconstruction of the Turnpike Mainline at MP 266 in Orange County. The work included of diverting turnpike traffic onto a temporary bypass to allow reconstructing the NB & SB roadways, raising the turnpike road profile grades by as much as 10'.
Project No. 5 - made improvements to the SR 50/Turnpike interchange ramps and included widening SR 50 within the interchange. Project No. 6 - Milling and resurfacing the Turnpike Mainline NB and SB Roadways from MM 217.6 to MM 249.2 in Osceola County.

Participated in Disputes Review Board (DRB) process for the third (3th) construction contract described in the preceding paragraph. No DRB involvement was needed for the other four (4) listed projects. One hearing was conducted for the third (3th) listed project and resulted in a favorable recommendation for the owner. The DRB recommendation was accepted by the Department and the minor outstanding issue(s) were resolved through negotiations.

Experience with other Firms
Metric Engineering, Inc. – 12.5 years
07/1988 – 02/2000

Prior to joining Lochner, Mr. Yates served as a Senior Vice president, a Vice President and the Principle-In-Charge of a statewide construction engineering and inspection (CEI) program, for the consulting firm: Metric Engineering, Inc. The services rendered included, but wasn't limited to, marketing for new work and management of the firm's statewide CEI program. Also handled the firm's resource coordination, recruiting, and quality control / quality assurance activities for CEI. Mr. Yates periodically served on special assignments as a part-time Project Resident Engineer. Mr. Yates also served full time on two major highway and bridge construction projects:
Project No. 1 - The Polk County Parkway – Section 5. The project was 4.7 miles in length and the construction cost was approximately $50 million. This major Polk Parkway project was completed in August 1999.
Project No. 2 - The Suncoast Parkway – Section 6 project. The project was 10 miles in length with a construction cost of over $31 million.

Other examples of previous FDOT projects, that part time services were provided on, includes a 1.4 mile, $14.5 million section of Seminole Expressway, major interchange improvements for the Turnpike at US 41 ($6 million project), H.E.F.T. ramp and toll facilities improvements for the University Drive / Miramar Interchange ($1 million project), and three (3) Bridge Rehabilitation Projects on the H.E.F.T. in Miami-Dade County.

Mr. Yates also served as an Expert in tort cases, requiring expert interpretation of design and construction standards and documents. In addition, he worked closely with attorneys and insurance representatives to resolve tort cases in which the firm was a named defendant.

Florida Department of Transportation (FDOT) – 24.5 years
03/1985 – 07/1988
Florida Department of Transportation (FDOT) – Statewide Director for the Division of Construction: served as the agency's Director for the Division of Construction located in the FDOT Tallahassee Central Office. The Director of Construction was responsible for the agency's Statewide Division of Construction, including the State Construction Office, the State Specifications Office and the State Materials & Research Office.

The Construction Division consisted of approximately 200 positions with an annual operating budget of approximately $7 million. Duties included setting statewide policies and procedures for the agency's then largest construction program consisting of as many as 475 construction projects valued at $1.8 billion dollars.

Mr. Yates was directly involved in the management and decision making for new or improved programs, including: construction specifications to improve management of construction contract time; use of construction contract incentive or disincentive clauses, replacement specifications for scheduling construction projects;

legislation for Joint Project Agreements for including utility work in FDOT contracts. Also, directed or handled the resolution of major construction contract claims; served as a fact witness for administration hearing and legal suits. Served as chairman of the agency's construction contract bids review committee; chaired the ad hoc committee for investigating the concrete pavement joint design failures on I-10 across the Florida Panhandle; chaired the ad hoc committee for investigating the concrete pavement system failures on I-75 in Sarasota and Manatee Counties. As the Construction Program Director, Mr. Yates was actively involved in collaborating with and reporting to legislators and their staff serving on the State Senate and House Transportation Committees.

Mr. Yates served as a key member of the FDOT oversight committee for construction and contract administration of the Sunshine Skyway Bridge. This Major Complex Bridge is located on I-275 (SR 93) and connects St. Petersburg in Pinellas County to Terra Ceia in Manatee County. The bridge particulars are: OAL = 29,040 feet (5.5 miles) with a width of 94' (4-lanes). The bridge height is 431' with a main span clearance of 175' over the bay. The longest span is 1,200'. The design is a precast segmental, continuous prestressed concrete cable-stayed structure. The flanking spans consisted of AASHTO prestressed beams supporting a poured in place reinforced concrete deck. The construction cost was over $244 million (1980's dollar value). As the State Director of Construction, Mr. Yates provided oversight monitoring and guidance for the Sunshine Skyway Bridge construction contract administration, the job progress and construction engineering & inspection issues between in March 1985 thru the bridge opening to traffic in April 1987. All construction contract issues were resolved and the contract was closed out in early 1988. During construction, the job site was visited an average of 4 days per month. Oversight was also provided through frequent meetings, phone conferences and site visits.

12/1983 – 03/1985

FDOT District Six – Deputy District Engineer (position is currently titled as a District Director for Operations): Responsible for all construction, maintenance and Traffic Operations programs for FDOT District Six (Dade & Monroe Counties). Involved in implementing the use of consultants to handle CEI work and implementing a district maintenance contract program. Worked closely with state and local officials, federal officials, contractors, developers and prominent citizen groups to solve problems resulting from construction, maintenance or traffic operation activities within the District.

