ST. GEORGE ISLAND UTILITY COMPANY, LTD.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

REGARDING THE APPLICATION FOR INCREASED RATES FOR

ST. GEORGE ISLAND UTILITY COMPANY, LTD.

IN FRANKLIN COUNTY

DOCKET NO. 940109-WU

REBUTTAL TESTIMONY OF

TED L. BIDDY, P.E., P.L.S.

Q. Please state your name, profession and address.

A. Ted L. Biddy, P.E., P.L.S., Tallahassee Regional Manager, Baskerville-Donovan, Inc., consulting engineers, 2878 Remington Green Circle, Tallahassee, FL 32308.

Q. Please give us a brief outline of your educational and professional background.

A. (See attached detailed resume).

Q. Please outline your professional relationship with St. George Island Utility Company, Ltd.?

A. In late 1970's and early 1980's, I provided design and permitting services for water system extensions to various sub-divisions on St. George Island through former firm of Ted L. Biddy & Associates, Inc. During 1991, 1992, 1993 and to date in 1994, the Tallahassee office of Baskerville-Donovan, Inc. has served as consulting engineer to the Utility for various projects including system capacity analysis, design, permitting and construction administration for Well No. 3; preparation of distribution system maps; preparation of aerator report; design and permitting for treatment plant improvements and miscellaneous services.

Q. Have you previously filed direct testimony in this proceeding?

A. No, I have not.

Q. What is the purpose of your rebuttal testimony.

A. The purpose of my rebuttal testimony is to respond to the direct testimony of PSC staff witnesses Kintz and

McKeown.

Q. Have you reviewed and analyzed the testimony of John Kintz and Cliff McKeown?

A. Yes.

Q. Would you please give us your response to the testimony of PSC staff witness John Kintz?

A. Yes. My response will basically follow the issues as set forth by Mr. Kintz. Firstly, in answer to the question of what immediate, near-term or long-range actions the Utility needs to accomplish in order to accommodate current and future customers, Mr. Kintz states, "that the Utility would need to construct an additional raw water line from the mainland in order to supply potable water for additional development of St. George Island in excess of the allowable total of 1346 customer connections". I do not agree that the allowable total customer connections is 1346 but is 1541 based on the detailed system capacity analyses performed under my direction by the Tallahassee office of Baskerville-Donovan, Inc. (See attached report dated May 27, 1992 and addendum report dated May 5, 1994.)

We have demonstrated in an addendum to the utility's hydraulic analysis, assuming the treatment plant modifications are on line, that the system has the capacity to serve 1541 ERU's under peak hourly flow.

In the course of providing model computations to support a construction permit application for Sunset Beach, we

have demonstrated the capability of the Utility to serve its existing service commitments; i.e. 1500 ERU;s, with resultant pressures of 30 psi +/- at Bob Sikes Cut and 35 psi +/- near the East end (State Park gate). This analysis would indicate that the system has the capacity to serve additional customers beyond 1500 before resultant pressures reach the 20 psi minimum.

These system analysis reports were very detailed and rigorous computer modeling of the distribution system based on best available engineering data and the report of May 27, 1992 was described by Mr. Kintz in his letter to the Utility of June 5, 1992 as "an excellent and thorough evaluation of the water system's status".

Mr. Kintz's conclusion that an additional raw water line is required is apparently based on the limitation that Northwest Florida Water Management District has set forth in its consumptive use permit; i.e. 700,000 gpd is as much as can be pumped through the existing raw water main. However, the capability of the Utility to provide additional raw water supply may be increased by other means, a determination of which should be economically feasible as much as any other factor:

<u>For Example</u>:

1. Increase withdrawal rates specified in Consumptive Use Permits (Utility is pursuing).
2. Construct additional raw water supply wells.
3. Install pumping appurtenances to boost higher flows

thru existing main, taking into consideration design limitations of the existing pipe and practical constraints.

4. Increase finished storage on the island to accommodate future demand.

Mr. Kintz statement that an additional raw water line needs to be constructed is puzzling and is not related to system capacity. The existing 8 inch raw water line will supply water to St. George Island at a rate of 500 gpm with Well No. 1 and Well No. pumping in tandem for 12 hours and at a rate of 620 gpm with Well No. 3 pumping alone for 12 hours for a total of 806,400 gallons per day. This 806,400 gallons per day is more than the maximum daily demand of 801,320 gallons for 1541 connections, at maximum daily demand of 520 gpd/ERU, not considering the 375,000-400,000 gallons of water storage which exists on the island. We contend that the water storage on the island should be considered along with raw water supply from the mainland when computing system capacity. A detailed analysis of finished water storage required would be dependent upon an analysis of average daily flow requirements as it relates to Department criteria and regulations. An evaluation of this scope has not been completed or reviewed by our office to date. Calculations by our firm demonstrated that raw water supply simply is not a problem related to allowable

number of equivalent residential connections. Rather, the distribution system pressure reaching the lowest allowable value of 20 pounds per square inch in the water main at the worst case as set forth in Section 17-555, F.A.C. should be the limiting factor for maximum allowable equivalent residential connections. The computer model capacity analyses which our firm performed computed the maximum number of connections which could be served while maintaining the minimum legal pressure of 20 psi.

Mr. Kintz's calculation of system capacity by considering only the 700,000 gallons per day allowable withdrawal rate based on the Northwest Florida Water Management District's consumptive use permit is also puzzling. Adding this maximum daily raw water pumping rate of 700,000 gpd to the total storage of 400,000 gallons gives a total of 1,100,000 gallons of water available per day compared to the maximum daily demand of 801,320 gallons for 1541 connections. One must also keep in mind that these periods of maximum demand occur only for a 1 to 2 day period at the three holiday periods of Memorial Day, Fourth of July and Labor Day with demand for all other times at much lower rates. Adequacy of supply is further documented in our firms' Technical Memorandum dated May 25, 1994 for Sunset Beach Subdivision attached hereto. Updating the ERU's in the memorandum to 1541 instead of the 1500 as presented would only increase the

usage from the elevated tank to 101,320 gallons for maximum day. Mr. Kintz determination of capacity is apparently based on the single limiting factor of maximum withdrawal set forth in the standard water use permit. Mr. Kintz is apparently confusing system capacity with system reliability. His concerns as previously expressed to me center on catastrophic events such as hurricanes interrupting the raw water supply by causing broken lines at the bridge crossing areas.

If the Utility is to be held to the test that raw water delivery to the island must equal maximum daily demand, then it is obvious that the consumptive use permit withdrawal rate would need to be increased from the present maximum day of 700,000 gallons to 801,320. Reportedly the Utility has such a permit modification request before the Northwest Florida Water Management District.

The third well effectively added one hundred percent backup supply well capacity for greater system reliability. Perhaps, adding parallel lines for the bridge crossing areas could be added in the future for greater system reliability. It is noted that during storm periods, there would be very few people on St. George Island and next to no water demand.

Mr. Kintz's comments on required system improvements for fire flow requirements are correct as far as additional storage on the island and increased size of distribution

system mains.

However, a fire flow system analysis would require a great deal of study to determine precise requirements which would not necessarily include increasing the capacity of the raw water transport to the island. For instance, adequately sized storage and pumping with separate dedicated fire flow water mains would not require additional raw water transport to the island.

Mr. Kintz's opinion is formulated without benefit of any fire flow analysis directed specifically at the St. George system. Criteria required to be developed in such an analysis include but are not limited to minimum pressure, flow and duration of fire flow.

With the necessary criteria developed, not all or any of the items deemed necessary may be required. AWWA Standards suggest that the development of fire protection in private utilities include consideration of economic feasibility in providing the system.

Finally, I note with exception that Mr. Kintz in his February 17, 1994 memo to Allan W. Johnson (EXH JAK-3) states that the Baskerville-Donovan capacity analysis report used theoretical assumptions rather than measured flows. The basis for all computer simulations of the SGIU System has been well documented in our firm's May 1992 report (attached) and is further discussed in the May 25, 1994 Technical Memorandum

(attached). We believe that our method of analysis has been an objective, reasonable and documented approach to evaluating system capacity in keeping with sound engineering principles.

Q. Would you please proceed now with your response to the testimony of PSC staff witness Cliff McKeown?

A. Yes. My response will follow the issues in the same order set forth by Mr. McKeown.

On Page 3 of his testimony, Mr. McKeown states that the Utility has experienced pressure related problems at the East end State Park entrance with 16 psi recorded by the Florida Rural Water Association (FRWA) on May 24, 1992 and 11 psi recorded on July 4, 1992.

Taking the FRWA report as a complete document, the following data is derived.

1. State Park employees reportedly tampered with pressure recording equipment placed at this location during the May 24 weekend. This makes this data suspect and may explain the observed drop in pressure.

2. The recorded pressure of 11 psi on July 4 spanned over about a two hour period. This low pressure may have been coincident with the State Park personnel replenishing their water storage tanks. It is common knowledge that the Utility and the State Park have coordinated the filling of the Park's storage tanks to minimize disruption or

degradation of service to the rest of the island, primarily being accomplished by filling these tanks at off peak hours. A more striking illustration of the pressure recording chart included with Mr. McKeown's testimony is that pressures of 35-40± psi were maintained at this location throughout the remainder of the two day recording period. Other pressure recordings submitted with both the May 24, 1992 and July 4, 1992 reports illustrate the system maintaining pressures above the 20 psi minimum. Attached hereto are both FRWA reports.

On Page 6 of his testimony, Mr. McKeown discusses his concerns for the presence of a light gray to white clay like material often found in the system's aerator and states that this material is lime rock breakup within the Florida Aquifer and being pumped to the aerator from Well No. 2.

This statement by Mr. McKeown is sheer conjecture and guesswork with no basis for such an opinion. The more likely source of the light gray to white clay like material found in the aerator is the residue of granular chlorination of the ground storage tank which is sometimes performed by the Utility for disinfection of the raw water before it is treated and pumped.

Concerning Mr. McKeown's discussion of the requirement for the Utility to develop current and accurate water distribution system maps which were required by the

Partial Final Judgement, the following history of submittals of such maps to the best of my knowledge and belief is as follows:

1. August 31, 1992 - Two sets of maps submitted to FDEP for review with regard to requirements of PFJ.
2. Per telephone conversation with Cliff McKeown on September 2, 1992 confirmed in writing by letter dated September 10, 1992, our firm received FDEP review comments on the subject maps.
3. On August 24, 1993 two copies of the subject map were transmitted to FDEP with the remaining copies required by the PFJ being submitted to the Utility for distribution. During the period of time between September 10, 1992 and August 24, 1993, Baskerville-Donovan, Inc. coordinated collection of the additional information required for the maps and was also involved in negotiations with the Utility to secure payment for professional services associated with completing the maps.
4. On October 27, 1993 FDEP issued correspondence indicating a number of corrections that needed to be performed on the maps.
5. This firm has recently reached an agreement for payment of professional fees owed by the Utility to the firm and is proceeding with the completion of the maps, current and up to date according to the Utility's CIAC list dated May 18, 1994. We

estimate completion no later than July 31, 1994.

On Page 8 of his testimony, Mr. McKeown states that Well No. 3 exceeded the MCL for color. While Well No. 3 did initially fail the MCL for color, subsequent testing yielded results within the range of Department secondary standards.

Concerning Mr. McKeown's discussion on Page 9 of H_2S removal and this firm's report on the matter, I offer the following:

> The Department, as illustrated by the exhibits to the aerator analysis does not have a specific MCL for hydrogen sulfide in its drinking water standards. The subject analysis does discuss several sets of H_2S data, a portion of which was supplied by the Utility, and a portion collected independently.

Concerning Mr. McKeown's discussion on Page 11 of request for an operating scheme for the three wells, I offer the following:

> An operating scheme for the three supply wells was documented in the original construction permit application submitted to the Department, as well as by separate letter dated February 11, 1994. The proposed pumping scheme had been communicated to the Department in May, 1992, during the construction permitting phase.

Concerning Mr. McKeown's discussion on Page 12 of the aerator report, I offer the following:

The aerator report was submitted to the Department for review on August 24, 1993. Delay in its delivery was a direct result in prioritizing of Baskerville-Donovan, Inc.'s work effort by the Utility, and on-going negotiations by Baskerville-Donovan, Inc. with the Utility to secure payment for professional services rendered.

The Department provided review comments on the aerator report by letter dated November 18, 1993. For reasons previously cited with regard to contract negotiations with the Utility, Baskerville-Donovan, Inc. has not responded to those comments.

Since the recent agreement has been reached between the Utility and Baskerville-Donovan, Inc., a response to the Department's letter will be submitted no later than July 31, 1994.

With regard to the validity of the data submitted by the Utility's contract lab, we are not in a position to comment on the technique, accuracy or format of the lab results.

Q. After having reviewed all of the direct testimony filed by PSC staff witnesses Kintz and McKeown, have you changed any of the opinions or conclusions set forth in your engineering analysis, including the various

amendments?

A. No.

Q. Mr. McKeown indicated that the system map was filed late. When was it actually filed?

A. First submittal was August 31, 1992.

Q. Was this map based upon the best engineering information available at the time?

A. Yes.

Q. Is this normal, for a map to be filed and then updated and revised at later dates?

A. Yes for large systems.

Q. Regarding the aerator analysis, do you believe that it was deficient or defective?

A. No.

Q. Why not?

A. I have fully commented on the aerator analysis in my response above to Mr. McKeown's testimony.

Q. Has Baskerville-Donovan, Inc. updated and revised the map?

A. Yes, and it will be delivered to the Utility no later than July 31, 1994.

Q. Have you updated and revised the aerator analysis as requested by DEP?

A. It is being done now and will be delivered to the company by July 31,1994.

Q. What is the total amount of all professional fees charged to St. George Island Utility Company between January 1,

1992 and the current date?

A. Approximately $141,140

Q. Have these fees been paid, or have satisfactory arrangements been made for payment.

A. Approximately $59,542 has been paid with an agreement reached for payment over a period of time for the balance of $81,462.80.

Q. What would Baskerville-Donovan charge St. George Island Utility Company to revise and update its engineering analysis?

A. $24,400.00.

Q. What would this cover?

A. Update of the 1992 Capacity Analysis report extended through the year 2020.

Q. Was the St. George Island Utility system designed as a fire protection system?

A. No.

Q. On what do you base this conclusion?

A. Familiar with system since initial installation.

Q. What would Baskerville-Donovan charge the utility company for a complete fire protection analysis?

A. $30,000.

Q. What would this cover?

A. Complete study of alternative fire protection systems and costs estimates therefor.

Q. Based upon all that you know about the St. George Island Utility system, do you have an opinion as to whether it

is in compliance with all of the state statutes, rules and regulations administered by the Department of Environmental Protection?

A. Yes.

Q. What is that opinion?

A. Utility is in compliance except for completion of some minor items of consent order.

Q. Is there anything about the St. George Island Utility Company system that makes it unique from other systems?

A. Very unique system, long distance from supply wells, sparse widely separated connections in some areas, private wells allowed in some areas, long narrow island does not lend itself to economical looped systems, loose sand conditions predominate with high water table making construction and maintenance difficult. Beach homes are typically 3 or more stories above ground.

Q. Base on all that you know about St. George Island Utility Company, does it seem to be well managed?

A. Yes, reasonably so and much better in recent years.

Q. If the utility company is in compliance, how do you explain all of the problems that the utility company seems to be having with DEP?

A. The utility company is a growing highly visible utility serving a resort type community where complaints from customers seem to be very vocal, although mostly unfounded. Such complaints have regularly been made to the FDEP who are sensitive to public comments. Over the

years, it seems that the utility owner, Mr. Gene Brown has been viewed as in an adversarial role to FDEP to the point where he is personally disliked by the agency. During the last three years as the utility has attempted to make substantial improvements, our firm, as consulting engineer for the improvements, has experienced unusual resistance from the agency in obtaining approvals and permits, seemingly related to the agency's dislike for Gene Brown.

TED L. BIDDY, P.E. / P.L.S.
CIVIL ENGINEER

BASKERVILLE-DONOVAN, INC.

EDUCATION: Bachelor of Science, Civil Engineering
Georgia Institute of Technology, 1963

REGISTRATION: Professional Engineer, Florida No. 17656
Registered Engineer, Georgia 12609
Registered Engineer, Mississippi 3984
Registered Engineer, Louisiana 18431
Registered Land Surveyor, Florida No. 2658
Registered Land Surveyor, Mississippi No. 1429
Registered Land Surveyor, Georgia No. 1421

EXPERIENCE:

Mr. Biddy joined Baskerville-Donovan, Inc. (BDI) in 1991. He presently serves as the Tallahassee Regional Manager. Prior to joining BDI, Mr. Biddy operated his own civil engineering firm for 21 years, where he served as chief designer and project manager for over 1300 projects. Mr. Biddy's areas of expertise include civil engineering, structural engineering (including bridge design), sanitary engineering, soils and foundation engineering, and precise surveying.

Experience includes, but is not limited to:

• Site survey of hazardous waste site at Mt. Pleasant, FL - U.S. Environmental Protection Agency, Atlanta, GA.

• Design of containment facilities at hazardous waste storage site - FL Department of Environmental Regulation, Tallahassee, FL.

• Design of replacements for underground storage tanks including underground concrete vaults, piping, leak detection, etc. - U.S. West, DesMoins, IA.

• Complete design of 320 lot subdivision including water, sewer, streets, drainage, platting and surveying - Better Housing, Ltd., Tallahassee, FL.

• Complete design and platting of 9 subdivisions. - Leisure Properties, Tallahassee, FL

• 3-Year contract for tide gauge maintenance and surveying throughout Florida coastline - U.S. National Ocean Survey, Rockville, MD.

• Boundary maps for parcels in Taylor, Franklin, Dixie, Jefferson & Wakulla Counties, FL. - Florida Department of Natural Resources, Tallahassee, FL.

• 5-Miles of County road - Liberty County Board of County Commissioners, Bristol, FL.

• Surveys & structural design of 100-ft. calibration tower at St. George Island - General Dynamics, Pomona, CA.

• Complete design, construction, contract administration & inspection for marina in Carrabelle, FL - Anneewakee Foundation, Douglasville, GA.

