SUZANNE BROWNLESS, P. A.

ATTORNEY AT LAW

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ADMINISTRATIVE LAW GOVERNMENTAL LAW PUBLIC UTILITY LAW ORIGINAL

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April 30, 2001

VIA HAND DELIVERY

Blanca Bayo, Director Division of Records and Reporting Florida Public Service Comm. 2540 Shumard Oak Blvd. Tallahassee, FL 32399-0850

RE: Dockets Nos. 990696-WS and 992040-WS
Application for certificates filed by Nocatee Utility
Corporation and Intercoastal Utilities, Inc.

Dear Ms. Bayo:

Attached please find the originals and fifteen copies each of the following to be filed in the above dockets:

St. Johns County, Florida's Motion to Accept Prefiled Testimony as Supplemental Intervenor Testimony or, in the Alternative, Motion to Allow Intervenor Direct Testimony;

Supplemental Testimony of Donald E. Maurer; and 05324-01

Second Supplemental Intervenor Testimony of William G. Young. 053250

Thank you for your attention to this matter. Should you have any questions or need any additional information, please contact me.

Very truly yours

Suzamne Brownless

Attorney for St. Johns County

APP CAF CMP -c: 3383 COM5 Cc: Bill Young CTR Brian Armstrong, Esq. ECR. LE13 OPC. 541 RGO RECEIVED & FILED SER C-RUREAU OF RECORDS

SUPPLEMENTAL INTERVENOR TESTIMONY OF DONALD E. MAURER ON BEHALF OF ST. JOHNS COUNTY, FLORIDA

DOCKET NO. 990696-WS DOCKET NO. 992040-WS

> Suzanne Brownless 1311- B Paul Russell Road Suite 201 (850) 877-5200 FAX: (850) 878-0090

ATTORNEY FOR ST. JOHNS COUNTY

DOCUMENT NUMBER-DATE
05324 APR 30 =

FPSC-RECORDS, REPORTING

- 1 Q. PLEASE STATE YOUR NAME AND ADDRESS.
- 2 A. My name is Donald E. Maurer and my address is 6650
- 3 Southpoint Parkway, Suite 330, Jacksonville, Florida
- 4 32216.
- 5 O. BY WHOM ARE YOU EMPLOYED?
- 6 A. I am employed by the engineering firm of Camp, Dresser
- 7 and McKee Inc.
- 8 O. WHAT IS YOUR POSITION AT CAMP DRESSER AND MCKEE?
- 9 A. I am a registered professional engineer in the State of
- 10 Florida serving as office manager for CDM and project
- 11 manager for St. Johns County Utility Department projects.
- 12 Q. WHAT IS YOUR EDUCATIONAL BACKGROUND AND WORK EXPERIENCE?
- 13 A. I am a graduate of the University of Florida earning a
- 14 Bachelor of Science degree in Environmental Engineering
- in 1981. I became a registered professional engineer in
- 16 Florida in 1985. As my attached resume, Exhibit
- 17 (DEM-1), details, over my 20 year professional work
- life I have developed expertise in the planning, design
- and supervision of wastewater transmission, treatment and
- 20 effluent disposal facilities; potable water supply,
- 21 pumping and distribution facilities; and stormwater
- 22 drainage facilities.
- 23 Q. HAVE YOU EVER BEEN QUALIFIED AS AN EXPERT WITNESS?
- 24 A. Yes, I have been accepted as an expert engineering
- witness in several administrative proceedings.
- 26 Q. ARE YOU A MEMBER OF ANY PROFESSIONAL ASSOCIATIONS?

- 1 A. Yes. I am a member of the Water Environmental Federation
- 2 (WEF) and a member of the American Waterworks Association
- 3 (AWWA).
- 4 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?
- 5 A. I am here to identify the plan of service which was
- 6 approved by the Board of County Commissioners of St.
- 7 Johns County (Board) on April 24, 2001. The plan of
- 8 service is presented by William G. Young, Director of the
- 9 County Utility Department, in Exhibit (WGY-4).
- 10 Q. IS THE PLAN OF SERVICE APPROVED BY THE BOARD CONSISTENT
- 11 WITH THE NOCATEE DEVELOPMENT ORDER, RESOLUTION NO. 2001-
- 12 30?
- 13 A. Yes. The Board approved the plan of service on April 24,
- 14 2001 as being consistent with the Nocatee Development
- 15 Order.
- 16 Q. COULD YOU BRIEFLY DESCRIBE THE PLAN OF SERVICE?
- 17 A. Yes. Water service will be provided by expanding the
- 18 County's Northwest water treatment plant and extending
- 19 lines in the manner described in the map provided in
- 20 Figure 1 of the plan of service. From the I-
- 21 95/International Golf Parkway (IGP) interchange, a 16-
- inch water main will be constructed eastward to U.S. 1.
- 23 Additional ground storage and high service pumping
- 24 capacity will be provided in the vicinity of the Marshall
- 25 Creek development. Along U.S. 1 from IGP, a 20-inch
- 26 water main will be constructed. Additional water

