M E M O R A N D U M

Agenda Item15(C)1

TO: Honorable Chairman Jose "Pepe" Diaz and Members, Board of County Commissioners

DATE: July 7, 2022

FROM: Honorable Harvey Ruvin, Clerk
Circuit and County Courts

Basia Pruna, Director
Clerk of the Board Division

SUBJECT: Appointment of Raymond J. Schnell, Ph.D. and William Shelley, P.E. to the Environmental Quality Control Board (EQCB)

It is recommended that the Board consider the appointment of Mr. Raymond J. Schnell and Mr. William Shelley to serve as members of the Environmental Quality Control Board (EQCB). The vacancies were created as a result of the resignation of Dr. Steven Ritter (retired) and the vacancy created by Ordinance No. 21-125, which increased the number of members on the EQCB from (5) five to (7) seven.

Mr. Schnell has a Ph.D. in biology, and Mr. Shelley is a Professional Engineer, and they each meet the required qualifications for members of the Environmental Quality Control Board, as outlined in the attached memoranda.

The names of Mr. Schnell and Mr. Shelley have been submitted as qualified candidates to serve on the EQCB by Mayor Daniella Levine Cava to fill the existing vacancies.

Mayor Levine Cava's memorandum, the curriculum vitae of Mr. Schnell and the resume of Mr. Shelley are attached for your review.

BP/lrs
Attachment

Memorandum

Date: March 22, 2022

To: Harvey Ruvin
Clerk of the Board

From: Daniella Levine Cava
Mayor

Subject: Appointment to the Environmental Quality Control Board by the Board of County Commissioners

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Please find attached the resume of Mr. Raymond J. Schnell, Ph.D. for consideration by the Board of County Commissioners (Board) for appointment to the Miami-Dade County Environmental Quality Control Board (EQCB). Members of the EQCB are appointed by the Board pursuant to Section 24-8 of the Code of Miami-Dade County (Code).

The EQCB is a quasi-judicial board created by Ordinance No. 69-30 that convenes monthly to hear cases for variances from, or time extensions to comply with, the requirements of the Environmental Protection Ordinance (Chapter 24 of the Code of Miami-Dade County) and appeals from decisions of the Director of the Division of Environmental Resources Management in the Department of Regulatory and Economic Resources. The membership, terms of office, organization, duties and powers, and procedures which govern the EQCB are set forth in Chapter 24 of the Code.

Dr. Steven Ritter gave notice of his retirement from the EQCB effective December 2020. Dr. Schnell's appointment would replace Dr. Ritter.

The EQCB is composed of seven members appointed by the Board. Members serve staggered three-year terms. Quorum requires a majority of members duly appointed to the EQCB, and four votes are required for certain types of cases within specific wellfield protection areas. Due to the highly scientific and technical nature of the matters that the EQCB reviews, the members of the EQCB are required to have advanced scientific or engineering qualifications as follows:

a) Two members shall be scientists possessing a master's or Ph.D. degree in biology or marine biology.
b) One member shall be a scientist possessing a master's or Ph.D. degree in biochemistry or chemistry.
c) Two members shall be licensed professional engineers in the field of chemical, civil or environmental engineering or in lieu of one licensed professional engineer, one member may have a Ph.D. degree in chemical, civil or environmental engineering or one member may be a licensed professional geologist with certain qualifications, including a Ph.D. degree.
d) Two members shall qualify as one of the following: a scientist possessing a master's or Ph.D. degree in biology, marine biology, biochemistry, or chemistry; or a licensed professional engineer in the field of chemical, civil, or environmental engineering.

Of the four current members, the EQCB has one member with a Ph.D. in biology, one member with a Ph.D. in biochemistry, one member is a Professional Engineer with a valid license issued by the Professional Board of Engineers in the State of Florida and has a Ph.D. in civil engineering, and one member has a Ph.D. in civil engineering.