• Pile cap designs for Apalachicola Bay Bridge, Apalachicola, FL - L&A General Contractors, Hattiesburg, MS.

• Cofferdams for sheet pile dolphins at Sunshine Skyway Bridge, Tampa, FL - H.G. Harders & Son, Inc. Panama City, FL.

• Pier 17, Cochrane Bridge, Mobile, AL - J.J. Grove & Son Company, Mobile, AL.

• Two 1-year survey contracts throughout Mobile District - Mobile District Corps of Engineers.

• Detailed drainage study, reports, & court appearances for 1,000 acres area west of Madison, FL - William Burnett.

• Detailed overall drainage study and report for City of Madison, FL and surrounding areas - City of Madison, FL.

• Drainage & flooding study for property near Madison, FL - William Kinner.

• Drainage and flooding study for shopping center complex in Live Oak, FL - Levis & Walter Lawson.

• Drainage, runoff & flooding studies, reports & permitting for commercial, industrial & residential facilities in Leon County - Numerous Clients.

• Drainage, runoff & flooding studies, reports, & permitting for recreational, commercial & residential projects on the Gulf Coast and at St. George Island, FL - Numerous Clients.

• Design & construction supervision of river barge terminal & support facilities - Jackson County Port Authority, Sneeds, FL.

• Design & construction supervision of bulk fertilizer unloading, conveying & storage facility & reclaim facility - MS Chemical Corporation.

• Complete design & construction supervision of 2.5 million dollar barge terminal port facility. - Jackson County Port Authority, Sneeds, FL.

• Master plan for complete development of 1500 acres property - Creare Corporation, Ocean Springs, MS.

• Master plan & scale model of 2000 acres planned unit development. Design & construction supervision of 150 acres first phase - Holiday Lakes, Inc., Eustis, FL.

• Planning, design & construction supervision of 220 lot mobile home park - Belle Aire Village, Tallahassee, FL.

• Preliminary engineering report for 420 acres industrial park - Apalachee Industries, Ltd., Tallahassee, FL.

• Planning & design of 130 acres subdivision. Planning & design of 35 acres subdivision. Property & topographic survey of 500 acres project. Planning & design of marina facilities. Planning for shopping center - Equity Resources, Inc., Tallahassee, FL.

• Property & topographic surveys and planning for 120 acres subdivision - Twin Lakes Development, Tallahassee, FL.

• Planning for 150 acres industrial park - Jackson County Port Authority, Marianna, FL.

• Property & topographic surveys, planning, & design of 110 acres subdivision - Panhandle Waterways, Ltd., Tallahassee, FL.

• Preliminary engineering report, topographic survey & feasibility report for sand mine and subdivision development on 200 acres tract - Gulf Land & Minerals, Ltd., Tallahassee, FL.

• Planning, design & receiving of construction bids for 13,200,000 tons per year coal unloading, conveying, storage, reclaim & shipping facility.

• One year long surveying contract for all types of surveying for 4-6 crews - U.S. Army Corps of Engineers Mobile, AL & Memphis, TN Districts.

• Cadastral & boundary surveys for numerous full sections throughout North Florida - St. Joe Paper Company, Port St. Joe, FL.

• Survey, plat, & designs for 1400 acre property in Franklin Co., FL - U.S. Home Corporation, Clearwater, FL.

• Civil engineering projects at 20 school locations - Leon County School Board, Tallahassee, FL.

• Planning & design of 4 mile water distribution system, Leon County, FL - Talquin Electric Coop, Inc., Tallahassee, FL.

• Design of over 100 steel buildings for this steel building manufacturer - Space Steel, Inc., Jackson, MS.

• Design of approximately 50 steel buildings for this prefabricated steel building manufacturer - Baywood Corporation, Hattiesburg, MS.

• Geometric analysis of 17 tainter gates at Robert S. Kerr Lock & Dam - Perini Corporation, Framingham, MA.

• Design & construction supervision of sewage collection system & sewage treatment plant. Preliminary designs & layouts for major shopping center mall in Leon County, FL - Culpepper Construction Company, Panama City, FL

• Land planning for subdivision development. Construction engineering consisting of quantity computations, and estimating for bidding purposes. Structural engineering for construction equipment - Harders Construction Company, Panama City, FL.

• Preliminary engineering report & investigations for repairs to major industrial building - Process Engineering Company, Jackson, MS.

• Preliminary engineering report & feasibility study for cement plant. Preliminary engineering report & feasibility study for 500,000 bushel grain terminal. Feasibility study for barge towing company.

• Preparation of oil spill protection and counter-measure plan - Escambia Treating Company, Pensacola, FL.

AFFILIATIONS:

Florida Engineering Society, Florida Society of Professional Land Surveyors, and National Society of Professional Engineers.

Rec'd 5/28/92
ltr

FLORIDA RURAL WATER ASSOCIATION
1391 TIMBERLANE ROAD • SUITE 104 • TALLAHASSEE, FL 32312
(904) 668-2746

St. George Island Hydraulic Analysis

The flow test performed at the utility consisted of monitoring the output of the high service pump and master meter by utilizing a Polysonics Tyme Flight strap-on meter. Signal strength and accuracy were checked and good. The test was conducted from 18:03 on May 23, 1992 until 12:03 on May 25, 1992 to cover the heavy use period on Memorial Day weekend. The amount of people visiting the island was very high. The stores ran out of ice, the hotels were booked and the state park recorded its largest number of people ever to the knowledge of the park manager (4,187 people on Sunday, May 24.)

Pressure recorders were placed at the far ends of the distribution at Mr. Cozy's home near the cut at St. George Plantation (7.8 miles from the water tank), and at the state park on the east end of the island (4.5 Miles from the water tank.) The pressure charts and strip charts for the flow meter are attached as part this report.

A separate test on flow to the aerator from the wells was performed on the bridge coming onto the island 1 mile from the water tank. The well pumps were tested running together and independently. Both well pumps running together were averaging 410 gallons per minute. The number 2 well pump averaged 310 gpm. The number 1 well pump averaged 265 gpm.

The flow test at the high service pump/meter site ran from 18:03 on May 23, 1992 until 12:03 on May 25, 1992. The maximum amount pumped over a 24 hour period during this time was 435,200 gallons. This occurred from 18:03 on May 24 until 18:03 on May 25. The minimum amount pumped in 24 hours was 337,400 from 18:03 on May 22 to 18:03 on May 23. Because flows were logged every hour during the test, 43 time periods of 24 hours can be calculated. The

average 24 hour flow is 401,211 gallons or 279 gallons per minute. During each hour of the flow test the high service pump on/off status was recorded. The pump was on 26 times and off 41 times when checked hourly. Of the 26 "instantaneous" recordings of the high service pump, the maximum output was 719 gallons per minute. The minimum output was 633 gpm. The average was 680 gpm. The St. George Island Utility meter was reading 6% high. The pressure test was conducted at both ends of the utilities distribution and observed at the tank between the sampling points. There was approximately 12.3 miles from the sampling point at St. George Plantation (Mr. Cozy's house) to the sampling site at the state park. For time and pressure analysis, please observe the chart recordings.

Hank Garrett of SGI utilities helped Florida Rural Water during the testing of the Memorial Day holiday.

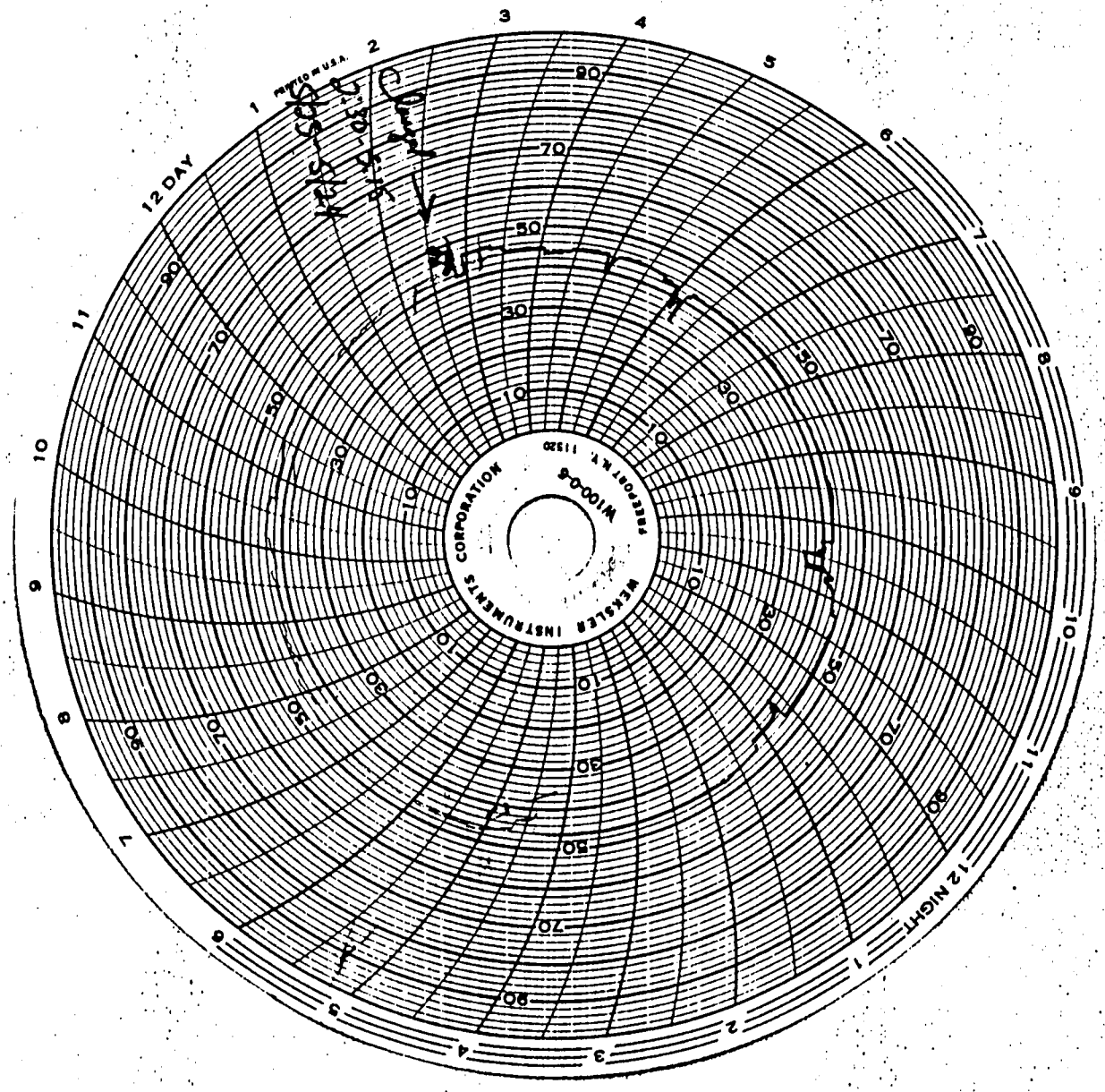
Sincerely,

Richard S. Herndon

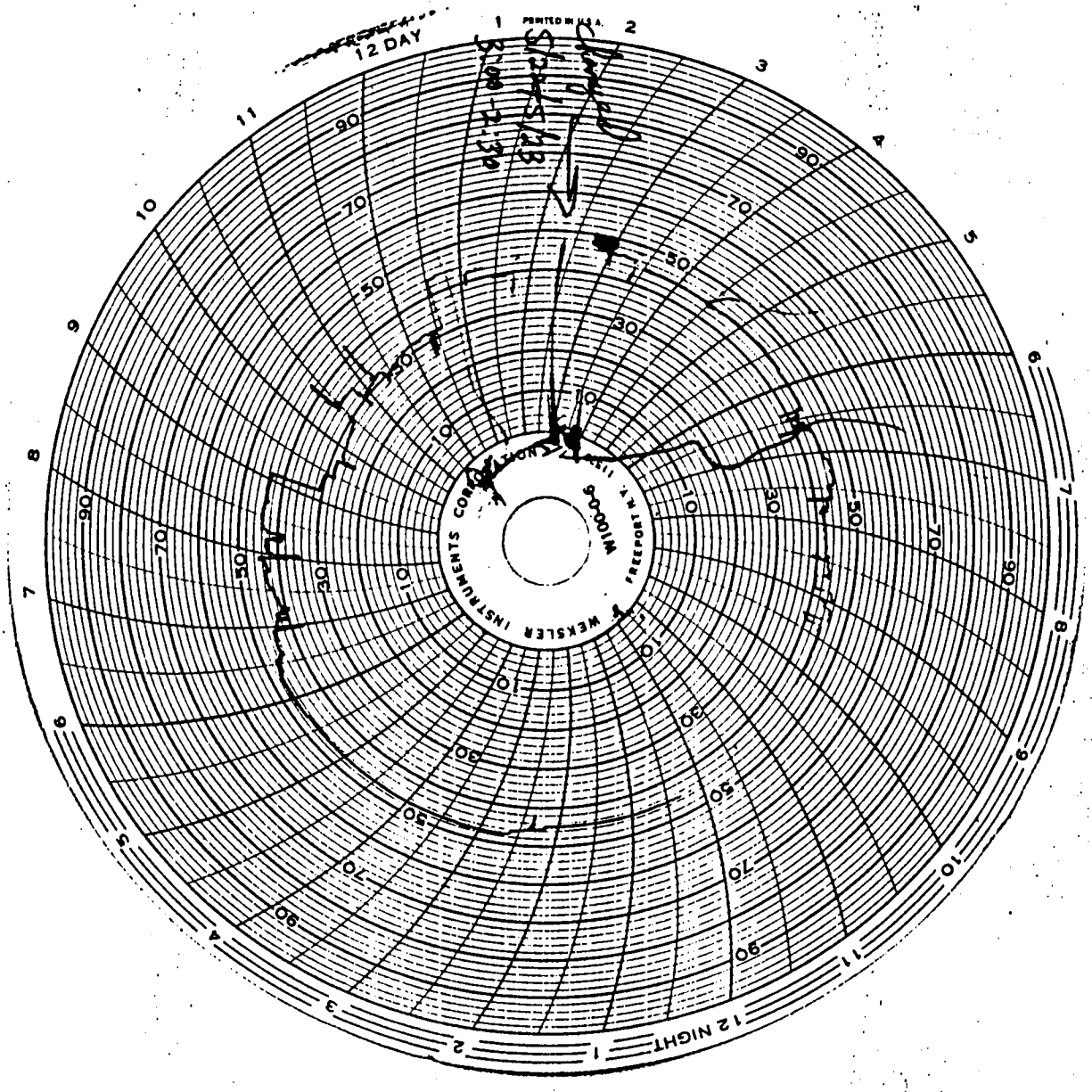
Rick Herndon

DATE	TIME	FLOW FOR PREVIOUS 24 HOURS	DATE	TIME	FLOW FOR PREVIOUS 24 HOURS
5/23	18:03	337,400	5/24	16:03	429,200
	19:03	375,800		17:03	403,700
	20:03	362,300		18:03	435,200
	21:03	394,700		19:03	406,100
	22:03	377,800		20:03	430,200
	24:03	406,500		21:03	400,200
5/24	00:03	383,900		22:03	420,400
	01:03	386,500		23:03	391,700
	02:03	407,900	5/25	00:03	417,100
	03:03	400,300		01:03	414,500
	04:03	385,700		02:03	393,100
	05:03	409,200		03:03	393,100
	06:03	409,200		04:03	415,600
	07:03	383,600		05:03	392,100
	08:03	415,400		06:03	392,100
	09:03	387,000		07:03	412,800
	10:03	420,500		08:03	389,600
	11:03	388,100		09:03	418,500
	12:03	422,600		10:03	399,800
	13:03	390,000		11:03	423,700
	14:03	424,700		12:03	409,200
	15:03	395,100			

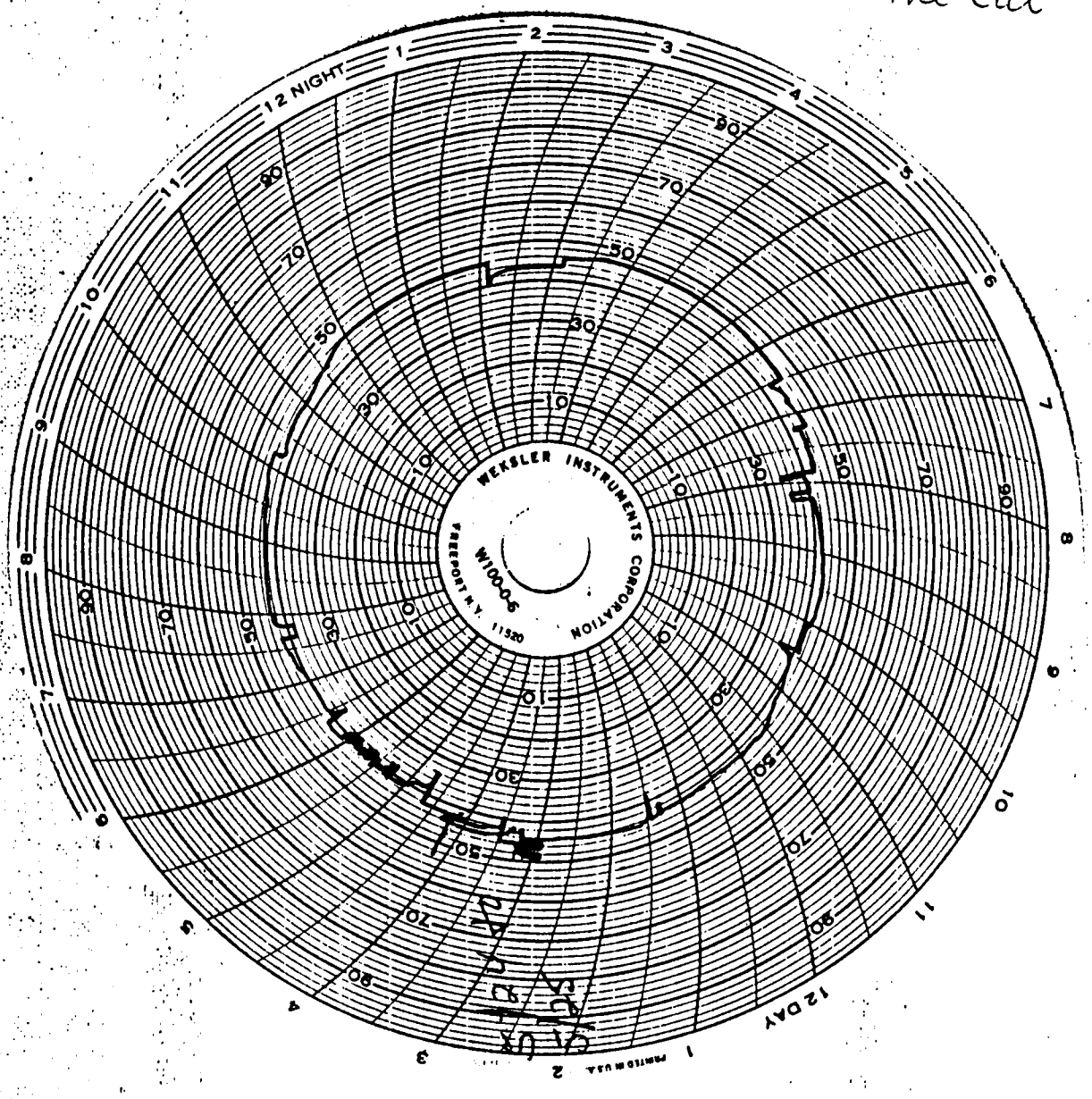
Mr. Cozy's
"The Cut"