production and storage capacity will be necessary to serve future phases of the development.

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Wastewater service will be initially provided by installing a 12-inch wastewater force main along County Road 210 to a new wastewater pump station in the vicinity of the Marshall Creek development. This pump station will pump wastewater through a 16-inch force main along IGP to the World Golf Village master pump station. Utilizing reserve capacity in the existing State Road 16 force main system, wastewater flow will be delivered to the State Road 16 wastewater treatment plant. phases of Nocatee will be served utilizing a 24-inch force main along the corridor of the State Road 312 extension and pumping station upgrades at the Marshall Creek pump station. Future phases of Nocatee will also require additional expansion to the State Road 16 wastewater treatment plant. The anticipated timing of these planned improvements is provided in the map provided as Figure 2 of the plan of service.

Irrigation demands at Nocatee will initially be met by stormwater reuse and off-site back-up wells. As wastewater flows in the State Road 16 wastewater treatment facility increase, the plant will become the source of reclaimed water for use to meet irrigation demands in future phases of development. In conjunction with the proposed wastewater force main improvements

along the State Road 312 extension, a 24-inch reclaimed water main will be installed from the wastewater treatment plant to U.S. 1. This 24-inch reclaimed water main will continue along U.S. 1 to the intersection of U.S. 1 and Ray Road. These improvements are outlined on the map provided as Figure 2 of the plan of service. DOES THAT CONCLUDE YOUR TESTIMONY? Q. Α. Yes. c: 3379

-4-

Donald E. Maurer, P.E., DEE

Associate

Camp Dresser & McKee

Years of Service with CDM

15

Years of Experience

20

Education

B.S. - Environmental Engineering, University of Florida, 1981

Registration

Professional Engineer: Florida (1985) Mr. Maurer is an environmental engineer with 20 years of experience in the planning, design, and supervision of construction of wastewater transmission, treatment, and effluent disposal facilities; potable water supply, pumping, and distribution facilities; and stormwater drainage facilities. His engineering design expertise is in the areas of wastewater treatment process analysis and design, effluent disposal and reclaimed water systems, and hydraulic systems design. He is also very familiar with the requirements of state and federal regulatory agencies and has been qualified as an expert witness in administrative proceedings.

Mr. Maurer has served as a project manager or project design engineer on a number of projects involving the study, permitting, design, and construction of water and wastewater facilities improvements in Florida.

Mr. Maurer most recently served as project manager for the expansion of St. Johns County Utility Department State Road 16 wastewater treatment plant. He was responsible for the design and permitting of the construction of a 1.5 mgd facility utilizing advanced secondary treatment and reclaimed water irrigation of area golf courses. Mr. Maurer was responsible for the process and mechanical design of the facility improvements and coordinated the structural, electrical and civil/site design efforts. Mr. Maurer's experience at this wastewater plant also includes project management and principal design responsibilities for the initial 0.5 mgd facility. This plant was originally designed to provide tertiary treatment and effluent disposal through a created wetlands system. Permitting of this system was achieved under the FDEP wetlands treatment rule (Ch. 62-611)

Project manager for the design of improvements to the JEA Arlington East Water Reclamation Facility. Working as a subconsultant to Pitman Hartenstein & Associates, Mr. Maurer and CDM were responsible for the process design, and mechanical/structural design of improvements to expand the facility from 10 to 15 mgd. Features were incorporated into the design to ease the expansion to 20 mgd or to upgrade the treatment to provide nutrient removal. He was also responsible for work efforts to assess enhancements to improve primary clarifier operations, evaluate centrifugal blower capacities and performance, evaluate solids handling system improvements, evaluate VOC emissions and odor control requirements.