Mr. Schnell has a Ph.D. in biology, meets the qualifications to serve on the EQCB, and is recommended for appointment. Due to the high volume of cases heard by the EQCB, the appointment of Mr. Schnell is necessary to avoid possible delays.

Attachment

Curriculum Vitae

Raymond J. Schnell
Senior Scientist
Schnell Biosciences LLC
8050 SW 122nd St.
Miami, FL 33156
786-765-7760
RJS.11601@gmail.com

Personal:

Date of Birth:	December 3, 1952
Personal Status:	Married
Address:	8050 SW 122nd St.
	Miami, FL 33156
Citizenship:	United States of America

Education:

Ph.D. Biology (Genetics) 1984; North Carolina State Univ.
M.S. Biology (Genetics) 1979; North Carolina State Univ.
B.S. in Biology, 1977; University of North Carolina at Wilmington

Research and Experience:

2020-present

Senior Scientist consulting on plant material supply chains, plant breeding, genetics, tropical and subtropical horticulture.

2017-2019

Mars Advanced Research Institute Plant Science Director. Led the corporation plant science efforts in cacao, mint, peanut and other nut crops. Initiated and supported projects involving traditional plant improvement and biotechnology. These included using CRISPR and RNAi for virus control in cacao and to develop enhanced stress tolerance in peanut. Retired from Mars December 2019.

2011 – 2017

Plant Science Director for Mars Global Chocolate. Directed the Mars Chocolate global plant science program. The basic goal of the program is to provide R&D needed to support a sustainable supply chain for cacao beans, peanuts and mint oil. In this role I supervised the overall of facilities at MCCS research farm in Brazil, the development of the Breeding Station in Tarengge Sulawesi Indonesia and the design and acquisition of the research station in Pangkep, Indonesia. Projects supervised in the program inlcude the disciplines of genetics and plant breeding, agronomy, integrated pest management, food safety and agroforestry. Through the recruitment of superior scientific talent, the Mars Plant Science Program is the most comprehensive and wide-ranging in the industry.

2001 – 2011

Supervisory Research Geneticist, U.S. Department of Agricultural Research Service, Subtropical Horticulture Research Station (SHRS) Miami, Florida. Served as the lead scientist for a project to develop new disease resistant cultivars of *Theobroma cacao*. Incumbents' lab is mapped QTLs associated with disease resistance, productivity and quality. We also used novel techniques to locate and characterize disease resistance genes primarily in cacao, but also in mango and avocado. I was the lead scientist on a fully funded project to sequence the genome of *T. cacao* in 2010.

1997 - 2000

Supervisory Research Geneticist/ Location Coordinator at the SHRS, Miami, Florida. Research projects included using molecular genetic techniques to provide functional genomic information on tropical fruit and ornamental crops. Developed diagnostic techniques for the detection of Avocado Sunblotch Viroid and investigated sequence diversity occurring within the pathogen.

1987-1997

Research Geneticist/Germplasm Curator at the National Clonal Germplasm Repository located at the SHRS, Miami, Florida. Major research emphasis was on the use molecular markers, AFLPs, RAPDs, and SSRs for estimating genetic diversity among germplasm collections and mapping quantitative trait loci to evaluate marker assisted selection for disease resistance and cultivar development.

1984-1987

Assistant Plant Breeder, Genetics and Pathology Dept. Experiment Station, Hawaiian Sugar Planters' Association, Aiea, Hawaii.

Courtesy Appointments:

Adjunct Professor, Horticultural Sciences Department, University of Florida, Gainesville, FL (1986-present).

Publications:

1. Schnell, R. J. 1979. Comparative efficiency of single-seed-descent vs. anther-derived breeding. M.S. Thesis. N.C. State University, Raleigh, NC.

2. Schnell, R. J. 1984. Anther culture-induced changes as a source of variability for tobacco improvement. Ph.D. Thesis. N.C. State University, Raleigh, NC.