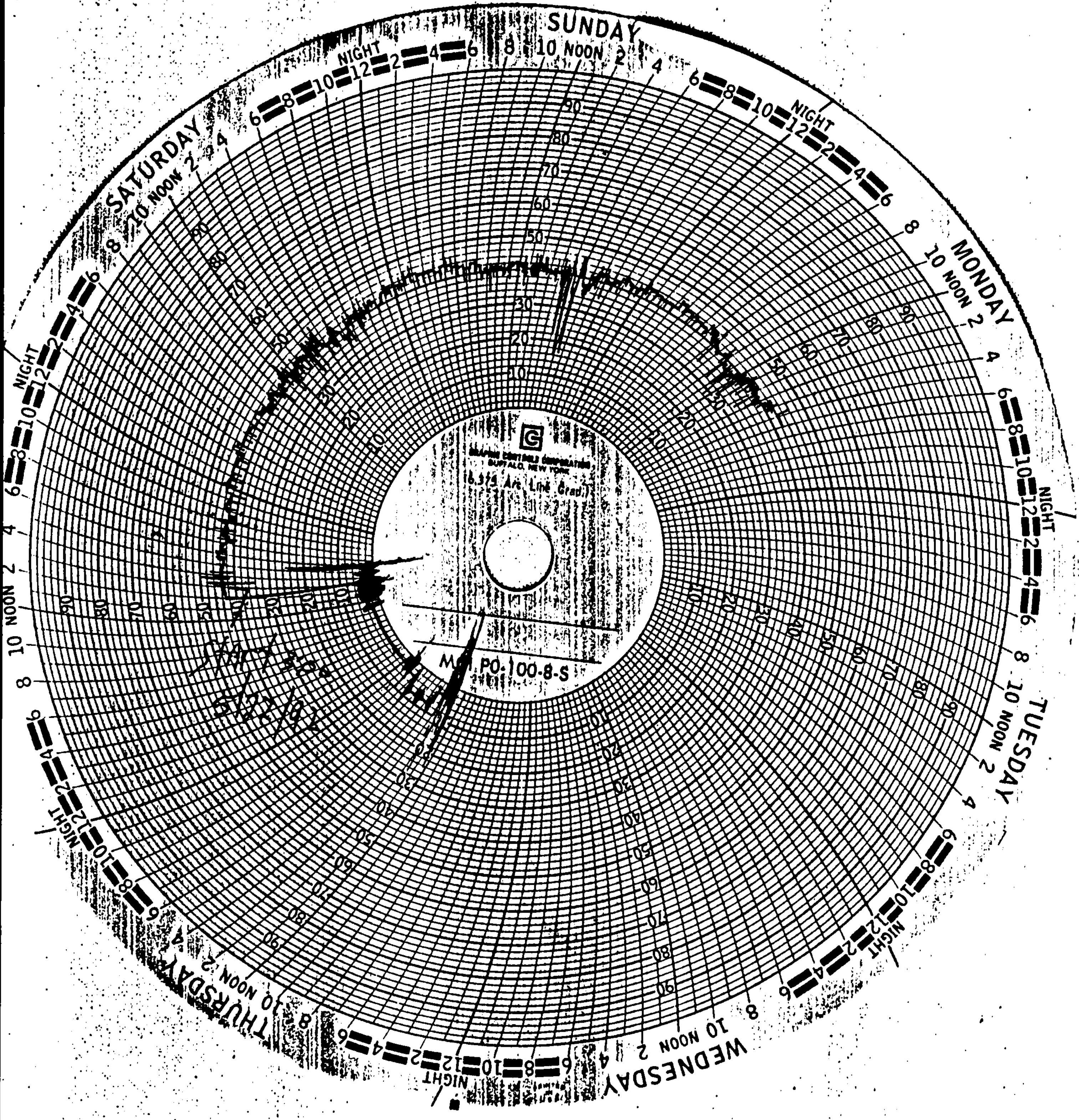
Mr. Cozy's
"The Cat"



Mr. Cozzy
"The Cut"



State Park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+000.00% AI1 00R
+002.50% AI2 00R

01:03+ 0.000E 0GPM 00R
OFF +00938 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

[illegible]:03+ 0.000E 0GPM 00R
OFF +00938 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

[illegible]:03+660.694E 0GPM 00R
ON +01014 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

[illegible]:03+ 0.000E 0GPM 00R
OFF +01160 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

[illegible]:03+ 0.000E 0GPM 00R
OFF +01160 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

06:03+ 0.000E 0GPM 00R
OFF +01160 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

ON +01416 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

08:03+ 0.000E 0GPM 00R
OFF +01421 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

09:03+651.712E 0GPM 00R
ON +01751 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

10:03+ 0.000E 0GPM 00R
OFF +01820 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

11:03+666.242E 0GPM 00R
ON +02193 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

12:03+ 0.000E 0GPM 00R
OFF +02239 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

13:03+695.036E 0GPM 00R
ON +02565 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

14:03+ 0.000E 0GPM 00R
OFF +02591 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

15:03+671.789E 0GPM 00R
ON +02894 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

16:03+ 0.000E 0GPM 00R
OFF +02932 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

17:03+690.545E 0GPM 00R
ON +03307 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

18:03+712.736E 0GPM 00R
ON +03398 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

19:03+681.828E 0GPM 00R
ON +03804 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

20:03+ 0.000E 0GPM 00R
OFF +03967 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

21:03+678.393E 0GPM 00R
ON +04291 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

22:03+ 0.000E 0GPM 00R
OFF +04447 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

23:03+692.923E 0GPM 00R
ON +04734 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

23

00:03+ 0.000E 0GPM 00R
OFF +04777 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

01:03+719.340E 0GPM 00R
ON +04803 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

02:03+ 0.000E 0GPM 00R
OFF +05017 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

03:03+ 0.000E 0GPM 00R
OFF +05017 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

04:03+ 0.000E 0GPM 00R
OFF +05017 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

05:03+ 0.000E 0GPM 00R
OFF +05252 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

06:03+ 0.000E 0GPM 00R
OFF +05252 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

07:03+ 0.000E 0GPM 00R
OFF +05252 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

08:03+683.941E 0GPM 00R
ON +05575 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

09:03+687.375E 0GPM 00R
ON +05621 *10E 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

10:03+686.054E 0GPM 00R
ON +06025 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

11:03+ 0.000E 0GPM 00R
OFF +06074 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

12:03+ 0.000E 0GPM 00R
OFF +06465 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

13:03+ 0.000E 0GPM 00R
OFF +06465 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

14:03+679.450E 0GPM 00R
ON +06838 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

15:03+ 0.000E 0GPM 00R
OFF +06845 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

16:03+636.390E 0GPM 00R
ON +07224 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

17:03+667.298E 0GPM 00R
ON +07344 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

18:03+671.789E 0GPM 00R
ON +07750 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

19:03+673.903E 0GPM 00R
ON +07865 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

20:03+712.736E 0GPM 00R
ON +08269 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

21:03+698.471E 0GPM 00R
ON +08293 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

22:03+ 0.000E 0GPM 00R
OFF +08651 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

23:03+ 0.000E 0GPM 00R
OFF +08651 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

5/5

00:03+ 0.000E 0GPM 00R
OFF +08948 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

01:03+ 0.000E 0GPM 00R
OFF +08948 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

02:03+ 0.000E 0GPM 00R
OFF +08948 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

03:03+ 0.000E 0GPM 00R
OFF +08948 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

04:03+ 0.000E 0GPM 00R
OFF +09173 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

05:03+ 0.000E 0GPM 00R
OFF +09173 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

06:03+ 0.000E 0GPM 00R
OFF +09173 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

07:03+680.507E 0GPM 00R
ON +09380 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

08:03+ 0.000E 0GPM 00R
OFF +09471 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

09:03+677.337E 0GPM 00R
ON +09806 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

10:03+ 0.000E 0GPM 00R
OFF +00023 *100 G 00R
-00000 *100 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

11:03+672.846E 0GPM 0
ON +00311 *100 G 0
-00000 *100 G 0
+000.00% AI1 0
+002.50% AI2 0

12:03+ 0.000E 0GPM 0
OFF +00557 *100 G 0
-00000 *100 G 0
+000.00% AI1 0
+002.50% AI2 0

14:11-416.335E 0GPM 00R
+00000 *G 00R
-00000 *G 00R
+000.00% AI1 00R
+002.40% AI2 00R

BOTH ON

14:12-408.410E 0GPM 00R
+00000 *10 G 00R
-00000 *10 G 00R
+000.00% AI1 00R
+002.40% AI2 00R

14:13-405.240E 0GPM 00R
+00000 *10 G 00R
-00000 *10 G 00R
+000.00% AI1 00R
+002.40% AI2 00R

14:14-428.222E 0GPM 00R
+00000 *10 G 00R
-00030 *10 G 00R
+000.00% AI1 00R
+002.40% AI2 00R

14:15-416.335E 0GPM 00R
+00000 *10 G 00R
-00070 *10 G 00R
+000.00% AI1 00R
+002.40% AI2 00R

14:16-431.393E 0GPM 00R
+00000 *10 G 00R
-00112 *10 G 00R
+000.00% AI1 00R
+002.40% AI2 00R

14:17-389.389E 0GPM 00R
+00000 *10 G 00R
-00152 *10 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

14:18-406.296E 0GPM 00R
+00000 *10 G 00R
-00194 *10 G 00R
+000.00% AI1 00R
+002.40% AI2 00R

14:19-408.410E 0GPM 00R
+00000 *10 G 00R
-00235 *10 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

14:20-395.729E 0GPM 00R
+00000 *10 G 00R
-00276 *10 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

14:21-416.335E 0GPM 00R
+00000 *10 G 00R
-00317 *10 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

14:22-158.767E 0GPM 00R
+00000 *10 G 00R
-00348 *10 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

OFF

14:23- 70.005E 0GPM 00R
+00000 *10 G 00R
-00358 *10 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

14:24- 41.210E 0GPM 00R
+00000 *10 G 00R
-00366 *10 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

14:26- 13.472E 0GPM 00R
+00000 *10 G 00R
-00368 *10 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

14:27- 23.511E 0GPM 00R
+00000 *10 G 00R
-00369 *10 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

14:28- 13.472E 0GPM 00R
+00000 *10 G 00R
-00371 *10 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

14:30- 17.699E 0GPM 00R
+00000 *10 G 00R
-00373 *10 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

14:31- 18.756E 0GPM 00R
+00000 *10 G 00R
-00374 *10 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

14:32- 19.812E 0GPM 00R
+00000 *10 G 00R
-00376 *10 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

14:33-331.271E 0GPM 00R
+00000 *10 G 00R
-00400 *10 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

#2

14:34-300.363E 0GPM 00R
+00000 *10 G 00R
-00432 *10 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

14:35-301.420E 0GPM 00R
+00000 *10 G 00R
-00463 *10 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

14:36-305.647E 0GPM 00R
+00000 *10 G 00R
-00494 *10 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

14:37-299.306E 0GPM 00R
+00000 *10 G 00R
-00525 *10 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

14:38-299.306E 0GPM 00R
+00000 *10 G 00R
-00556 *10 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

14:39-145.030E 0GPM 00R
+00000 *10 G 00R
-00586 *10 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

OFF

14:41- 47.550E 0GPM 00R
+00000 *10 G 00R
-00598 *10 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

14:42- 35.399E 0GPM 00R
+00000 *10 G 00R
-00602 *10 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

14:43-279.494E 0GPM 00R
+00000 *10 G 00R
-00623 *10 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

#1 ON

14:44-269.455E 0GPM 00R
+00000 *10 G 00R
-00650 *10 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

14:45-252.548E 0GPM 00R
+00000 *10 G 00R
-00677 *10 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

14:46-278.437E 0GPM 00R
+00000 *10 G 00R
-00702 *10 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

14:47-260.473E 0GPM 00R
+00000 *10 G 00R
-00729 *10 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

OFF

14:48-244.623E 0GPM 00R
+00000 *10 G 00R
-00755 *10 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

14:49-133.142E 0GPM 00R
+00000 *10 G 00R
-00777 *10 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

14:50- 73.175E 0GPM 00R
+00000 *10 G 00R
-00787 *10 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

14:51- 49.664E 0GPM 00R
+00000 *10 G 00R
-00793 *10 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

14:52- 35.399E 0GPM 00R
+00000 *10 G 00R
-00797 *10 G 00R
+000.00% AI1 00R
+002.50% AI2 00R

14:53- 26.681E 0GPM 00R
+00000 *10 G 00R

wells

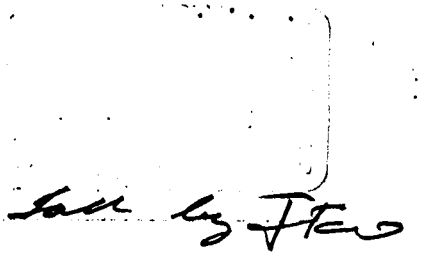
St. George Island Water Utility Review

On July 3,4,5, 1992 the Florida Rural Water Association completed flow and pressure testing activities for St. George Island Water Utility. These tests include the flow on the raw water line just prior to aerator and flow on the finish water line next to high service pumps. Chart records were placed at both ends of the utility distribution system and on a house located on a 2" main to record system pressure. An activity recorder was hooked into the high service pump circuits to record on a chart when pumps were on and when they were off.

The following is the results of these tests and supporting material.

1) The 8" PVC - C900 line was exposed to provide access for the FRWA Polysonics TF-P Ultrasonic flow tester. (In our last trip to the island, we hooked the unit to a dead 8" line in the same excavation, and couldn't get a flow or signal.) This application provided an excellent location, signal strength, accuracy, and consistent flow. The unit needs a signal strength over 2.0 (we had 2.8) and full pipe of constant flow (which we had) and an accuracy between 98% and 102% (we had 99.14%). We ran the test twice between 4:30 p.m. and 6:00 p.m., July 3, 1992. The integrator function on the flow meter was set to get total gallons. This number then allows us to divide the number of minutes test ran to get on average gallon per minute flow.

7/3/92	Gallons	GPM
16:55	980	
16:56	1480	500
16:57	1980	500
16:58	2480	500
16:59	2970	490
17:00	3470	500
17:01	3980	510
17:02	4480	500
17:03	4980	500
17:04	5480	500
17:05	5980	500
17:06	Well Off	
17:35	Well On (0)	
17:36	490	490
17:37	1000	510
17:38	1500	500
17:39	2000	500
17:40	2500	500
17:41	3000	500
17:42	3500	500
17:43	4010	510
17:44	4500	490
17:45	5000	500
17:46	5510	510
17:47	6010	500
17:48	6500	490
17:49	7010	510
	Average =	500 gpm



See charts #1 and #2

2) A measurement of flow was taken at the high service pump location on the 12" line. At this location we had good flow, good signal strength (2.40%), just under 98% (97.5%) accuracy. We were unable to get a higher accuracy figure. (We suspect encrustation, or perhaps an obstruction in a valve or tee.) Therefore, these figures may not be perfectly accurate, so use as best estimate. The unit printed out flows every 10 minutes starting at 6:37 p.m., 7/3/92 until 4:37 a.m., 7/4/92.

The following is an understanding of the printout:

18:47	- 26.417	GPM	OOR
	+ 00015	*10G	OOR
	- 00024	*10G	OOR
	+ 002.40%	A12	OOR

18:47 Military time

- 26.417 Gallon per minute flow instantous a 18:47
  (-) negative number means reverse flow
  (check valve on high service pump is not closing totally off)

+ 00015 *10G Integrated flow since unit started printing out, Positive flow, 15 gallons x 10= 150 gallons

- 00024 *10G Integrated flow since unit started printing out, Negative flow, 24 gallons x 10= 240 gallons

+ 002.40% A12 Signal strength

OOR Acceptable flow - non-aerated

See chart #3

3) A measurement of flow at the same high service pump location was done each hour from 9:00 a.m. to 7:06 p.m. on 7/4/92.

The same parameter and data were recorded except the addition of feet per second was added:

+ 2.057E OFPS (feet per second) OOR

Again, the accuracy was only 97.58%

See chart #4

4) An activity Recorder was set-up and recorded high service pump activity from 7/3/92 to 7/5/92.

The line closest to the outside of the chart shows when the pump are off. The inside line shows when the pumps are running. The uneven, blotched lines are results of loading and unloading the charts.

See charts #5 and #6

5) The following is a chart of pressure recording data location close to the entrance of the state park. (It should be noted that Bruce Tyce of St. George Island State Park told Hank Garrett, SCI Utility and Gary Williams, FRWA, that the pressure recorder setting on Memorial Day weekend was tampered with by state park employees.) Therefore, we moved recorder location to area not accessible by people wanting to tamper with the equipment.