Mr. Maurer also served as project officer for the JEA Biosolids Master Plan. This assignment was undertaken in conjunction with the Arlington East expansion, to evaluate biosolids handling and disposal options for the 5 regional treatment facilities. In addition to a comprehensive regulatory review, biosolids production, treatment technologies, costs and economics

Docket No. 990696-WS Docket No. 992040-WS Exhibit _____ (DEM-1) Page 1 of 5 and siting criteria were evaluated to determine the best long-term strategy for biosolids management and beneficial use.

Mr. Maurer has also served as project manager for treatment facilities evaluations for United Water Florida. In these assignments, he was responsible for evaluations of UWF's Holly Oaks, St. Johns North and San Pablo wastewater treatment facilities. These treatment facilities were in need of rehabilitation to improve treatment performance. Mr. Maurer provided project oversight for facilities inspections and evaluations, and a review of regulatory compliance deficiencies, formulating recommendations for treatment plant upgrades. In addition, Mr. Maurer supervised the completion of a system-wide evaluation of sludge management practices to assess compliance with the Part 503 sludge regulations.

Mr. Maurer has also been involved in the design and construction of a 7.5 mgd expansion to Orange County's Sand Lake Road wastewater treatment facility, a 4.0 mgd expansion to the City of Sarasota's wastewater treatment plant, a 1.7 mgd expansion to the City of Jacksonville's Buckman Street wastewater treatment plant, and a new 4.5-mgd master pumping station for the City of Sarasota. He also has experience in the remedial design of two hazardous waste site clean-ups, industrial waste pretreatment program implementation, and stormwater utility development and implementation.

Project manager for a reclaimed water system feasibility study for Orange County, Florida, involving the planning, preliminary design, hydraulic modeling, and cost analysis of an 18 mgd reclaimed water system. Project involved conceptual and preliminary design, regulatory review and compliance, alternatives analysis, and program implementation phasing.

Project manager for the development and implementation of a stormwater management utility for the City of Jacksonville Beach, Florida. Successful implementation of the utility was achieved in 4 months with the \$3.00 per month base charge generating an estimated \$450,000 per year in revenue.

Project manager for the design of pump station improvements and rapid infiltration basin modifications to expand Orange County, Florida's, 3.0 mgd Western effluent disposal system to 4.4 mgd. Facility improvements included new flow control and metering equipment to allow remote monitoring and operation through the county's telemetry and control system.

Project manager for the design of reclaimed water transmission and distribution system improvements including irrigation booster pumping stations for commercial and residential sites in the vicinity of Central Florida Parkway and the Sea World tourist attraction for Orange County, Florida,

Completed the final design of the preliminary treatment facility for Orange County, Florida's, Sand Lake Road wastewater treatment facility Phase 3

Docket No. 990696-WS Docket No. 992040-WS Exhibit _____ (DEM-1) Page 2 of 5 expansion from 23.0 mgd to 33.0 mgd. The preliminary treatment facility was designed for a 110-mgd peak flow and includes four Smith and Loveless vortex grit chambers and odor control provided by wet scrubbers.

Professional Activities

American Water Works Association

Water Environment Federation

Publications/Presentations

Reardon, R.D. and D.E. Maurer. "Water Quality, What Price - BNR Costs Revisited." Presented at the 1991 Joint Technical Conference of the FSAWWA, FPCA, and FWPCOA, November 4-6, 1991, Pensacola, Florida.

Lynn, A. G., D. E. Maurer, and C. D. Groff. "Electric Deregulation – One City's Response Leads to Water Department Independence." Florida Water Resources Journal, October 2000.

Maurer, D. E. and W. G. Young. "A Survivor's Guide to Service Area Warfare." Presented at the 2000 AWWA National Conference, June 11-15, 2000, Denver, CO.

Professional History

HINGERGOOF TITION

1986 to date Project Manager - Camp Dresser & McKee, Jacksonville, Florida

Completed final designs for the remedial action and clean-up of contaminated materials at two hazardous waste sites in the Jacksonville, Florida area involving the excavation and thermal destruction of pentachlorophenol contaminated soils on the site of an active wood preserving facility and the solidification and stabilization of soils contaminated with aresenic and polycyclic aromatic hydrocarbons and the installation of an impermeable cap on an area located within a power generating station site.

Responsible for the design of dechlorination facilities for a central Florida major resort development wastewater treatment plant expansion from 6.0 to 9.0 mgd.