3. Schnell, R. J., E. A. Wernsman and L. G. Burk. 1980. Efficiency of single-seed-descent vs. anther-derived dihaploid breeding methods in tobacco. Crop Science, 20: 619-622.

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5. Brown, J. S., E. A. Wernsman and R. J. Schnell. 1983. Effect of a second cycle of anther culture on flue-cured lines of tobacco. Crop Science, 23: 733-739.

6. Schnell, R. J. and E. A. Wernsman. 1986. Androgenic somaclonal variation in tobacco and estimation of its value as a source of novel genetic variability. Crop Science, 26: 84-88.

7. Schnell, R. J. 1986. Current variety status: making use of the pairwise comparison analysis. Hawaii Sugar Technologist. 5th Annual Conference Reports, p 36-38.

8. Tew, T. L., K. K. Wu, R. J. Schnell and C. Nagai. 1988. Registration of H74-1715 sugarcane. Crop Science, 29:197.

9. Knight, R. J. and R. J. Schnell. 1990. The role of USDA-ARS Miami in introduction of tropical fruit and the development of cultivars and markers. Tropical Fruit World, 1(2): 48-49.

10. Schnell, R. J. and R. J. Knight. 1991. Are polyembryonic mangos dependable sources of nucellar seedlings for rootstocks? Proc. Florida State Hort. Society. 104: 44-47.

11. Schnell, R. J. and C. Nagai. 1992. Variation for agronomic characters among maternal half-sib families of *Saccharum officinarum* L. and elite Hawaiian commercial clones. Tropical Agriculture, 69(3): 203-206.

12. Schnell, R. J. and R. J. Knight. 1992. Frequency of zygotic seedlings from five polyembryonic mango rootstocks. HortScience, 27(2): 174-176.

13. Comstock, J. C., K. K. Wu, and R. J. Schnell. 1992. Heritability of resistance to *Puccinia melanocephala*, the common rust pathogen of sugarcane. Sugarcane, 6: 7-10.

14. Schnell, R. J. and K. K. Wu. 1992. Sugarcane full-sib family yield plots for estimating genetic variation in elite Hawaiian clones. Journal American Soc. Sugarcane Technologist, 102: 98-102.

15. Schnell, R. J. and R. J. Knight. 1993. Random Amplified Polymorphic DNA (RAPD) markers for estimating genetic relationships in the genus *Mangifera*. Acta Horticulturae, 301: 86-92.

16. Knight, R. J. and R. J. Schnell. 1993. Mango (*Mangifera indica*) introduction and evaluation in Florida and its impact on the world industry. Acta Horticulturae, 301: 125-135.

17. Schnell, R. J., R. J. Knight, D. M. Harkins, and Gary Zill. 1994. Eliminating zygotic seedlings in 'Turpentine' mango rootstock populations by visual roguing. HortScience, 29(4): 319-320.

18. Ronning, C. R. and R. J. Schnell. 1994. Allozyme diversity in a germplasm collection of *Theobroma cacao* L. Journal of Heredity, 85(4): 35-38.

19. Zee, F., R. J. Schnell and R. J. Knight. 1993. Techniques for proper shipment of plant material. Hawaiian Grown Tree Crops Journal, Vol.1 #1.

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22. Schnell R. J., C. M. Ronning and R. J. Knight. 1995. Identification of cultivars and validation of genetic relationships in *Mangifera indica* L. using RAPD markers. Theoretical and Applied Genetics, 90: 269-274.

23. Ronning, C.M., R. J. Schnell, and D. N. Kuhn. 1995. Inheritance of Random Amplified Polymorphic DNA (RAPD) Markers in *Theobroma cacao* L. J. Amer. Soc. Hort. Sci., 120(4): 681- 686.

24. Comstock, J. C., R. J. Schnell, and J.D. Miller. 1995. Current Status of the World Sugarcane Germplasm Collection in Florida. ACIAR Proceedings #67. Sugarcane Germplasm Conservation and Exchange, p17-18.