See chart #7

6) The following are charts that show pressure at 573 W. Gorrie Drive, from 7/3 to 7/4 (Chart #8) and 7/4 to 7/5 (Chart #9).

7) The following are charts that show pressure at location in the Plantation towards the end of distribution system.

See chart #10 7/3/92 to 7/4/92

(This chart stopped advancing by only dropped to 44psi in that time.)

See chart #11 7/4/92 to 7/5/92

It should be noted that the Utility had its Peak Day for water usage on Saturday, July 4, 1992, at 449,000 gallons used.

If any additional information is needed or questions arise upon review of this data, please do not hesitate to contact Gary Williams at (800) 872-8207.

IN U

OUTER DIAMETERL1
8.6248 IN

PIPE MATERIAL L1
PVC

WALL THICKNESSL1
0.4059 IN

INNER LINING L1
NO LING.

LING. THICKNESL1
0.0000 IN

KIND OF FLUID L1
WATER

SENSOR MOUNTINL1
V

TYPE OF SENSORL1
SMALL

SPACING L1
6.272 IN V

8" PVC Line - into the Plant
Unit Accuracy - 99.14%
#1

16:55+498.492E 0GPM 00R
+00098 *10 G 00R
-00000 *10 G 00R
+002.80% AI2 00R

16:56+507.210E 0GPM 00R
+00148 *10 G 00R
-00000 *10 G 00R
+002.80% AI2 00R

16:57+495.058E 0GPM 00R
+00198 *10 G 00R
-00000 *10 G 00R
+002.80% AI2 00R

16:58+485.548E 0GPM 00R
+00248 *10 G 00R
-00000 *10 G 00R
+002.80% AI2 00R

16:59+496.379E 0GPM 00R
+00297 *10 G 00R
-00000 *10 G 00R
+002.80% AI2 00R

17:00+500.341E 0GPM 00R
+00347 *10 G 00R
-00000 *10 G 00R
+002.80% AI2 00R

17:01+492.152E 0GPM 00R
+00398 *10 G 00R
-00000 *10 G 00R
+002.80% AI2 00R

17:02+511.701E 0GPM 00R
+00448 *10 G 00R
-00000 *10 G 00R
+002.80% AI2 00R

17:03+488.982E 0GPM 00R
+00498 *10 G 00R
-00000 *10 G 00R
+002.80% AI2 00R

17:04+499.021E 0GPM 00R
+00548 *10 G 00R
-00000 *10 G 00R
+002.80% AI2 00R

17:05+496.379E 0GPM 00R
+00598 *10 G 00R
-00000 *10 G 00R
+002.80% AI2 00R

17:06+326.252E 0GPM 00R
+00632 *10 G 00R
-00000 *10 G 00R
+002.80% AI2 00R

17:07+312.251E 0GPM 00R
+00664 *10 G 00R
-00000 *10 G 00R
+002.80% AI2 00R

17:08+160.616E 0GPM 00R
+00690 *10 G 00R
-00000 *10 G 00R
+002.80% AI2 00R

17:09+ 63.137E 0GPM 00R
+00700 *10 G 00R
-00000 *10 G 00R
+002.80% AI2 00R

17:10+ 25.360E 0GPM 00R
+00704 *10 G 00R
-00000 *10 G 00R
+002.80% AI2 00R

17:11+ 6.340E 0GPM 00R
+00706 *10 G 00R
-00000 *10 G 00R
+002.80% AI2 00R

17:12+ 0.000E 0GPM 00R
+00706 *10 G 00R
-00000 *10 G 00R
+002.80% AI2 00R

17:13+ 0.000E 0GPM 00R
+00706 *10 G 00R
-00000 *10 G 00R
+002.80% AI2 00R

17:14+ 0.000E 0GPM 00R
+00706 *10 G 00R
-00000 *10 G 00R
+002.80% AI2 00R

17:15+ 0.000E 0GPM 00R
+00706 *10 G 00R
-00000 *10 G 00R
+002.80% AI2 00R

17:16+ 0.000E 0GPM 00R
+00706 *10 G 00R
-00000 *10 G 00R
+002.80% AI2 00R

OUTER DIAMETERL1
8.6248 IN

PIPE MATERIAL L1
PVC

WALL THICKNESSL1
0.4059 IN

INNER LINING L1
NO LING.

LING. THICKNESL1
0.0000 IN

KIND OF FLUID L1
WATER

SENSOR MOUNTINL1
U

TYPE OF SENSORL1
SMALL

SPACING L1
6.272 IN U

99.19 % Accurate

#2

17:35+512.229E 0GPM 00R
+00000 *10 G 00R
-00000 *10 G 00R
+002.80% AI2 00R

17:36+521.475E 0GPM 00R
+00049 *10 G 00R
-00000 *10 G 00R
+002.80% AI2 00R

17:37+519.098E 0GPM 00R
+00100 *10 G 00R
-00000 *10 G 00R
+002.80% AI2 00R

17:38+513.022E 0GPM 00R
+00150 *10 G 00R
-00000 *10 G 00R
+002.80% AI2 00R

17:39+473.924E 0GPM 00R
+00200 *10 G 00R
-00000 *10 G 00R
+002.80% AI2 00R

17:40+500.870E 0GPM 00R
+00250 *10 G 00R
-00000 *10 G 00R
+002.80% AI2 00R

17:41+514.078E 0GPM 00R
+00300 *10 G 00R
-00000 *10 G 00R
+002.80% AI2 00R

17:42+490.567E 0GPM 00R
+00350 *10 G 00R
-00000 *10 G 00R
+002.80% AI2 00R

17:43+512.229E 0GPM 00R
+00401 *10 G 00R
-00000 *10 G 00R
+002.80% AI2 00R

17:44+494.530E 0GPM 00R
+00450 *10 G 00R
-00000 *10 G 00R
+002.80% AI2 00R

17:45+485.284E 0GPM 00R
+00500 *10 G 00R
-00000 *10 G 00R
+002.80% AI2 00R

17:46+498.492E 0GPM 00R
+00551 *10 G 00R
-00000 *10 G 00R
+002.80% AI2 00R

17:47+502.719E 0GPM 00R
+00601 *10 G 00R
-00000 *10 G 00R
+002.80% AI2 00R

17:48+493.473E 0GPM 00R
+00650 *10 G 00R
-00000 *10 G 00R
+002.80% AI2 00R

17:49+504.832E 0GPM 00R
+00701 *10 G 00R
-00000 *10 G 00R
+002.80% AI2 00R

18:37+679.978E 0GPM 00R
+00000 *10 G 00R
-00000 *10 G 00R
+002.40% AI2 00R

OUTER DIANETERL1
13.2000 IN

PIPE MATERIAL L1
AL,DI

WALL THICKNESSL1
0.5000 IN

INNER LINING L1
MORTAR

LING. THICKNESL1
0.1000 IN

KIND OF FLUID L1
WATER

SENSOR MOUNTINL1
U

TYPE OF SENSORL1
SMALL

SPACING L1
10.677 IN U

18:47- 26.417E 0GPM 00R
+00015 *10 G 00R
-00024 *10 G 00R
+002.40% AI2 00R

18:57- 19.548E 0GPM 00R
+00015 *10 G 00R
-00048 *10 G 00R
+002.40% AI2 00R

19:07- 19.548E 0GPM 00R
+00015 *10 G 00R
-00072 *10 G 00R
+002.40% AI2 00R

19:17- 29.851E 0GPM 00R
+00015 *10 G 00R
-00096 *10 G 00R
+002.40% AI2 00R

19:27- 22.982E 0GPM 00R
+00015 *10 G 00R
-00119 *10 G 00R
+002.40% AI2 00R

19:37+713.264E 0GPM 00R
+00381 *10 G 00R
-00131 *10 G 00R
+002.40% AI2 00R

19:47+690.281E 0GPM 00R
+01099 *10 G 00R
-00131 *10 G 00R
+002.40% AI2 00R

19:57+724.888E 0GPM 00R
+01819 *10 G 00R
-00131 *10 G 00R
+002.40% AI2 00R

20:07+713.264E 0GPM 00R
+02536 *10 G 00R
-00131 *10 G 00R
+002.40% AI2 00R

20:17+707.717E 0GPM 00R
+03239 *10 G 00R
-00131 *10 G 00R
+002.40% AI2 00R

20:[illegible] +738.911E 0GPM 00R
[illegible] +03941 *10 G 00R
-00131 *10 G 00R
+002.40% AI2 00R

20:37- 24.039E 0GPM 00R
+04118 *10 G 00R
-00150 *10 G 00R
+002.40% AI2 00R

20:47- 21.926E 0GPM 00R
+04118 *10 G 00R
-00174 *10 G 00R
+002.40% AI2 00R

20:57- 24.039E 0GPM 00R
+04118 *10 G 00R
-00197 *10 G 00R
+002.40% AI2 00R

21:07- 27.738E 0GPM 00R
+04118 *10 G 00R
-00221 *10 G 00R
+002.40% AI2 00R

21:17- 22.982E 0GPM 00R
+04118 *10 G 00R
-00245 *10 G 00R
+002.40% AI2 00R

21:27- 25.360E 0GPM 00R
+04118 *10 G 00R
-00268 *10 G 00R
+002.40% AI2 00R

21:37+722.774E 0GPM 00R
+04766 *10 G 00R
-00270 *10 G 00R
+002.40% AI2 00R

21:47+698.471E 0GPM 00R
+05483 *10 G 00R
-00270 *10 G 00R
+002.40% AI2 00R

21:57+704.018E 0GPM 00R
+06194 *10 G 00R
-00270 *10 G 00R
+002.40% AI2 00R

22:07+690.281E 0GPM 00R
+06904 *10 G 00R
-00270 *10 G 00R
+002.40% AI2 00R

22:17+698.471E 0GPM 00R
+07610 *10 G 00R
-00270 *10 G 00R
+002.40% AI2 00R

22:27- 18.492E 0GPM 00R
+03103 *10 G 00R
-00278 *10 G 00R
+002.40% AI2 00R

22:37- 21.926E 0GPM 00R
+08103 *10 G 00R
-00303 *10 G 00R
+002.40% AI2 00R

22:47- 26.417E 0GPM 00R
+08103 *10 G 00R
-00326 *10 G 00R
+002.40% AI2 00R

22:57- 31.172E 0GPM 00R
+08103 *10 G 00R
-00349 *10 G 00R
+002.40% AI2 00R

23:07- 28.794E 0GPM 00R
+08103 *10 G 00R
-00373 *10 G 00R
+002.40% AI2 00R

23:17- 21.926E 0GPM 00R
+08103 *10 G 00R
-00397 *10 G 00R
+002.40% AI2 00R

23:27- 21.926E 0GPM 00R
+08103 *10 G 00R
-00420 *10 G 00R
+002.40% AI2 00R

23:37+693.715E 0GPM 00R
+08388 *10 G 00R
-00434 *10 G 00R
+002.40% AI2 00R

23:47+721.454E 0GPM 00R
+09102 *10 G 00R
-00434 *10 G 00R
+002.40% AI2 00R

23:57+693.715E 0GPM 00R
+09815 *10 G 00R
-00434 *10 G 00R
+002.40% AI2 00R

00:07+696.093E 0GPM 00R
+00523 *10 G 00R
-00434 *10 G 00R
+002.40% AI2 00R

00:17- 22.982E 0GPM 00R
+01045 *10 G 00R
-00441 *10 G 00R
+002.40% AI2 00R

00:27- 29.851E 0GPM 00R
+01045 *10 G 00R
-00466 *10 G 00R
+002.40% AI2 00R

00:37- 20.605E 0GPM 00R
+01045 *10 G 00R
-00490 *10 G 00R
+002.40% AI2 00R

00:47- 20.605E 0GPM 00R
+01045 *10 G 00R
-00514 *10 G 00R
+002.40% AI2 00R

00:57- 28.794E 0GPM 00R
+01045 *10 G 00R
-00537 *10 G 00R
+002.40% AI2 00R

01:07- 19.548E 0GPM 00R
+01045 *10 G 00R
-00561 *10 G 00R
+002.40% AI2 00R

01:17- 24.039E 0GPM 00R
+01045 *10 G 00R
-00584 *10 G 00R
+002.40% AI2 00R

01:27- 19.548E 0GPM 00R
+01045 *10 G 00R
-00608 *10 G 00R
+002.40% AI2 00R

01:37- 27.738E 0GPM 00R
+01045 *10 G 00R
-00631 *10 G 00R
+002.40% AI2 00R

[illegible] 00R
-00655 *10 G 00R
+002.40% AI2 00R

01:57- 18.492E 0GPM 00R
+01045 *10 G 00R
-00679 *10 G 00R
+002.40% AI2 00R

02:07- 27.738E 0GPM 00R
+01045 *10 G 00R
-00704 *10 G 00R
+002.40% AI2 00R

02:17- 27.738E 0GPM 00R
+01045 *10 G 00R
-00729 *10 G 00R
+002.40% AI2 00R

02:27- 29.851E 0GPM 00R
+01045 *10 G 00R
-00755 *10 G 00R
+002.40% AI2 00R

02:37- 33.285E 0GPM 00R
+01045 *10 G 00R
-00781 *10 G 00R
+002.40% AI2 00R

02:47+719.076E 0GPM 00R
+01570 *10 G 00R
-00787 *10 G 00R
+002.40% AI2 00R

02:57+705.339E 0GPM 00R
+02282 *10 G 00R
-00787 *10 G 00R
+002.40% AI2 00R

03:07+702.961E 0GPM 00R
+02992 *10 G 00R
-00787 *10 G 00R
+002.40% AI2 00R

03:17- 32.228E 0GPM 00R
+03476 *10 G 00R
-00794 *10 G 00R
+002.40% AI2 00R

03:27- 20.605E 0GPM 00R
+03476 *10 G 00R
-00819 *10 G 00R
+002.40% AI2 00R

03:37- 25.360E 0GPM 00R
+03476 *10 G 00R
-00844 *10 G 00R
+002.40% AI2 00R

03:47- 20.605E 0GPM 00R
+03476 *10 G 00R
-00868 *10 G 00R
+002.40% AI2 00R

03:57- 26.417E 0GPM 00R
+03476 *10 G 00R
-00891 *10 G 00R
+002.40% AI2 00R

04:07- 26.417E 0GPM 00R
+03476 *10 G 00R
-00915 *10 G 00R
+002.40% AI2 00R

04:17- 26.417E 0GPM 00R
+03476 *10 G 00R
-00938 *10 G 00R
+002.40% AI2 00R

04:27- 19.548E 0GPM 00R
+03476 *10 G 00R
-00962 *10 G 00R
+002.40% AI2 00R

04:37- 26.417E 0GPM 00R
+03476 *10 G 00R
-00985 *10 G 00R

7/4 - 7/5 '92

OUTER DIAMETERL1
13.2000 IN

PIPE MATERIAL L1
AL,DI

WALL THICKNESSL1
0.5000 IN

INNER LINING L1
MORTAR

LING. THICKNESL1
0.1000 IN

KIND OF FLUID L1
WATER

SENSOR MOUNTING L1
U

TYPE OF SENSORL1
SMALL

SPACING L1
10.677 IN U

#4

Under 98% accurate

09:06+724.888E 0GPM 00R
+ 2.057E 0FPS 00R
+00000 *10 G 00R
-00000 *10 G 00R
+002.40% AI2 00R

10:06+715.642E 0GPM 00R
+ 2.030E 0FPS 00R
+01158 *10 G 00R
-00000 *10 G 00R
+002.40% AI2 00R

11:06+729.643E 0GPM 00R
+ 2.070E 0FPS 00R
+05596 *10 G 00R
-00000 *10 G 00R
+002.40% AI2 00R

12:06+ 0.000E 0GPM 00R
+ 0.000E 0FPS 00R
+06347 *10 G 00R
-00000 *10 G 00R
+002.40% AI2 00R

13:06+734.134E 0GPM 00R
+ 2.083E 0FPS 00R
+00646 *10 G 00R
-00000 *10 G 00R
+002.40% AI2 00R

14:06+ 0.000E 0GPM 00R
+ 0.000E 0FPS 00R
+01172 *10 G 00R
-00000 *10 G 00R
+002.40% AI2 00R

15:06+721.454E 0GPM 00R
+ 2.047E 0FPS 00R
+05252 *10 G 00R
-00000 *10 G 00R
+002.40% AI2 00R

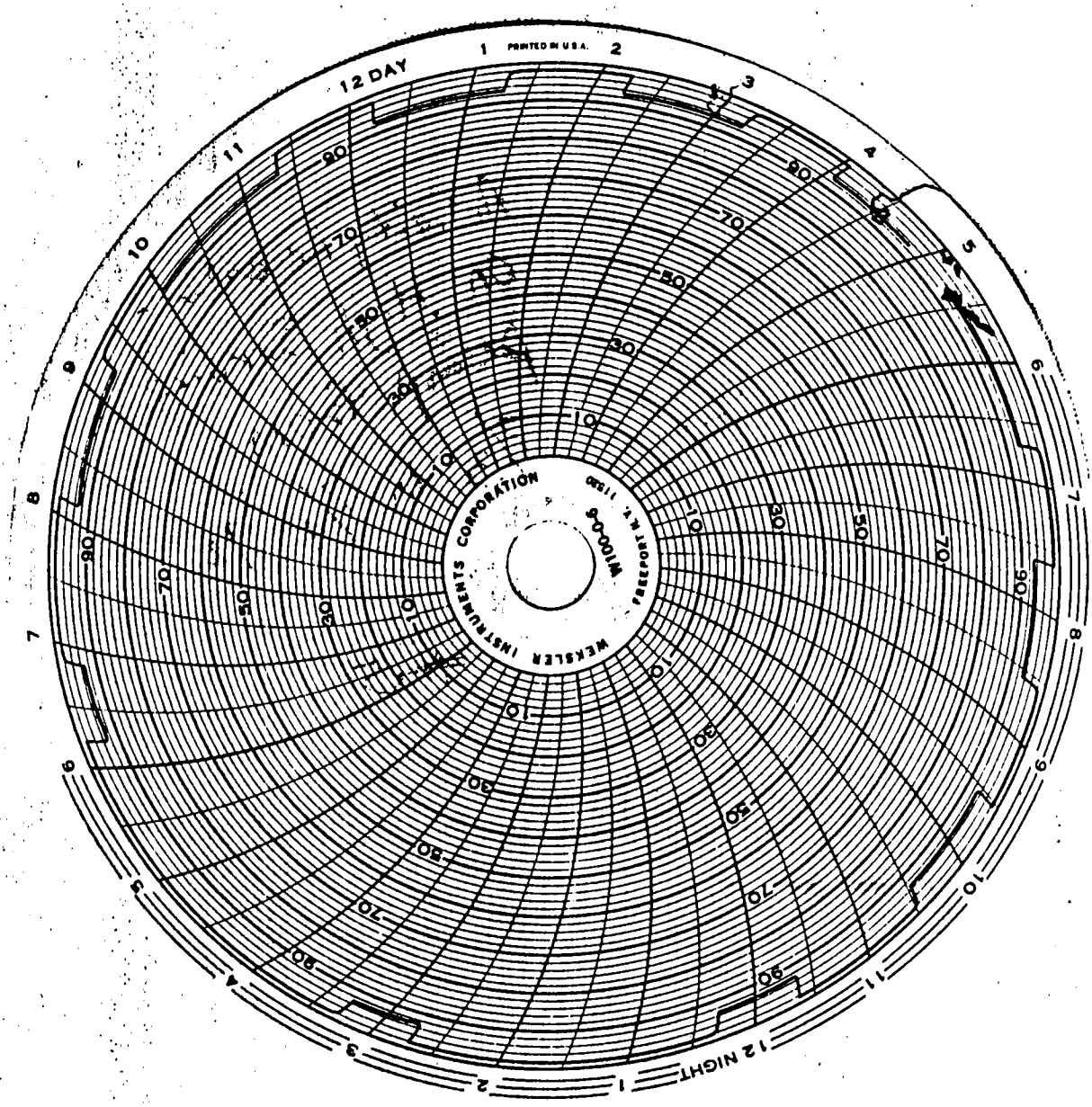
16:06+756.060E 0GPM 00R
+ 2.145E 0FPS 00R
+06061 *10 G 00R
-00000 *10 G 00R
+002.40% AI2 00R