Responsible for the design and preparation of plans and specifications for approximately 36,000 linear feet of transmission piping varying in size from 6 inches to 14 inches. This piping served as the initial segment of a distribution system for effluent reuse within residential and agricultural areas of Sarasota County for the City of Sarasota, Florida.

1985 to 1986 Project Manager - Smith & Gillespie Engineers, Inc., Jacksonville, Florida

Project manager for the design and preparation of plans and specifications for an oxidation ditch, secondary clarifiers, and chlorine contact chamber for a 0.75 mgd plant expansion for the City of Clewiston, Florida.

Responsible design engineer for the preparation of plans and specifications for a 13 mgd land application facility for final disposal of wastewater effluent. The project involved the development of a 2,500-acre site for 15 center-pivot spray irrigation fields, a 220 million gallon storage area, an operations area, site drain-age, and retention areas utilizing wetlands. Site surface water management features involved the stormwater analysis of a 14,000-acre drainage basin. In addition, the design included two pumping stations rated at 25 mgd and 13 mgd and approximately 15 miles of 36-inch transmission line.

Project manager for the design and preparation of plans and specifications for a 4.5 mgd wastewater pumping station featuring four 50 hp, 1,100 gpm submersible pumps and activated carbon odor control. This pumping station was designed for construction and operation on the City of Sarasota's bayshore.

Docket No. 990696-WS Docket No. 992040-WS Exhibit _____ (DEM-1) Page 4 of 5 Project manager for the design and preparation of plans and specifications for the relocation of water and sewer lines within the right-of-way in conjunction with a Florida Department of Transportation road widening project. The project also included the replacement of two lift stations and pressure sewers.

Project manager during the design and construction phases of the City of Sarasota's wastewater treatment plant expansion. The 4.0-mgd expansion to 13 mgd included a contact stabilization process and new sludge handling facilities utilizing dissolved air flotation thickeners, belt filter presses, and a PURAC invessel mechanical composting facility.

Project manager during construction phase services for the addition of two clarifiers, a sludge pumping station, and a chlorine contact chamber at the City of Jacksonville's Buckman Street sewage plant.

1981 to 1985 Project Engineer - Smith and Gillespie Engineers, Inc., Jacksonville, Florida

Prepared plans and specifications for an expansion of the 6.0-mgd wastewater treatment plant for the City of Bradenton, Florida.

Prepared plans and specifications for the City of Plant City, Florida's, Well No. 7 pumping and distribution facility including a 2,200 gpm vertical turbine pump, a pump house, and chlorination and sodium hexametaphosphate injection equipment.

Prepared plans and specifications for the North Dreamland Subdivision paving, storm drainage, and sanitary sewer improvements for the City of Perry, Florida, under a HUD Community Development Block Grant.

Authored preliminary engineering reports serving as master planning documents for the City of Dunnellon, Florida's, water and sewer utilities.

Conducted belt filter press pilot testing and evaluation for the Cities of Sarasota and Jacksonville to compare manufacturers' equipment for sludge dewatering application. Results were presented to clients and manufacturers in final reports regarding polymer usage and the evaluation of cost and performance factors.

Prepared plans and specifications for the design of a belt filter press installation at the City of Jacksonville's Buckman Street sewage treatment plant.

Docket No. 990696-WS Docket No. 992040-WS Exhibit (DEM-1) Page 5 of 5

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing was furnished by Hand Delivery (*) or regular U.S. Mail and facsimile to the following on this 30 th day of April, 2001:

Richard D. Melson, Esq. Hopping Law Firm P.O. Box 6526 Tallahassee, Florida 32314-6526

J. Stephen Menton, Esq. Kenneth A. Hoffman, Esq. Rutledge Law Firm P.O. Box 551 Tallahassee, Florida 32302

John L. Wharton, Esq. Rose Sundstrom & Bentley, LLP 2548 Blairstone Pines Drive Tallahassee, Florida 32301 (*) Samantha Cibula, Esq. Division of Legal Services Florida Public Service Comm. 2540 Shumard Oak Blvd. Tallahassee, Florida 32399-0850

Michael J. Korn, Esq. Korn & Zehmer, P.A. Suite 200, Southpoint Bldg. 6620 Southpoint Drive South Jacksonville, FL 32216

Michael B. Wedner, Esq. Asst. General Counsel JEA St. James Building, Suite 480 117 West Duval Street Jacksonville, FL 32202

Suzanne Brownless, Esq.

c: 3382