25. Ronning, C.M., R. J. Schnell, and S. Gazit. 1995. Use of Randomly Amplified Polymorphic DNA (RAPDs) to Identify *Annona* Cultivars. J. Amer. Soc. Hort. Sci., 120(5): 726-729.

26. Knight, R. J. Jr., J. A. Payne, R. J. Schnell, and A.A. Amis. 1995. 'Byron Beauty', An Ornamental Passion Vine for the Temperate Zone. HortScience, 30(5): 1112.

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32. Hennessey, M. K., and R. J. Schnell. 1996. Screening Florida mango fruits from germplasm for resistance to immature stages of Caribbean Fruit Fly. Insect Science and its Application 6(1): 119-121.

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management. Ed. Bruce A. McPheron and Gary Steck. St. Lucie Press. Delray Beach, FL.

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49. Hennessey, M. K., and R. J. Schnell. 2001. Resistance of immature mango fruit to Caribbean fruit fly (Diptera: Tephritidae). Florida Entomologist, 84(1): 508-509.

50. Saunders, J. A., E. Rosenquist, and R. J. Schnell. 2001. The development of the Alternative Crops Program of the Agricultural Research Service as a narcotics supply reduction effort. Proceedings 2001 International Technology Symposium, Counter Drug Research and Development: Technologies for the next decade, 1: 210-223.

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52. Comstock, J. C., J. D. Miller, and R. J. Schnell. 2001. Incidence of sugarcane yellow virus in clones maintained in the world collection of sugarcane and related grasses at the U.S. National Repository in Miami, FL. Sugar Tech., 3(4): 128-133.

53. Brown, J. S., R. J. Schnell, PYP Tai, and J. Miller. 2002. Phenotypic diversity among *Saccharum barbari*, *S. sinense*, and *S. robustum* germplasm accessions. Sugarcane Sept/Oct 2002.

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67. Castle, W. S., J. W. Grosser, F. G. Gmitter, R. J. Schnell, T. Alaya-Silva, J. H. Crane, and K. Bowman. 2004. Evaluation of new citrus rootstocks for 'Tahiti' lime production in southern Florida. Proc. Fla. State Hort. Soc., 117: 174-181.

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tetraptera (Styracaceae). Mol. Ecol. Notes, 5: 777-779

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Memorandum

Date: March 22, 2022

To: Harvey Ruvin
Clerk of the Board

From: Daniella Levine Cava
Mayor

Subject: Appointment to the Environmental Quality Control Board by the Board of County Commissioners

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Please find attached the resume of Mr. William Shelley, P.E. for consideration by the Board of County Commissioners (Board) for appointment to the Miami-Dade County Environmental Quality Control Board (EQCB). Members of the EQCB are appointed by the Board pursuant to Section 24-8 of the Code of Miami-Dade County (Code).

The EQCB is a quasi-judicial board created by Ordinance No. 69-30 that convenes monthly to hear cases for variances from, or time extensions to comply with, the requirements of the Environmental Protection Ordinance (Chapter 24 of the Code of Miami-Dade County) and appeals from decisions of the Director of the Division of Environmental Resources Management in the Department of Regulatory and Economic Resources. The membership, terms of office, organization, duties and powers, and procedures which govern the EQCB are set forth in Chapter 24 of the Code.

The membership of the EQCB was recently amended by Ordinance No. 21-125, increasing the number of members of EQCB from five to seven. Mr. Shelley's appointment will fill a vacancy created by this ordinance.