17:06+729.643E 0GPM 00R
+ 2.070E 0FPS 00R
+00499 *10 G 00R
-00000 *10 G 00R
+002.40% AI2 00R

18:06+ 0.000E 0GPM 00R
+ 0.000E 0FPS 00R
+02016 *10 G 00R
-00001 *10 G 00R
+002.40% AI2 00R

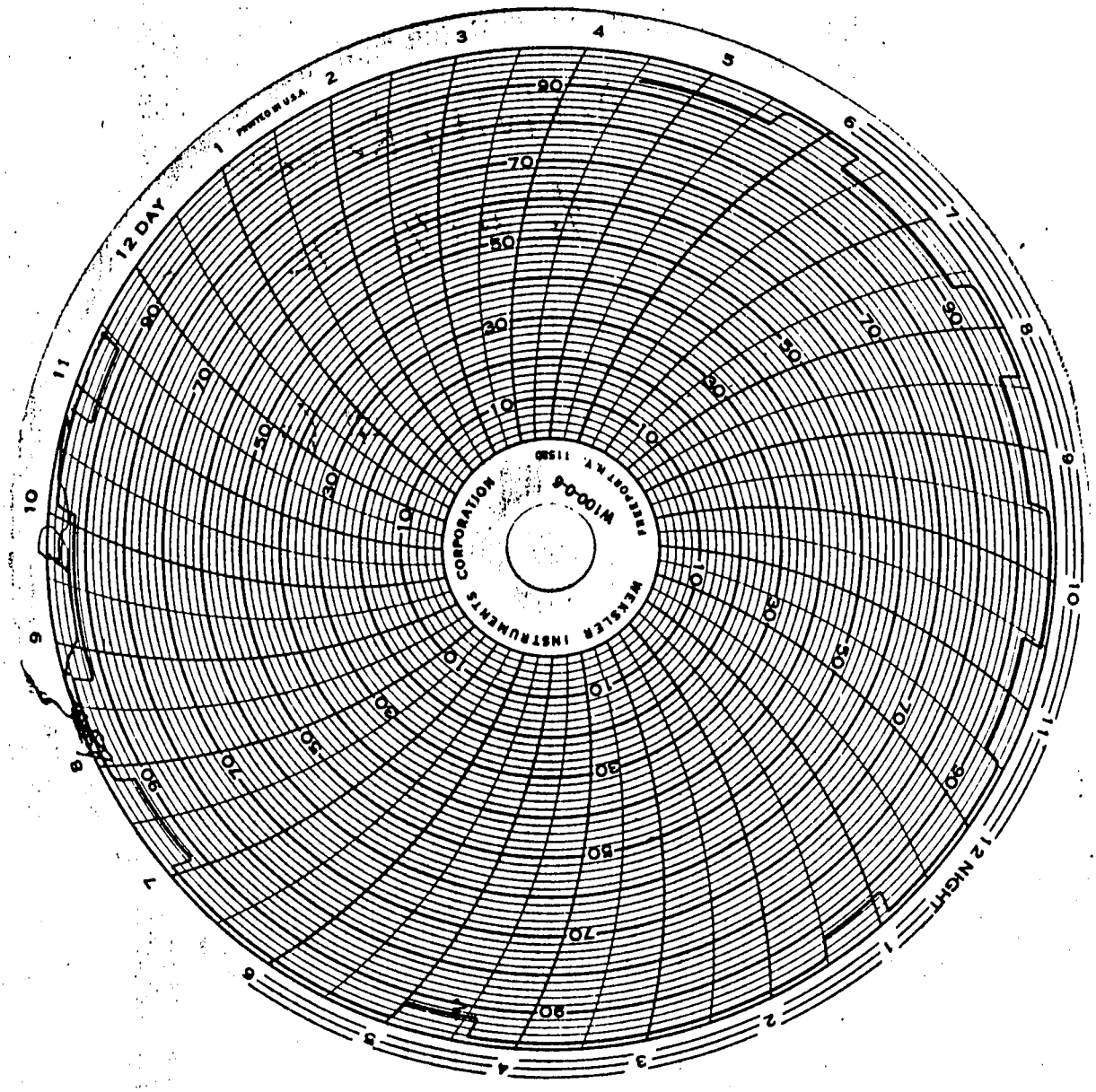
19:06+724.888E 0GPM 00R
+ 2.057E 0FPS 00R
+06407 *10 G 00R
-00001 *10 G 00R
+002.40% AI2 00R

CHART #5



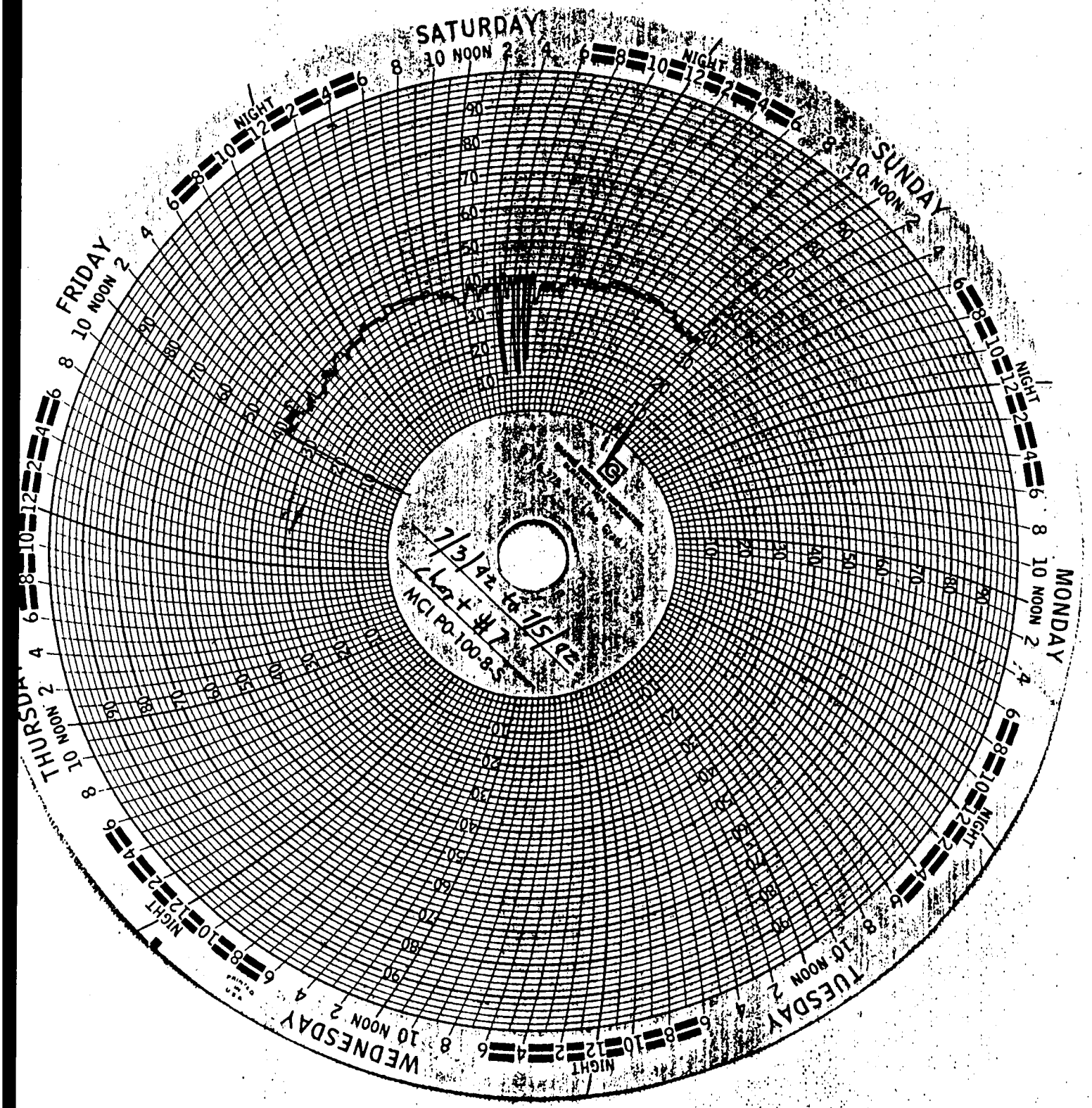
ACTIVITY RECORDER ON HIGH SERVICE PUMP CIRCUITRY FROM 7/3 to 7/4 1992.

CHART #6



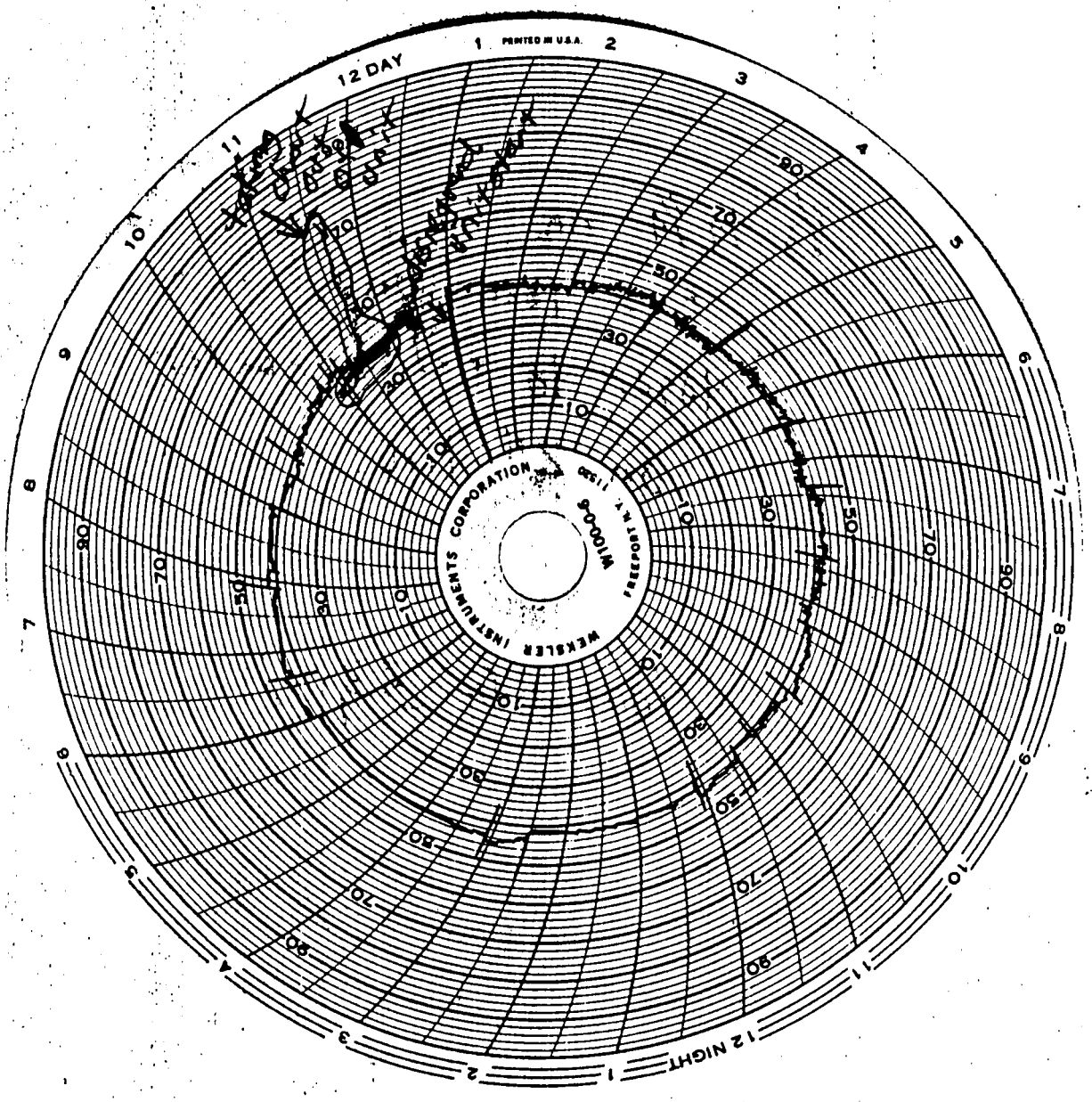
ACTIVITY RECORDER 7/4 to 7/5 1992.

CHART #7



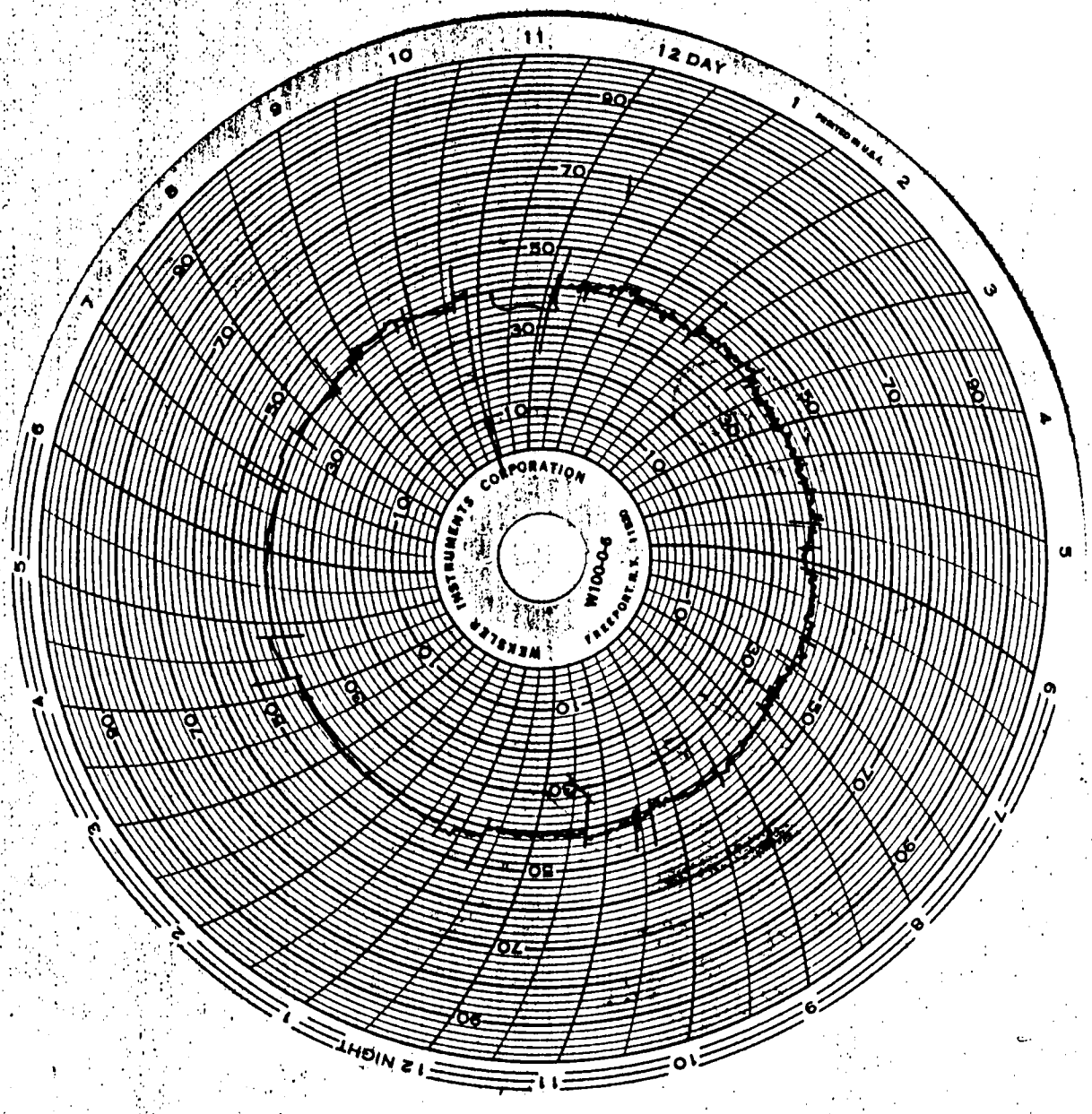
CLOSE TO ENTRANCE OF STATE PARK

CHART #8



573 WEST GORRIE DRIVE, 2" MAIN, 7/3 to 7/4 1992

CHART #9



573 WEST GORRIE DRIVE, 2" MAIN, 7/4 to 7/5 1991

CHART #10

LOCATION TOWARDS THE END OF PLANTATION

UNIT QUIT ADVANCING AT 8:00 p.m. BUT DROPPED ONLY TO 44psi
BEFORE THE CHART WAS CHANGED OUT AT 12:30 p.m. on 7/4/92.