03/1978 -12/1983

FDOT District Six – District Design & District Production Engineer: Provided management oversight and engineering decisions required to plan and execute the District Six highway and bridge design program. Supervised District Department Heads for the Internal Design Office, the External (consultant) Design Office, the Project Development and Environmental (PD&E) Office, the Utilities Office, the Right-of-Way Office and the Location Survey Office.

Major Projects included: Design of new 4-laned William Lehman Causeway at N.W. 192nd Street in Miami-Dade County (included high level bridge over the I.C.W.W.) and a flyover bridge serving northbound traffic on SR A1A; design for 8-laning SR-852/Sunny Isles Causeway (included twin bascule bridges over the Intracoastal Waterway), design for improvements to connect SR-826 (Palmetto Expressway) into the Golden Glades Interchange; design for 5-laning U.S. 1 in N.E. Miami-Dade County; design for 4-laning U.S. 1 in Marathon, (located in the FL Keys). During this period, eminent domain negotiations and expert services were also provided for right-of-way takings that were critical to the success of the District's work program. Example case descriptions: Right-of-Way Parcels along SR A1A on Miami Beach taken from the Marco Polo Hotel and Racket Club for the William Lehman Causeway; Right-of-Way Parcel taken from Quality Inn for intersection improvements at US 1 and S. Roosevelt Blvd. (main entrance into the City of Key West); various Right-of-way parcels needed for 4-laning US 27 between SR 826 and the Dade/Broward County lines.

04/1977 – 03/1978

FDOT District Four – Assistant District Construction Engineer: Provided insight and directed the construction program in six counties. Supervised four (4) Construction Resident Engineers. Reviewed and approved construction contract changes resulting in change orders or supplemental agreements. Negotiated settlement of major construction contract claims (for both money and contract time). Resolved major design/construction problem issues. Coordinated with local communities, federal officials, contractors and other, as needed. Advised designers on constructability issues. Analyzed alternate solutions to complex construction problems and initiated implementation of solutions. Handled budget and staffing related decisions. Evaluated facts and recommendations submitted by Resident Engineers and in cases when entitlement existed, negotiated settlement of construction contract claims.

02/1973 – 04/1977

FDOT District Four – Resident Engineer for the Miami Construction Office: Supervised up to 16 project engineers responsible for as many as 27 construction projects concurrently under construction. Resolved quality control/quality assurance problems. Negotiated major contract changes. Analyzed construction costs, time extension, etc. Conducted pre-construction conferences. Handled budgets and staffing decisions for residency. Certified projects as completed in reasonable conformance with contract documents.

Example major construction projects included: Adding HOV lanes on 8.5 miles for I-95, including major interchange improvements. Widening resurfacing and adding median barrier wall on 10 miles of

SR-852/Palmetto Expressway. Added two (2) new major interchanges to SR-826/Palmetto Expressway. Added curved fly-over bridge and park-ride facilities for an express transit bus system (OAL approximately 300' long). This bridge superstructure was supported by 72" WF Steel Girders (curve radius = 318') with standard bracing and supporting a poured in place reinforced concrete deck. Installed (Miami-Dade) countywide computer controlled traffic signal system, including a Traffic Control Center. Contract Administration included: evaluating entitlement and negotiated settlement of construction contract changes or claims. Prepared or reviewed and signed all contract changes (Supplemental Agreements and Change Orders) for up to 26 construction contracts that were concurrently under construction.

10/1967 – 02/1973

FDOT District Four – Project Engineer: Assigned as on-site field engineer and construction manager on from three (3) to six (6) construction projects, which were concurrently under construction. Worked closely with Contractors' representatives to ensure projects were completed in reasonable conformance with contact documents; supervised on-site material sampling and testing, and supervised on-site inspection and record keeping. Prepared diary entries, job related correspondence and reports. Prepared final estimate documents. Initiated supplemental agreements and change orders. Managed construction contract time. Coordinated utility activities and resolved field construction problems. Made minor field design changes. Coordinated and collaborated with local officials and adjoining property owners. Monitored complex Maintenance of Traffic plans. Collected and evaluated facts needed for preparing written recommendations for resoling construction contract claims.

Example projects included: Reconstruction of NW 36th Street from NW 57th Ave to NW 42nd Ave.; Reconstruction of NW 27th Ave from NW 103rd St. to Opa Locka Blvd.; Reconstruction of NW 119th Street from 27th Ave. to NW 7th Ave.; Construction of SR 826 interchange at NW 122 Ave. and the construction of the 4-lane divided alignment of County Line Road from NW 27th Ave. to NW 7th Ave.

10/1965 – 10/1967

FDOT Engineer Trainee. Completed the agency's two (2) year on-the-job engineer training program. Training phases included: construction, maintenance, highway design, location surveying, materials testing, final estimates, computer applications, etc. Appointment was based upon results from a state-wide competitive examination score and successfully passing a written examination at the completion of each training phase.

05/1964 – 10/1965

FDOT District Four – Engineer Technician III: worked for the District Materials Laboratory in District Four. Conducted laboratory tests on highway and bridge construction materials. Performed QA field inspection on roadbeds, concrete pipe, etc.