The EQCB is composed of seven members appointed by the Board. Members serve staggered three-year terms. Quorum requires a majority of members duly appointed to the EQCB, and four votes are required for certain types of cases within specific wellfield protection areas. Due to the highly scientific and technical nature of the matters that the EQCB reviews, the members of the EQCB are required to have advanced scientific or engineering qualifications as follows:

a) Two members shall be scientists possessing a master's or Ph.D. degree in biology or marine biology.
b) One member shall be a scientist possessing a master's or Ph.D. degree in biochemistry or chemistry.
c) Two members shall be licensed professional engineers in the field of chemical, civil or environmental engineering or in lieu of one licensed professional engineer, one member may have a Ph.D. degree in chemical, civil or environmental engineering or one member may be a licensed professional geologist with certain qualifications, including a Ph.D. degree.
d) Two members shall qualify as one of the following: a scientist possessing a master's or Ph.D. degree in biology, marine biology, biochemistry, or chemistry; or a licensed professional engineer in the field of chemical, civil, or environmental engineering.

Of the four current members, the EQCB has one member with a Ph.D. in biology, one member with a Ph.D. in biochemistry, one member is a Professional Engineer with a valid license issued by the Professional Board of Engineers in the State of Florida and a Ph.D. in civil engineering, and one member has a Ph.D. in civil engineering.

Mr. Shelley is a Professional Engineer with a valid license issued by the Professional Board of Engineers in the State of Florida, meets the qualifications to serve on the EQCB, and is recommended for appointment. Due to the high volume of cases heard by the EQCB, the appointment of Mr. Shelley is necessary to avoid possible delays.

Attachment

William Shelley

1677 NW 20th Street, Homestead, FL 33030
Daytime (305) 242-7748, Evening (305) 245-7941

WORK EXPERIENCE

March 2009 to Present Civil Engineer

Everglades National Park, 40001 State Road 9336, Homestead, FL 33034

I work as a Civil Engineer in the professional services division of Everglades National Park. The division is a small office with one supervisor, three engineers, two architects, and a construction inspector. In a small office, I was responsible for facility projects from cradle to grave. Project scopes crossed many engineering disciplines including, civil, architectural, structural, electrical, and mechanical. The work can be divided into four major areas.

Planning/Pre-design Work: This work includes facility condition assessments, project scoping, budget cost estimating, gathering stakeholder input, assessing user needs, writing project descriptions, and writing justifications. Projects were entered into the Project Management System (PMIS) for prioritizing funding.

Design work: This work includes performing engineering calculations, preparing construction drawings, writing specifications, estimating construction costs, performing topographic land surveys, circulating review packages, addressing review comments, and putting together the final construction package for contracting. Work incorporates NEPA Conditions and considerations, pertinent code requirements, sustainable design considerations, accessibility standards, and current costing data, ensuring projects are planned properly, and in conformance with all NPS policies. Documents are created with the use of Microsoft Office, AutoCAD, and Adobe software, among others.

Permitting and Compliance: Gather information and submit applications for permits. This has included:
Over 18 permits and/or permit exemptions for in-water work from the Florida Department of Environmental Protection, and from the US Army Corp or engineers,
Two water system operating permits from Florida Dept of Health confirming 4-log removal for water systems under the influence of surface water,
A discharge permit revision for the combined wastewater from the Flamingo Wastewater Treatment Plant and the Flamingo Reverse-Osmosis Water Treatment Plant, and
A water well drilling permit from the South Florida Water Management District.

Construction Supervision and Inspection: Responsibilities included evaluating and making recommendations for contractor selection, inspecting work, monitoring the schedule, facilitation contract modifications, making recommendations on progress payments, and coordinating construction with other divisions. This work requires obtaining and maintaining certification as a Contracting Officers Representative.

Specific projects (grouped per the major engineering discipline) include:

Civil Engineering (Structural)
Replacing the Anhinga Boardwalk and Trail at Royal Palm
Replacing the Bobcat Boardwalk at Shark Valley
Replacing the dock decking and the dock house siding at Dry Tortugas National Park
Replacing docks and chickees in the Everglades Backcountry
Constructing a deck over-looking the canal at Shark Valley
Constructing finger piers at Dry Tortugas
Rehabilitating a jib crane at Dry Tortugus
Evaluating and planning for the replacement of the pier on Loggerhead Key in Dry Tortugas