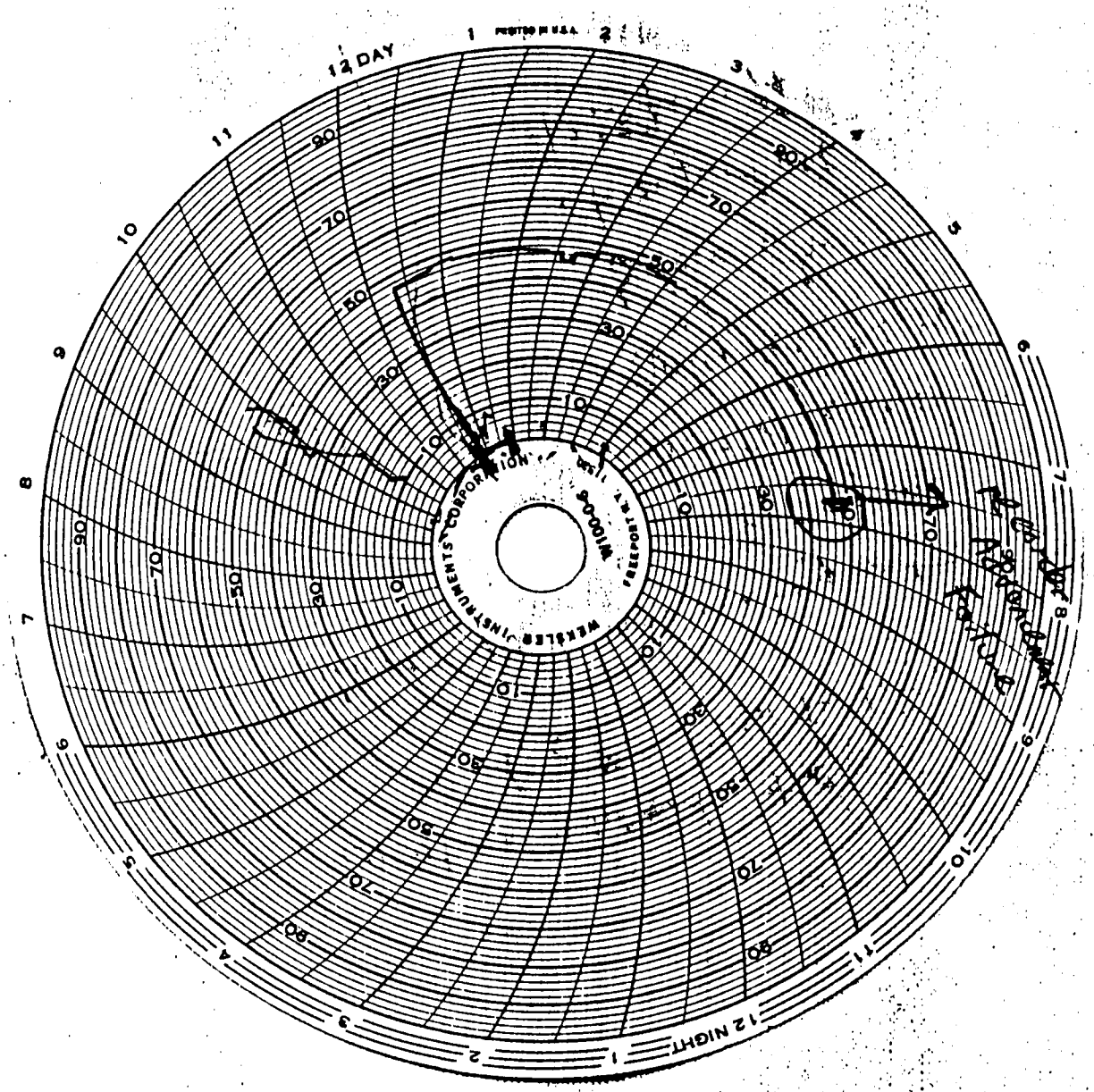
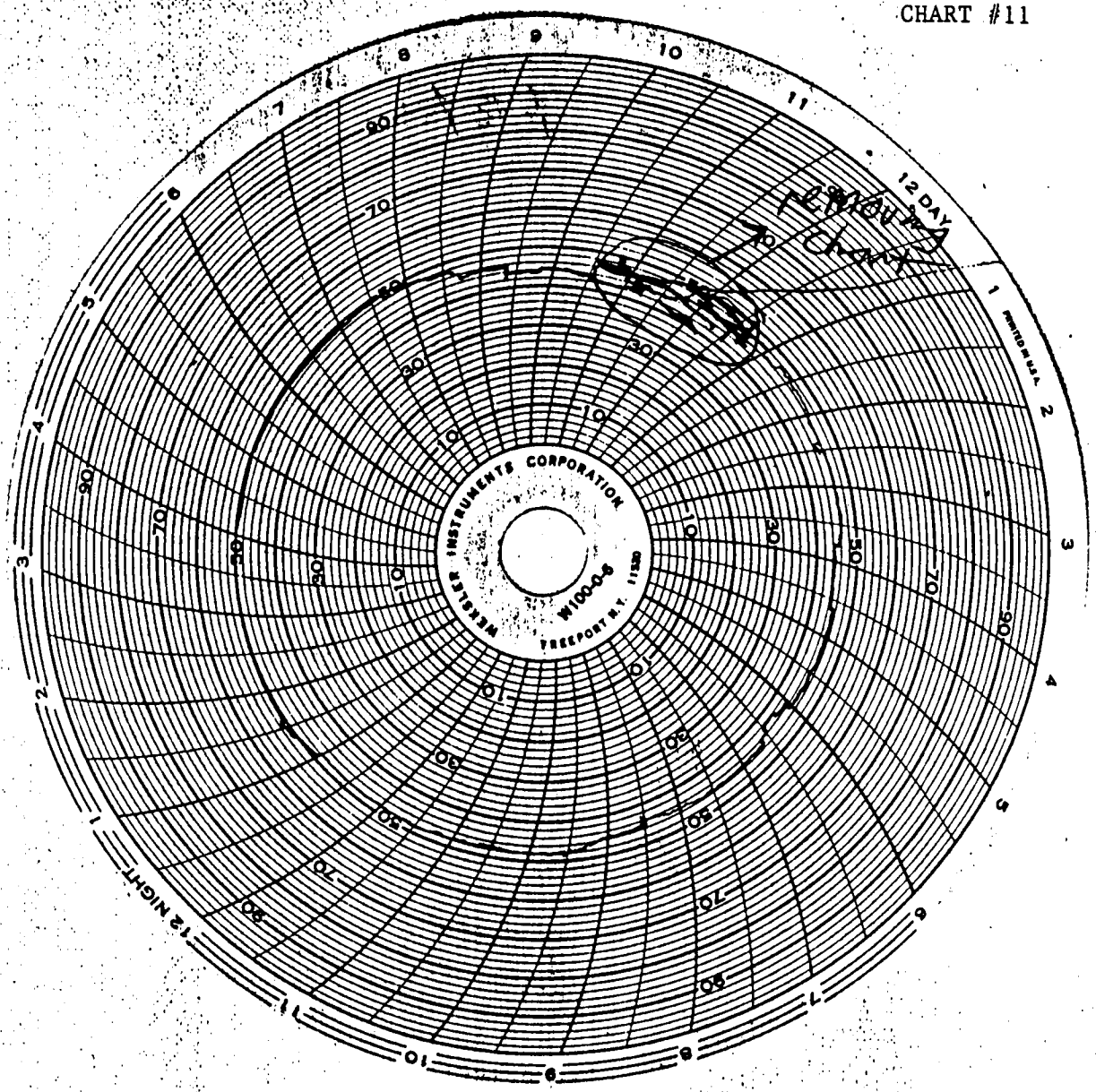


CHART #11



LOCATION TOWARDS THE END OF THE PLANTATION

7/4 to 7/5 1992

BASKERVILLE-DONOVAN, INC.
2878 REMINGTON GREEN CIRCLE
TALLAHASSEE, FL 32308
(904) 385-6788 • FAX: 385-5401

LETTER OF TRANSMITTAL

DATE: MAY 25, 1994 | JOB NO.: 25701.06

ATTENTION: RICE CREEKMORE, P.E.

RE: SUNSET BEACH

TO JOHNSON, CREEKMORE & FABRE
119 E. GREGORY
PENSACOLA, FLORIDA 32501

GENTLEMEN:

WE ARE SENDING YOU ☑ Attached ☐ Under separate cover via _____ the following items

☐ Shop drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications

☐ Copy of letter ☐ Change order ☐ _____

COPIES	DATE	NO.	DESCRIPTION
3	5/25/94		TECHNICAL MEMORANDUM

THESE ARE TRANSMITTED as checked below:

☐ For approval ☐ Approved as submitted ☐ Resubmit _____ copies for approval

☒ For your use ☐ Approved as noted ☐ Submit _____ copies for distribution

☐ As requested ☐ Returned for corrections ☐ Return _____ corrected prints

☐ For review and comment ☐ _____

☐ FOR BIDS DUE _____ 19____ ☐ PRINTS RETURNED AFTER LOAN TO US

REMARKS _____

file

COPY TO CLIFF McKEOWEN - FDEP
SHAY DIVSALAR - JRA ARCHITECTS
HELEN SPOHRER - RESORT REALTY

SIGNED James Waddell

If enclosures are not as noted, kindly notify us at once.

BASKERVILLE-DONOVAN, INC.

ARCHITECTS ■ ENGINEERS ● PLANNERS ■ SURVEYORS

TECHNICAL MEMORANDUM

May 25, 1994 25701.06

TO: Rice Creekmore, P.E.
Johnson, Creekmore, Fabre

FROM: James Waddell, P.E.
Baskerville-Donovan, Inc.

James Waddell 5-25-94

SUBJECT: Sunset Beach Subdivision

Mr. Creekmore,

Baskerville-Donovan, Inc. has completed its analysis of the St. George Island Utility (SGIU) water system as it relates to supplying water to the above-referenced project.

Our calculations and analysis may be summarized as follows:

A. Total # of ERU's added based on the type of development at Sunset Beach -

30 Phase I residential lots	=	30 ERU's
13 Phase II (future) residential lots	=	13 ERU's
Club House and Pool		
43 Household members x 3 pers/household	=	129 persons
129 persons x 10 gal/day/person (Dept. of	=	1,290 gal/day
H.R.S Rule 10D-6)	=	4.3, Say 5 ERU
(1,290 gal/day)/(300 gal/ERU)		
TOTAL NO. OF ERU'S	=	48

B. Update of SGIU engineers report dated May 1992 to reflect additional commitments by utility to provide service.

The most recent CIAC list (date May 17, 1994) was made available by the Utility, which lists all commitments made by the Utility since May 1992. Through discussions with representatives of Sunset Beach, FDEP, and the Utility, we have summarized those commitments as follows.

In order to evaluate the impact of those commitments on the capacity of the system, the commitments were input into the Waterworks computer model, developed in the original engineers report, at the node(s) indicated.

1. Nicks Hole: Including St. George Island Resort Village ERU's = 25, loaded at node 132

2. The Bluffs: ERU's = 10, loaded at node 132

3. Pebble Beach: ERU's = 21, loaded at node 133

4. Sunset Beach: ERU's = 48, loaded at node 30

5. Sea Palm Village: ERU's = 14, loaded at node 129

6. St. George Plantation (Various Locations): ERU's = 55, loaded at nodes 125-150

7. West Side of Island: ERU's = 15, loaded at node 114 (7th St./Gulf Beach Drive)

8. East Side of Island: ERU's = 52, loaded at node 14 (8th St. East/Gulf Beach Drive)

9. Case Del Mar: 25 ERU's + 67 ERU's purchased from Andrew Jackson = 92, loaded at nodes 151-154

The results of the computer model (attached),simulating the proposed treatment plant modifications, indicate a total peak hourly demand of 1,035 gpm and a minimum pressure of 29.59 psi, occurring at Bob Sikes Cut.

This analysis indicates that the system has the capacity to serve Sunset Beach subdivision at a pressure of 35 psi +/- under a peak hourly flow condition.

With regard to the additional questions raised by the Department in their letter dated May 11, 1994, we offer the following comments.

The basis for all computer simulations of the SGIU system has been well documented in BDI's May 1992 Engineer's Report. The simulation submitted with this Technical Memorandum models peak hourly flow of all commitments claimed by the Utility and appearing on the May 17, 1994 CIAC list. Peak hourly flow is derived by increasing average daily flow (300 gpd/ERU) by an appropriate peaking factor. The peaking factor in this simulation, derived in a manner consistent with the May 1992 report, is approximately 3.3.

Peak hourly flow is loaded into the model, assuming each and every ERU is using water (0.69 gpm) at the same time.

It has been suggested by the Department that the values reported in the model for individual ERU'S is low and does not account for a peak hourly flow condition. It is our opinion that the method of analysis employed is an objective, reasonable, documented approach to evaluating the system under a peak flow condition. An arbitrary assignment of some fractional distribution of active ERU'S to simulate a peak flow condition would be purely subjective.

With regard to comparing the results of this analysis and the capacity of the system to meet the historical Maximum Day Demand (520 gpd/ERU), the following comments are offered.

The Utility's Standard Water Use Permit allows for a maximum combined withdrawal of 700,000 gpd from the raw water supply wells. Separate finished water storage of 150,000 gallons is provided by the elevated tank, given that the tank is full at the beginning of the day. Therefore, during any one twenty four hour period 850,000 gallons is available for delivery to the Utility's ERU commitments. In the case of this simulation the Utility could deliver approximately 567 gpd/ERU.

Given the conditions of flow described in the May 1992 report, the burden on finished water storage would be as follows:

6 hr	total peak	X 0.69 gpm/ERU X 1500 ERU =	372,600	gal
18 hr		X 0.21 gpm/ERU X 1500 ERU =	340,200	gal
TOTAL 24 hr			712,800	gal

Net storage utilized would equal 12,800 gal (712,800-700,000)
Average ERU demand would be 475 gpd (712,800/1500).

Similarly, if ERU demand is taken to be 520 gpd/ERU (maximum daily flow), total flow would equal 780,000. Thus, only 80,000 gal of finished water storage would be depleted.

The Utility, based on these calculations, would be capable of adequately supplying service in the range of the historical ERU maximum day demand.

ST. GEORGE ISLAND WATER DISTRIBUTION SYSTEM
COMMITMENTS PER CIAC LIST DATED MAY 17, 1994
BOTH PUMPS ON
PEAK HOURLY FLOW WITH EXISTING ELEVATED TANK OFF LINE

PIPE TABLE

<-- Input -->						<-- Output -->			<-Input->
Pipe	UpNode	DnNode	Length	Diameter	Roughness	Flow	Velocity	HeadLoss	Status
			NA	NA	ERR	NA	NA	NA	Open
1	101	1	140.00	12.00	120.00	1035.00	2.94	0.45	
2	1	2	500.00	8.00	120.00	476.74	3.04	2.73	
3	2	3	330.00	4.00	120.00	17.94	0.46	0.12	
4	3	4	185.00	4.00	120.00	11.04	0.28	0.03	
5	2	5	180.00	8.00	120.00	453.97	2.90	0.90	
6	5	6	200.00	8.00	120.00	373.29	2.38	0.69	
7	6	7	500.00	8.00	120.00	367.77	2.35	1.69	
8	7	8	450.00	8.00	120.00	364.32	2.33	1.49	
9	8	9	440.00	8.00	120.00	357.42	2.28	1.41	
10	9	10	595.00	8.00	120.00	351.21	2.24	1.84	
11	10	11	1180.00	8.00	120.00	346.38	2.21	3.57	
12	11	12	1070.00	8.00	120.00	318.68	2.03	2.77	
13	12	13	1185.00	8.00	120.00	304.19	1.94	2.82	
14	13	14	1200.00	8.00	120.00	293.84	1.88	2.67	
15	14	15	1220.00	8.00	120.00	230.55	1.47	1.73	
16	15	16	330.00	6.00	120.00	32.46	0.37	0.05	
17	16	17	430.00	4.00	120.00	32.46	0.83	0.47	
18	17	18	770.00	4.00	120.00	29.01	0.74	0.69	
19	18	19	330.00	6.00	120.00	13.88	0.16	0.01	
20	19	20	1210.00	8.00	120.00	199.55	1.27	1.32	
21	20	21	550.00	2.00	120.00	-7.54	-0.77	1.16	
22	20	22	2000.00	6.00	120.00	195.27	2.22	8.49	
23	22	23	1400.00	6.00	120.00	184.92	2.10	5.37	
24	23	24	850.00	6.00	120.00	180.09	2.04	3.11	
25	24	25	1150.00	6.00	120.00	173.19	1.97	3.91	
26	25	26	1150.00	6.00	120.00	162.15	1.84	3.46	
27	26	27	2000.00	6.00	120.00	158.70	1.80	5.78	
28	27	28	1300.00	6.00	120.00	152.49	1.73	3.49	
29	28	29	500.00	6.00	120.00	145.59	1.65	1.23	
30	29	30	2600.00	6.00	120.00	65.55	0.74	1.46	
31	5	31	500.00	6.00	120.00	11.04	0.13	0.01	
32	31	32	450.00	6.00	120.00	11.04	0.13	0.01	
33	32	33	440.00	6.00	120.00	10.35	0.12	0.01	
34	11	34	400.00	6.00	120.00	13.90	0.16	0.01	
35	34	35	1070.00	2.00	120.00	13.90	1.42	7.17	
36	35	36	1185.00	2.00	120.00	5.62	0.57	1.48	
37	36	37	1200.00	2.00	120.00	-2.66	-0.27	0.38	
38	37	38	1220.00	2.00	120.00	9.57	0.98	4.09	
39	38	39	1210.00	2.00	120.00	3.36	0.34	0.58	
40	39	40	1210.00	2.00	120.00	-2.85	-0.29	0.43	
41	5	41	150.00	6.00	120.00	69.64	0.79	0.09	
101	0	101	10.00	12.00	120.00	1035.00	2.94	0.03	
102	101	102	300.00	8.00	120.00	0.00	0.00	0.00	
103	1	103	600.00	8.00	120.00	558.26	3.56	4.39	

ST. GEORGE ISLAND WATER DISTRIBUTION SYSTEM
COMMITMENTS PER CIAC LIST DATED MAY 17, 1994
BOTH PUMPS ON
PEAK HOURLY FLOW WITH EXISTING ELEVATED TANK OFF LINE

PIPE TABLE

<-- Input -->						<-- Output -->			<-Input->
Pipe	UpNode	DnNode	Length	Diameter	Roughness	Flow	Velocity	HeadLoss	Status
			NA	NA	ERR	NA	NA	NA	Open
104	103	104	400.00	6.00	120.00	-38.59	-0.44	0.08	
105	103	105	510.00	8.00	120.00	594.78	3.80	4.19	
106	105	106	900.00	6.00	120.00	198.38	2.25	3.93	
107	106	107	630.00	8.00	120.00	197.69	1.26	0.67	
108	107	108	570.00	2.00	120.00	14.49	1.48	4.13	
109	105	109	1174.00	8.00	120.00	375.70	2.40	4.12	
110	109	110	1174.00	8.00	120.00	362.59	2.31	3.86	
111	110	111	900.00	6.00	120.00	-130.76	-1.48	1.82	
112	111	112	360.00	8.00	120.00	-172.16	-1.10	0.30	
113	111	113	860.00	8.00	120.00	21.39	0.14	0.01	
114	110	114	983.00	8.00	120.00	478.17	3.05	5.40	
115	114	115	1154.00	8.00	120.00	454.02	2.90	5.76	
116	115	116	790.00	6.00	120.00	15.18	0.17	0.03	
117	116	117	350.00	6.00	120.00	15.18	0.17	0.01	
118	115	118	1177.00	8.00	120.00	419.52	2.68	5.07	
119	118	119	1222.00	8.00	120.00	401.58	2.56	4.86	
120	119	120	800.00	6.00	120.00	19.32	0.22	0.05	
121	120	121	840.00	6.00	120.00	12.42	0.14	0.02	
122	121	122	600.00	6.00	120.00	10.35	0.12	0.01	
123	119	123	1250.00	8.00	120.00	368.46	2.35	4.23	
124	123	124	1170.00	8.00	120.00	332.58	2.12	3.28	
125	124	125	1150.00	8.00	120.00	320.16	2.04	3.00	
126	125	126	920.00	8.00	120.00	307.74	1.96	2.23	
127	126	127	978.00	8.00	120.00	298.08	1.90	2.24	
128	127	128	1323.00	8.00	120.00	289.11	1.85	2.86	
129	128	129	1150.00	8.00	120.00	271.86	1.74	2.22	
130	129	130	805.00	8.00	120.00	255.30	1.63	1.38	
131	130	131	3450.00	8.00	120.00	253.92	1.62	5.87	
132	131	132	1035.00	8.00	120.00	249.78	1.59	1.71	
133	132	133	1150.00	8.00	120.00	218.73	1.40	1.48	
134	133	134	690.00	8.00	120.00	197.34	1.26	0.74	
135	134	135	690.00	8.00	120.00	195.96	1.25	0.73	
136	135	136	1322.00	8.00	120.00	187.68	1.20	1.28	
137	136	137	1265.00	8.00	120.00	178.02	1.14	1.11	
138	137	138	863.00	8.00	120.00	166.98	1.07	0.68	
139	138	139	920.00	8.00	120.00	153.18	0.98	0.61	
140	139	140	1150.00	8.00	120.00	138.69	0.89	0.64	
141	140	141	690.00	8.00	120.00	128.34	0.82	0.33	
142	141	142	690.00	8.00	120.00	117.30	0.75	0.28	
143	142	143	402.00	8.00	120.00	115.92	0.74	0.16	
144	143	144	460.00	8.00	120.00	114.54	0.73	0.18	
145	144	145	460.00	8.00	120.00	93.15	0.59	0.12	
146	145	146	633.00	8.00	120.00	91.77	0.59	0.16	
147	146	147	288.00	8.00	120.00	90.39	0.58	0.07	

ST. GEORGE ISLAND WATER DISTRIBUTION SYSTEM
COMMITMENTS PER CIAC LIST DATED MAY 17, 1994
BOTH PUMPS ON
PEAK HOURLY FLOW WITH EXISTING ELEVATED TANK OFF LINE

PIPE TABLE

<---------- Input ---------->						<---------- Output ---------->			<-Input->
Pipe	UpNode	DnNode	Length	Diameter	Roughness	Flow	Velocity	HeadLoss	Status
			NA	NA	ERR	NA	NA	NA	Open
148	147	148	460.00	8.00	120.00	77.28	0.49	0.09	
149	148	149	633.00	8.00	120.00	75.90	0.48	0.12	
150	149	150	1150.00	8.00	120.00	66.24	0.42	0.16	
151	150	151	748.00	8.00	120.00	64.86	0.41	0.10	
152	151	152	288.00	8.00	120.00	48.30	0.31	0.02	
153	152	153	690.00	8.00	120.00	32.43	0.21	0.03	
154	153	154	403.00	8.00	120.00	16.56	0.11	0.00	
155	154	155	403.00	8.00	120.00	0.69	0.00	0.00	
156	155	156	690.00	8.00	120.00	0.00	0.00	0.00	
157	156	157	460.00	8.00	120.00	0.00	0.00	0.00	
158	123	158	320.00	6.00	120.00	15.87	0.18	0.01	
159	158	159	1220.00	6.00	120.00	4.83	0.05	0.01	
401	15	19	1210.00	8.00	120.00	191.88	1.22	1.22	
402	18	21	990.00	4.00	120.00	11.68	0.30	0.16	
403	14	37	400.00	6.00	120.00	21.89	0.25	0.03	
404	20	40	400.00	6.00	120.00	2.85	0.03	0.00	
405	41	104	960.00	6.00	120.00	68.26	0.77	0.58	
406	107	112	1358.00	8.00	120.00	183.20	1.17	1.26	
500	500	0	2.00	12.00	120.00	263.79	0.75	0.00	
501	501	0	2.00	12.00	120.00	771.21	2.19	0.00	

DEMAND 0.69 gpm/ERU

NODE TABLE

<---------- Input --------->		<----- Output ---->		<--- Optional --->		<-Input->
Node	Elevation	Demand	Pressure	HGL	XCoord	YCoord	Status
	NA	NA	NA	NA			ON
0	6.00	0.00	62.59	150.59			
1	6.00	0.00	62.39	150.12			
2	6.00	4.83	61.21	147.39			
3	6.00	6.90	61.15	147.26			
4	6.00	11.04	61.14	147.24			
5	6.00	0.00	60.82	146.49			
6	6.00	5.52	60.52	145.79			
7	6.00	3.45	59.79	144.11			
8	6.00	6.90	59.14	142.61			
9	6.00	6.21	58.53	141.20			
10	6.00	4.83	57.73	139.36			
11	6.00	13.80	56.19	135.79			
12	6.00	14.49	54.99	133.02			
13	6.00	10.35	53.77	130.21			
14	6.00	41.40	52.61	127.53			
15	6.00	6.21	51.86	125.80			
16	6.00	0.00	51.84	125.75			
17	6.00	3.45	51.63	125.28			
18	6.00	3.45	51.34	124.59			
19	6.00	6.21	51.33	124.58			
20	6.00	8.97	50.76	123.26			
21	6.00	4.14	51.26	124.42			
22	6.00	10.35	47.09	114.77			
23	6.00	4.83	44.76	109.40			
24	6.00	6.90	43.42	106.29			
25	6.00	11.04	41.73	102.39			
26	6.00	3.45	40.23	98.93			
27	6.00	6.21	37.73	93.15			
28	6.00	6.90	36.21	89.66			
29	6.00	80.04	35.68	88.42			
30	6.00	65.55	35.05	86.96			
31	6.00	0.00	60.81	146.48			
32	6.00	0.69	60.81	146.47			
33	6.00	10.35	60.81	146.46			
34	6.00	0.00	56.18	135.78			
35	6.00	8.28	53.08	128.61			
36	6.00	8.28	52.44	127.13			
37	6.00	9.66	52.60	127.50			
38	6.00	6.21	50.83	123.41			
39	6.00	6.21	50.57	122.83			
40	6.00	0.00	50.76	123.26			
41	6.00	1.38	60.78	146.39			
101	6.00	0.00	62.58	150.56			
102	7.00	0.00	62.15	150.56			

DEMAND 0.69 gpm/ERU

NODE TABLE

<---------- Input --------->		<----- Output ---->		<--- Optional --->		<-Input->
Node	Elevation	Demand	Pressure	HGL	XCoord	YCoord	Status
	NA	NA	NA	NA			ON
103	6.00	2.07	60.49	145.73			
104	6.00	29.67	60.52	145.81			
105	6.00	20.70	58.67	141.53			
106	6.00	0.69	56.97	137.60			
107	6.00	0.00	56.68	136.93			
108	6.00	14.49	54.89	132.80			
109	6.00	13.11	56.89	137.41			
110	6.00	15.18	55.22	133.55			
111	6.00	20.01	56.00	135.37			
112	6.00	11.04	56.13	135.67			
113	6.00	21.39	56.00	135.35			
114	6.00	24.15	52.88	128.15			
115	6.00	19.32	50.39	122.40			
116	6.00	0.00	50.38	122.37			
117	6.00	15.18	50.37	122.36			
118	6.00	17.94	48.19	117.33			
119	6.00	13.80	46.09	112.47			
120	6.00	6.90	46.07	112.43			
121	6.00	2.07	46.06	112.40			
122	6.00	10.35	46.06	112.39			
123	6.00	20.01	44.26	108.24			
124	6.00	12.42	42.84	104.96			
125	6.00	12.42	41.54	101.96			
126	6.00	9.66	40.57	99.72			
127	6.00	8.97	39.60	97.48			
128	6.00	17.25	38.37	94.62			
129	6.00	16.56	37.41	92.41			
130	6.00	1.38	36.81	91.02			
131	6.00	4.14	34.27	85.16			
132	6.00	31.05	33.53	83.45			
133	6.00	21.39	32.89	81.97			
134	6.00	1.38	32.57	81.23			
135	6.00	8.28	32.25	80.51			
136	6.00	9.66	31.70	79.22			
137	6.00	11.04	31.22	78.11			
138	6.00	13.80	30.92	77.43			
139	6.00	14.49	30.66	76.82			
140	6.00	10.35	30.38	76.18			
141	6.00	11.04	30.24	75.85			
142	6.00	1.38	30.12	75.57			
143	6.00	1.38	30.05	75.41			
144	6.00	21.39	29.97	75.23			
145	6.00	1.38	29.92	75.11			
146	6.00	1.38	29.85	74.94			

DEMAND 0.69 gpm/ERU

NODE TABLE

Node	Elevation	Demand	Pressure	HGL	XCoord	YCoord	Status
	NA	NA	NA	NA			ON
147	6.00	13.11	29.81	74.87			
148	6.00	1.38	29.78	74.79			
149	6.00	9.66	29.73	74.67			
150	6.00	1.38	29.66	74.51			
151	6.00	16.56	29.61	74.41			
152	6.00	15.87	29.60	74.38			
153	6.00	15.87	29.59	74.36			
154	6.00	15.87	29.59	74.35			
155	6.00	0.69	29.59	74.35			
156	6.00	0.00	29.59	74.35			
157	6.00	0.00	29.59	74.35			
158	6.00	11.04	44.25	108.22			
159	6.00	4.83	44.25	108.22			
500	6.00		62.59	150.59			
501	6.00		62.60	150.60			
		1035.00	29.59				

INFLOW TABLE

Node	Pumps	OpCurve	%Estimate	%Actual	Inflow	Status
					NA	ON
102	1	PUMP1	1	0.00	0.00 C	
501	1	PUMP2		0.75	-771.21	
500	1	PUMP3		0.25	-263.79	

PUMP1		PUMP2		PUMP3	
<------- Input ------>		<------- Input ------>		<------- Input ------>	
Flow	Head	Flow	Head	Flow	Head
NA	NA	NA	NA	NA	NA
0.00	105.00	0.00	250.00	0.00	190.00
500.00	105.00	100.00	250.00	80.00	185.00
1000.00	105.00	300.00	240.00	160.00	180.00
1500.00	105.00	500.00	215.00	240.00	155.00
		650.00	185.00	320.00	120.00
		800.00	135.00	400.00	70.00
		900.00	80.00	480.00	20.00
		1000.00	0.00	490.00	0.00

FILENAME:SUNSET2.WK1

NODE NO.	CUSTOMERS (ERU'S) RUN1 EX. CUST.	RUN1 +DAGMT
0	0	
1	0	
2	7	
3	10	
4	16	
5	0	
6	8	
7	5	
8	10	
9	9	
10	7	
11	20	
12	21	
13	15	
14	8	52
15	9	
16	0	
17	5	
18	5	
19	9	
20	13	
21	6	
22	15	
23	7	
24	10	
25	16	
26	5	
27	9	
28	10	
29	116	
30	47	48
31	0	
32	1	
33	15	
34	0	
35	12	
36	12	
37	14	
38	9	
39	9	
40	0	
41	2	
101	0	
102	0	

FILENAME:SUNSET2.WK1

NODE NO.	CUSTOMERS (ERU'S) RUN1 EX. CUST.	RUN1 +DAGMT
103	3	
104	43	
105	30	
106	1	
107	0	
108	21	
109	19	
110	22	
111	29	
112	16	
113	31	
114	20	15
115	28	
116	0	
117	22	
118	26	
119	20	
120	10	
121	3	
122	15	
123	29	
124	18	
125	15	3
126	11	3
127	10	3
128	23	2
129	8	16
130	0	2
131	4	2
132	8	37
133	8	23
134	0	2
135	10	2
136	12	2
137	14	2
138	18	2
139	19	2
140	13	2
141	14	2
142	0	2
143	0	2
144	29	2
145	0	2
146	0	2

FILENAME:SUNSET2.WK1

NODE NO.	CUSTOMERS (ERU'S) RUN1 EX. CUST.	RUN1 +DAGMT
147	17	2
148	0	2
149	12	2
150	0	2
151	1	23
152	0	23
153	0	23
154	0	23
155	1	
156	0	
157	0	
158	16	
159	7	
TOTAL	1168	332

ALL COMMITMENTS 1500

ADDENDUM NUMBER 2

MAY 5, 1994

ENGINEER'S REPORT

SYSTEM CAPACITY ANALYSIS OF THE

ST. GEORGE ISLAND UTILITY CO., LTD WATER DISTRIBUTION SYSTEM

PREPARED FOR

ST. GEORGE ISLAND UTILITY CO., LTD.

PREPARED BY

BASKERVILLE-DONOVAN, INC.
316 SOUTH BAYLEN STREET
SUITE 300
P.O. BOX 13370
PENSACOLA, FLORIDA 32591

MAY, 1992

Ted Biddy
5-6-94

The following text is hereby incorporated into the subject report, certified by Baskerville-Donovan, Inc. on May 27, 1992. Information in this addendum relates to the capacity of St. George Island Utility Co., Ltd. to serve additional customers.

Parameters established for the data presented in this model assume that year 2 improvements are on line. The improvements include:

1. Altitude valve with pressure sustaining feature to isolate the existing elevated tank during periods of high demand.

2. Modification of electrical controls to allow parallel operation of the larger and smaller booster pumps located at the treatment plant.

3. Reconditioning of existing pumps to ensure performance similar to their published curves.

4. Provision of a second 50 hp pump, with operating characteristics similar to that of the existing 50 hp pump.

The purpose of this analysis is to determine the limiting capacity of the system. The limiting capacity of the system is assumed to be the point at which under a peak hourly flow condition, the system cannot maintain pressures above the minimum level of 20 psi, as set forth in Section 17-555, F.A.C.

VI. Analysis Results

A. Existing Customers

5. Peak hourly flow demand for existing ERU's (1264), plus additional ERU's totalling 277 were distributed throughout the distribution node network (as shown on the attached printout) in the waterworks model. This simulation was executed with the 50 hp and 20 hp booster pumps operating in parallel and the existing elevated tank off line. The results, attached as Exhibit 10-G, indicate a total instantaneous system demand of approximately 1048 gpm. The flow contribution by the large and small booster pump is 779 gpm and 269 gpm, respectively. Minimum system pressure, occurring at node 157, is approximately 20 psi.