Civil Engineering (General/Site Work)
Dredging the Gulf Coast Marina
Modifying the Shark Valley Tower Parking Lot
Replacing boat ramps at Whitewater Bay, Florida Bay, and Key Largo
Installing an Air Boat Ramp at Frog City
Installing a Canoe/Kayak Launch Ramp at the Gulf Coast Visitor Center
Repaving the Guy Bradley Trail in Flamingo
Three projects installing boundary markers and aids to navigation in Gulf of Mexico and Florida Bay
Installing Culverts on the Old Ingram Highway
Stabilizing the shoreline at the Gulf Coast Visitor Center

Civil Engineering (Water and Sewer)
Rehabilitating thirteen sewer lift stations at Flamingo
Drilling a new well at the Shark Valley Tower
Rehabilitating the concrete water cistern at Dry Tortugas
Rehabilitating the Flamingo WWTP Equalization Tank
Relining the Flamingo WWTP emergency storage lagoon

Mechanical and Electrical
Replacing the generators and the electrical distribution system at Fort Jefferson in Dry Tortugas National Park
Installing electrical power to camp sites in the Flamingo Campground
Installing solar hot-water systems at the Flamingo Campground Shower Buildings
Installing gasoline storage tanks at the Gulf Coast Visitor Center and Dry Tortugas
Replacing the HVAC System in the Earnest Coe Visitor Center
Installing LED lighting in the Earnest Coe Visitor Center

Building/Architectural
Installing a prefabricated maintenance office building at Flamingo
Installing a prefabricated laboratory, dormitory and house at the Key Largo Science Center
Installing three prefabricated shower buildings at the Pine Island Campground
Installing siding and replacing windows on the Gulf Coast Visitor Center
Demolishing buildings at Chekika
Installing a metal Emergency Equipment Storage Building at Flamingo
Replacing three park entrance signs

Oct 2007 to March 2009 Civil Engineer

United States Coast Guard, Civil Engineering Unit Miami,
15601 SW 117 Avenue, Miami, FL 33177

I worked as a design Civil Engineer for the United States Coast Guard. Projects I have completed include site drainage, roads, parking lots, water systems, and pier hardware replacement. The project costs ranged between $50,000 and $790,000. The work requires computer skills in AutoCAD, Microsoft Office Suite, and Adobe Acrobat.

At the start of a project, tasks I performed include meeting with unit personnel to evaluate needs, developing alternatives, preparing budget estimates, and conducting a concept brief to the Command. Once concurrence from Command is obtained, I would prepare preliminary design drawings, perform engineering calculations, circulate review packages, address comments, write specifications, prepare construction drawings, estimate construction costs, and put together the final construction package for contracting. After project award, I would assist the Construction Branch by reviewing construction submittals.

Projects completed include:

MSST Miami, FL: I completed the design to modify the parking lot and site grading to improve drainage around the boat maintenance facility. Work included surveying the site, preparing a site topographic map, producing construction drawings, estimating construction costs, and writing specifications for asphalt, concrete, earthwork, and drainage piping. The estimated construction cost of the project was $87,000.

Station Tybee, GA: I completed the design to abandon the existing water well and connect to the adjacent National Park Service water system. Work included analyzing water system alternatives, producing construction drawings, estimating construction costs, and writing specifications. I also worked with the compliance and real property divisions to get an agreement with the National Park Service for water service. The estimated construction cost of the project was $50,000.

Station Sabine, TX: I completed the design to improve drainage and add parking lots to accommodate an increase in small boat activity at the station. I also completed and combined into a single construction package the design for water and sewer utilities and a 2,000 fuel tank which I inherited from another engineer who retired. Work also included coordinating with the electrical engineer who was providing electrical power and lighting to the site. Coordination with local unit personnel was necessary since they had plans to install a new boat maintenance structure in the same area as my project. The estimated construction cost of the project was $790,000.

NESU Charleston, SC: I completed the design to replace hardware, which holds large foam fenders on the pier. The estimated construction cost of the project was $88,000.

Nov 2003 to Oct 2007 Project Specialist/Civil Engineer

National Park Service, Denver Service Center, P. O. Box 25287, Denver, CO 80225

I worked as a Project Specialist/Civil Engineer on assigned projects in the National Park Service Construction Program. As a Project Specialist, I was the Contracting Officers Representative. I oversaw the work of architectural/engineering design firms, construction management firms, and construction contractors. I was assigned to a construction project from pre-design through construction. I was usually assigned 6 to 8 projects at a time working with 3 to 4 different Project Managers. The projects ranged from $1 million to $16 million in construction cost.

During the design phase, I was the Contracting Officers Representative on architectural/engineering design contracts. I prepared the scope of work, prepared the government estimate, and negotiated the task order. I was able to consistently negotiate task orders under the NPS budget goals. The goal for pre-design services is 5% of the estimated construction cost and the goal for final design services is 10%. After award, I monitored the schedule, reviewed the quality of work, and made recommendations for invoice payments. I served as the point of contact between the design firm and the park staff for design decisions and provided technical expertise to the park staff. I had also served as the chairman of a contractor selection board for an engineering indefinite quantities contract.

During the award of a construction contract, I provided technical assistance to the Contracting Officer in answering contractor questions and participated on the contractor selection board. I had served as both a member of the board and chairman. I also wrote the scope of work, prepared the government estimate, and negotiated the task order for the construction management firm to provide on-site inspection services.

During the construction phase of a project, I served as the Contracting Officers Representative on the Construction Contract, the Construction Management Firm's Contract, and the Design Firm's Contract. I participated in weekly progress meetings, made recommendations on progress payment requests, approved construction submittals, prepared government estimates, and negotiated contract modifications.

My assigned projects included the following components:
Water Distribution and Sewer Collection System Construction and Rehabilitation.
Water Treatment including reverse-osmosis and arsenic removal using absorptive media.
Water Well Drilling.
Pumps including well pumps, fire pumps, and wastewater lift stations.
SCADA control and radio telemetry systems.
Wastewater treatment including lagoons, re-circulating sand filters, sand-mound systems, and septic systems.
Storage tanks including lead paint abatement, concrete water tanks, and recoating steel water tanks.
Solar power.
Electrical and telephone utilities.
Road construction and site work.
Buildings including treatment plants and public restrooms.

Sept, 1986 to Nov, 2003 Civil Engineer

Denver Service Center, National Park Service, P. O. Box 25287, Denver, CO 80225

I worked as a team captain and civil engineering designer on assigned projects in the National Park Service Construction Program.

As a Team Captain, I determined the project requirements and developed the project scope, construction budget, design budget, and schedule. I coordinated and oversaw the work of a multi disciplinary team, usually 5 to 7 people, including architects, landscape architects, and engineers (structural, mechanical and electrical). I made regular verbal presentations to upper management, monitored cost and schedule, and communicated with park/regional offices on design issues. I was involved in contract awards by conducting pre-bid site meetings, establishing completion dates, evaluating contractor's proposals and qualifications, and evaluating and negotiating contract prices.

As a civil engineering designer, I worked on all phases of water, wastewater, drainage, roadway, and parking lot design. Tasks included developing alternatives, preparing budget estimates, preparing preliminary design drawings, writing project specifications, estimating construction costs, preparing construction drawings, reviewing construction submittals, performing construction inspections, and writing operation and maintenance manuals. I also reviewed the work of other staff civil engineers and the work of engineering consultants. I functioned as the lead civil engineer on large projects overseeing the work of other civil engineers.

My other duties have given me experience serving on the committee to plan and implement the CAD computer system and serving on the committee to develop and implement CAD standards. I served on a work group to implement and develop the project cost and scheduling system. I have also both facilitated and participated in value analysis studies. I have functioned as an A/E Manager and Contracting Officers Representative. I have chaired a technical evaluation panel to evaluate contractor's proposals. I have also been involved in utility contract negotiations.

I am an experienced computer user of AutoCAD, civil engineering design applications, e-mail, spreadsheets, word processors, presentation software, and the internet.

My assigned projects included the following components:

Wastewater treatment: Activated sludge, biological nitrogen removal, chemical phosphorous removal, recirculating sand filters, lagoons, sand mounds, and septic tank/leach field systems.

Water Supply and Treatment: Wells, surface water intakes, filtration, and disinfection.

Utilities Lines: Water mains, gravity sewers, force mains, storm water systems, lift stations, sliplining, and pipe bursting.

Mechanical Systems: Fire pumps, fire sprinkler systems, and emergency generators.

Water storage: Concrete tanks, lead paint abatement, and painting steel tanks.

Miscellaneous: Parking lots, access roads, walkways, retaining walls, and solar power.

March 1983 to Sept 1986 Civil Engineer

Denver Service Center, National Park Service, P. O. Box 25287, Denver, CO 80225

I worked as an on-site government representative (Project Supervisor) administering construction contracts in several national parks including Glacier, Lassen, Kalaupapa and Yosemite. Projects included water system improvements, a visitor center expansion, sewage disposal system installation, underground utility (water, sewer and elec.) construction, fire sprinkler system installation, well pump installation, generator building construction, and a wastewater treatment plant expansion. Duties included inspecting materials and workmanship, evaluating construction schedules and monitoring construction progress, making necessary field changes, and negotiating contract modifications. Additional responsibilities included coordinating the Contractors' activities with the park and handling problems that developed.

June 1981 to Jan 1983 Associate Engineer

Colorado Interstate Gas Company, P. O. Box 1087, Colorado Springs, CO 80944

I worked as an engineer assigned to a rotational training program. Work involved design and project coordination for a variety of projects including: replacing gasoline storage tanks, replacing a compressor temperature control system, installing gas sampling equipment, and replacing a regulator station. Construction experience included inspecting a compressor station expansion. Other experience included economic studies on well connections, heat and material balances for a gas processing plant, and a feasibility study for a nitrogen rejection plant to upgrade low BTU gas. The job required the knowledge and skill to develop the project scope and perform all design work involved with my assigned projects. Also required was the ability to negotiate with other departments in order to coordinate and schedule the project to assure its timely completion.

May 1980 to Aug 1980 Engineering Aid

City of Broomfield, No. 6 Garden Office Center, Broomfield, CO 80020

I worked for the Department of Public Works directly under the Assistant City Engineer and the City Traffic Engineer. Duties included performing traffic surveys, checking legal easements, and filing subdivision plats and construction plans. The job required the ability to work independently, perform calculations, and to read construction plans.

May 1979 to Jan 1980 Engineering Aid

Sellards and Grigg, Inc., 8745 West 14th Avenue, Lakewood, CO 80215

I worked as a member of a survey crew with responsibilities including performing calculations, reducing field notes, and plotting surveys. Types of surveying included topographic, construction, and property. This job required physical work in all weather conditions, skill to operate precision surveying instruments, the ability to perform surveying calculations, and the ability to read construction plans.

May 1978 to Aug 1978 Engineering Aid

John W. Donnell And Associates, P O Box 13, Worland, WY 82401

I worked as a member of a survey crew. Projects included developing subdivisions, setting street grades, and locating oil wells. This job required physical work in all weather conditions, skill to operate precision surveying instruments, and the ability to read construction plans.

EDUCATION

1981 Bachelor of Science--Civil Engineering
Colorado State University, Fort Collins, CO 80523
Graduated with Distinction GPA 3.8 (A=4.0)

Licenses

Professional Engineer License # 66676, State of Florida, 2007 to present
Professional Engineer License # 24146, State of Colorado, 1986 to 2013
Contracting Officer's Representative Certification, 1995 to present

References

Upon Request