   To clarify the location of additional connections input for this simulation, the assignment of ERU's is as follows:

   A. One (1) ERU per node throughout the system, excluding St. George Plantation.

B. 5 or 6 ERU's per node within St. George Plantation, except node 130 (Nick's Hole) where 35 ERU's were input into the model.

jw00113

EXHIBIT 10-G

ST. GEORGE ISLAND WATER DISTRIBUTION SYSTEM
EXISTING FLOWS
BOTH PUMPS ON, PEAK HOURLY FLOW WITH EXIST. ELEVATED TANK
OFF LINE AND PLANT MODIFICATIONS IN PLACE

PIPE TABLE

<-------- Input -------->						<---------- Output ---------->			<-Input->
Pipe	UpNode	DnNode	Length	Diameter	Roughness	Flow	Velocity	HeadLoss	Status
			NA	NA	ERR	NA	NA	NA	Open
1	101	1	140.00	12.00	120.00	1045.84	2.97	0.45	
2	1	2	500.00	8.00	120.00	457.19	2.92	2.53	
3	2	3	330.00	4.00	120.00	19.04	0.49	0.14	
4	3	4	185.00	4.00	120.00	11.56	0.30	0.03	
5	2	5	180.00	8.00	120.00	432.71	2.76	0.82	
6	5	6	200.00	8.00	120.00	321.64	2.05	0.53	
7	6	7	500.00	8.00	120.00	315.52	2.01	1.27	
8	7	8	450.00	8.00	120.00	311.44	1.99	1.12	
9	8	9	440.00	8.00	120.00	303.96	1.94	1.04	
10	9	10	595.00	8.00	120.00	297.16	1.90	1.35	
11	10	11	1180.00	8.00	120.00	291.72	1.86	2.59	
12	11	12	1070.00	8.00	120.00	263.98	1.69	1.95	
13	12	13	1185.00	8.00	120.00	249.02	1.59	1.94	
14	13	14	1200.00	8.00	120.00	238.14	1.52	1.81	
15	14	15	1220.00	8.00	120.00	207.55	1.32	1.43	
16	15	16	330.00	6.00	120.00	30.15	0.34	0.04	
17	16	17	430.00	4.00	120.00	29.47	0.75	0.40	
18	17	18	770.00	4.00	120.00	25.39	0.65	0.54	
19	18	19	330.00	6.00	120.00	10.12	0.11	0.01	
20	19	20	1210.00	8.00	120.00	173.92	1.11	1.02	
21	20	21	550.00	2.00	120.00	-6.43	-0.66	0.87	
22	20	22	2000.00	6.00	120.00	165.92	1.88	6.28	
23	22	23	1400.00	6.00	120.00	155.04	1.76	3.88	
24	23	24	850.00	6.00	120.00	149.60	1.70	2.20	
25	24	25	1150.00	6.00	120.00	142.12	1.61	2.71	
26	25	26	1150.00	6.00	120.00	130.56	1.48	2.32	
27	26	27	2000.00	6.00	120.00	126.48	1.44	3.80	
28	27	28	1300.00	6.00	120.00	119.68	1.36	2.23	
29	28	29	500.00	6.00	120.00	112.20	1.27	0.76	
30	29	30	2600.00	6.00	120.00	32.64	0.37	0.40	
31	5	31	500.00	6.00	120.00	12.92	0.15	0.01	
32	31	32	450.00	6.00	120.00	12.24	0.14	0.01	
33	32	33	440.00	6.00	120.00	10.88	0.12	0.01	
34	11	34	400.00	6.00	120.00	13.46	0.15	0.01	
35	34	35	1070.00	2.00	120.00	12.78	1.30	6.14	
36	35	36	1185.00	2.00	120.00	3.94	0.40	0.77	
37	36	37	1200.00	2.00	120.00	-4.90	-0.50	1.17	
38	37	38	1220.00	2.00	120.00	9.37	0.96	3.94	
39	38	39	1210.00	2.00	120.00	2.57	0.26	0.36	
40	39	40	1210.00	2.00	120.00	-4.23	-0.43	0.90	
41	5	41	150.00	6.00	120.00	97.47	1.11	0.18	
101	0	101	10.00	12.00	120.00	1047.20	2.97	0.03	
102	101	102	300.00	8.00	120.00	0.68	0.00	0.00	
103	1	103	600.00	8.00	120.00	587.97	3.75	4.83	

ST. GEORGE ISLAND WATER DISTRIBUTION SYSTEM
EXISTING FLOWS
BOTH PUMPS ON, PEAK HOURLY FLOW WITH EXIST. ELEVATED TANK
OFF LINE AND PLANT MODIFICATIONS IN PLACE

PIPE TABLE

<---------- Input ---------->						<---------- Output ---------->			<-Input->
Pipe	UpNode	DnNode	Length	Diameter	Roughness	Flow	Velocity	HeadLoss	Status
			NA	NA	ERR	NA	NA	NA	Open
104	103	104	400.00	6.00	120.00	-65.51	-0.74	0.22	
105	103	105	510.00	8.00	120.00	650.76	4.15	4.95	
106	105	106	900.00	6.00	120.00	217.06	2.46	4.65	
107	106	107	630.00	8.00	120.00	215.70	1.38	0.79	
108	107	108	570.00	2.00	120.00	14.96	1.53	4.38	
109	105	109	1174.00	8.00	120.00	412.62	2.63	4.90	
110	109	110	1174.00	8.00	120.00	399.02	2.55	4.61	
111	110	111	900.00	6.00	120.00	-146.34	-1.66	2.24	
112	111	112	360.00	8.00	120.00	-188.50	-1.20	0.35	
113	111	113	860.00	8.00	120.00	21.76	0.14	0.02	
114	110	114	983.00	8.00	120.00	529.72	3.38	6.52	
115	114	115	1154.00	8.00	120.00	515.44	3.29	7.28	
116	115	116	790.00	6.00	120.00	16.32	0.19	0.03	
117	116	117	350.00	6.00	120.00	15.64	0.18	0.01	
118	115	118	1177.00	8.00	120.00	479.40	3.06	6.49	
119	118	119	1222.00	8.00	120.00	461.04	2.94	6.27	
120	119	120	800.00	6.00	120.00	21.08	0.24	0.06	
121	120	121	840.00	6.00	120.00	13.60	0.15	0.03	
122	121	122	600.00	6.00	120.00	10.88	0.12	0.01	
123	119	123	1250.00	8.00	120.00	425.68	2.72	5.53	
124	123	124	1170.00	8.00	120.00	389.64	2.49	4.40	
125	124	125	1150.00	8.00	120.00	376.72	2.40	4.06	
126	125	126	920.00	8.00	120.00	361.76	2.31	3.01	
127	126	127	978.00	8.00	120.00	349.52	2.23	3.00	
128	127	128	1323.00	8.00	120.00	337.96	2.16	3.82	
129	128	129	1150.00	8.00	120.00	316.88	2.02	2.95	
130	129	130	805.00	8.00	120.00	306.00	1.95	1.93	
131	130	131	3450.00	8.00	120.00	280.84	1.79	7.07	
132	131	132	1035.00	8.00	120.00	263.16	1.68	1.88	
133	132	133	1150.00	8.00	120.00	252.28	1.61	1.93	
134	133	134	690.00	8.00	120.00	241.40	1.54	1.07	
135	134	135	690.00	8.00	120.00	235.96	1.51	1.02	
136	135	136	1322.00	8.00	120.00	223.72	1.43	1.78	
137	136	137	1265.00	8.00	120.00	210.12	1.34	1.51	
138	137	138	863.00	8.00	120.00	195.16	1.25	0.90	
139	138	139	920.00	8.00	120.00	177.48	1.13	0.81	
140	139	140	1150.00	8.00	120.00	159.12	1.02	0.82	
141	140	141	690.00	8.00	120.00	144.84	0.92	0.41	
142	141	142	690.00	8.00	120.00	129.88	0.83	0.34	
143	142	143	402.00	8.00	120.00	125.12	0.80	0.18	
144	143	144	460.00	8.00	120.00	120.36	0.77	0.20	
145	144	145	460.00	8.00	120.00	95.88	0.61	0.13	
146	145	146	633.00	8.00	120.00	91.12	0.58	0.16	
147	146	147	288.00	8.00	120.00	86.36	0.55	0.07	

ST. GEORGE ISLAND WATER DISTRIBUTION SYSTEM
EXISTING FLOWS
BOTH PUMPS ON, PEAK HOURLY FLOW WITH EXIST. ELEVATED TANK
OFF LINE AND PLANT MODIFICATIONS IN PLACE

PIPE TABLE

<---------- Input ---------->						<---------- Output ---------->			<-Input->
Pipe	UpNode	DnNode	Length	Diameter	Roughness	Flow	Velocity	HeadLoss	Status
			NA	NA	ERR	NA	NA	NA	Open
148	147	148	460.00	8.00	120.00	70.04	0.45	0.07	
149	148	149	633.00	8.00	120.00	65.28	0.42	0.09	
150	149	150	1150.00	8.00	120.00	52.36	0.33	0.11	
151	150	151	748.00	8.00	120.00	47.60	0.30	0.06	
152	151	152	288.00	8.00	120.00	42.16	0.27	0.02	
153	152	153	690.00	8.00	120.00	37.40	0.24	0.03	
154	153	154	403.00	8.00	120.00	33.32	0.21	0.02	
155	154	155	403.00	8.00	120.00	29.24	0.19	0.01	
156	155	156	690.00	8.00	120.00	24.48	0.16	0.02	
157	156	157	460.00	8.00	120.00	20.40	0.13	0.01	
158	123	158	320.00	6.00	120.00	15.64	0.18	0.01	
159	158	159	1220.00	6.00	120.00	4.76	0.05	0.01	
401	15	19	1210.00	8.00	120.00	170.60	1.09	0.98	
402	18	21	990.00	4.00	120.00	11.19	0.29	0.15	
403	14	37	400.00	6.00	120.00	24.47	0.28	0.04	
404	20	40	400.00	6.00	120.00	4.91	0.06	0.00	
405	41	104	960.00	6.00	120.00	95.43	1.08	1.08	
406	107	112	1358.00	8.00	120.00	200.06	1.28	1.48	
500	500	0	2.00	12.00	120.00	269.36	0.76	0.00	
501	501	0	2.00	12.00	120.00	778.52	2.21	0.00	

DEMAND 0.68 gpm/ERU

NODE TABLE

Node	Elevation	Demand	Pressure	HGL	XCoord	YCoord	Status
	NA	NA	NA	NA			ON
0	6.00	0.68	61.54	148.16			
1	6.00	0.68	61.33	147.67			
2	6.00	5.44	60.24	145.14			
3	6.00	7.48	60.18	145.01			
4	6.00	11.56	60.16	144.98			
5	6.00	0.68	59.88	144.32			
6	6.00	6.12	59.65	143.79			
7	6.00	4.08	59.10	142.52			
8	6.00	7.48	58.62	141.41			
9	6.00	6.80	58.17	140.36			
10	6.00	5.44	57.58	139.01			
11	6.00	14.28	56.46	136.42			
12	6.00	14.96	55.61	134.46			
13	6.00	10.88	54.77	132.52			
14	6.00	6.12	53.99	130.71			
15	6.00	6.80	53.37	129.28			
16	6.00	0.68	53.35	129.23			
17	6.00	4.08	53.18	128.84			
18	6.00	4.08	52.94	128.30			
19	6.00	6.80	52.94	128.29			
20	6.00	9.52	52.50	127.27			
21	6.00	4.76	52.88	128.15			
22	6.00	10.88	49.78	120.99			
23	6.00	5.44	48.10	117.12			
24	6.00	7.48	47.15	114.92			
25	6.00	11.56	45.98	112.21			
26	6.00	4.08	44.97	109.89			
27	6.00	6.80	43.33	106.09			
28	6.00	7.48	42.37	103.86			
29	6.00	79.56	42.04	103.10			
30	6.00	32.64	41.86	102.70			
31	6.00	0.68	59.87	144.31			
32	6.00	1.36	59.87	144.30			
33	6.00	10.88	59.86	144.29			
34	6.00	0.68	56.45	136.40			
35	6.00	8.84	53.80	130.27			
36	6.00	8.84	53.46	129.50			
37	6.00	10.20	53.97	130.67			
38	6.00	6.80	52.26	126.73			
39	6.00	6.80	52.11	126.37			
40	6.00	0.68	52.50	127.27			
41	6.00	2.04	59.80	144.15			
101	6.00	0.68	61.53	148.12			
102	7.00	0.68	61.09	148.12			

DEMAND 0.68 gpm/ERU

NODE TABLE

Node	Elevation	Demand	Pressure	HGL	XCoord	YCoord	Status
	NA	NA	NA	NA			ON
103	6.00	2.72	59.24	142.84			
104	6.00	29.92	59.34	143.06			
105	6.00	21.08	57.09	137.89			
106	6.00	1.36	55.08	133.24			
107	6.00	0.68	54.74	132.45			
108	6.00	14.96	52.84	128.07			
109	6.00	13.60	54.97	132.98			
110	6.00	15.64	52.97	128.37			
111	6.00	20.40	53.94	130.61			
112	6.00	11.56	54.10	130.96			
113	6.00	21.76	53.94	130.59			
114	6.00	14.28	50.15	121.85			
115	6.00	19.72	47.00	114.57			
116	6.00	0.68	46.98	114.54			
117	6.00	15.64	46.98	114.52			
118	6.00	18.36	44.19	108.08			
119	6.00	14.28	41.48	101.81			
120	6.00	7.48	41.45	101.75			
121	6.00	2.72	41.44	101.73			
122	6.00	10.88	41.43	101.71			
123	6.00	20.40	39.08	96.27			
124	6.00	12.92	37.18	91.88			
125	6.00	14.96	35.42	87.82			
126	6.00	12.24	34.12	84.81			
127	6.00	11.56	32.81	81.80			
128	6.00	21.08	31.16	77.98			
129	6.00	10.88	29.89	75.04			
130	6.00	25.16	29.05	73.10			
131	6.00	17.68	25.99	66.03			
132	6.00	10.88	25.17	64.15			
133	6.00	10.88	24.34	62.22			
134	6.00	5.44	23.88	61.15			
135	6.00	12.24	23.43	60.13			
136	6.00	13.60	22.66	58.35			
137	6.00	14.96	22.01	56.84			
138	6.00	17.68	21.62	55.94			
139	6.00	18.36	21.27	55.13			
140	6.00	14.28	20.91	54.31			
141	6.00	14.96	20.73	53.89			
142	6.00	4.76	20.59	53.55			
143	6.00	4.76	20.51	53.37			
144	6.00	24.48	20.42	53.17			
145	6.00	4.76	20.37	53.04			
146	6.00	4.76	20.30	52.88			

DEMAND 0.68 gpm/ERU

NODE TABLE

Node	Elevation	Demand	Pressure	HGL	XCoord	YCoord	Status
	NA	NA	NA	NA			ON
147	6.00	16.32	20.27	52.82			
148	6.00	4.76	20.24	52.74			
149	6.00	12.92	20.20	52.66			
150	6.00	4.76	20.15	52.55			
151	6.00	5.44	20.13	52.49			
152	6.00	4.76	20.12	52.48			
153	6.00	4.08	20.11	52.44			
154	6.00	4.08	20.10	52.43			
155	6.00	4.76	20.09	52.41			
156	6.00	4.08	20.09	52.40			
157	6.00	20.40	20.08	52.39			
158	6.00	10.88	39.07	96.26			
159	6.00	4.76	39.07	96.26			
500	6.00		61.54	148.16			
501	6.00		61.54	148.16			
		1047.88	20.08				

INFLOW TABLE

<---------- Input ---------->				<------ Output ------>		<-Input->
Node	Pumps	OpCurve	%Estimate	%Actual	Inflow	Status
					NA	ON
					NA	ON
102	1	PUMP1	1	0.00	0.00	C
501	1	PUMP2		0.74	-778.52	
500	1	PUMP3		0.26	-269.36	

PUMP1		PUMP2		PUMP3	
<------- Input ------>		<------- Input ------>		<------- Input ------>	
Flow	Head	Flow	Head	Flow	Head
NA	NA	NA	NA	NA	NA
0.00	105.00	0.00	250.00	0.00	190.00
500.00	105.00	100.00	250.00	80.00	185.00
1000.00	105.00	300.00	240.00	160.00	180.00
1500.00	105.00	500.00	215.00	240.00	155.00
		650.00	185.00	320.00	120.00
		800.00	135.00	400.00	70.00
		900.00	80.00	480.00	20.00
		1000.00	0.00	490.00	0.00

NODE NO.	CUSTOMERS (ERU'S) RUN1 EX. CUST.	RUN1 +DAGMT ADDL.
0	0	1
1	0	1
2	7	1
3	10	1
4	16	1
5	0	1
6	8	1
7	5	1
8	10	1
9	9	1
10	7	1
11	20	1
12	21	1
13	15	1
14	8	1
15	9	1
16	0	1
17	5	1
18	5	1
19	9	1
20	13	1
21	6	1
22	15	1
23	7	1
24	10	1
25	16	1
26	5	1
27	9	1
28	10	1
29	116	1
30	47	1
31	0	1
32	1	1
33	15	1
34	0	1
35	12	1
36	12	1
37	14	1

ODE NO.	CUSTOMERS (ERU'S) RUN1 EX. CUST.	RUN1 +DAGMT	ADDL.
38	9		1
39	9		1
40	0		1
41	2		1
101	0		1
102	0		1
103	3		1
104	43		1
105	30		1
106	1		1
107	0		1
108	21		1
109	19		1
110	22		1
111	29		1
112	16		1
113	31		1
114	20		1
115	28		1
116	0		1
117	22		1
118	26		1
119	20		1
120	10		1
121	3		1
122	15		1
123	29		1
124	18		1
125	15	1	6
126	11	1	6
127	10	1	6
128	23	2	6
129	8	2	6
130	0	2	35
131	4	16	6
132	8	2	6
133	8	2	6
134	0	2	6
135	10	2	6
136	12	2	6
137	14	2	6
138	18	2	6
139	19	2	6
140	13	2	6

NODE NO.	CUSTOMERS (ERU'S) RUN1 EX. CUST.	RUN1 +DAGMT	ADDL.	
141	14	2	6	
142	0	2	5	
143	0	2	5	
144	29	2	5	
145	0	2	5	
146	0	2	5	
147	17	2	5	
148	0	2	5	
149	12	2	5	
150	0	2	5	
151	1	2	5	
152	0	2	5	
153	0	1	5	
154	0	1	5	
155	1	1	5	
156	0	1	5	
157	0	25	5	
158	16			
159	7			
TOTAL	1168	96	277	
				1541

ADDENDUM NO. 1

June 8, 1992

ENGINEER'S REPORT

SYSTEM CAPACITY ANALYSIS
OF THE
ST. GEORGE ISLAND UTILITY CO. LTD.
WATER DISTRIBUTION SYSTEM

Prepared For:

St. George Island Utility Co. Ltd.

Prepared By:

Baskerville-Donovan, Inc.
316 South Baylen Street, Suite 300
P.O. Box 13370
Pensacola, Florida 32591

May 1992

The following text is hereby incorporated into the subject report, certified by Baskerville-Donovan, Inc. on May 27, 1992. Information presented in this Addendum relates to the capacity of St. George Island Utility Co., Ltd. to accept additional ERU's. The limiting capacity of the system is assumed to be the point at which under a peak hourly flow condition, the system cannot maintain pressures above the minimum level of 20 psi, as set forth in Section 17-555, FAC.

VI. ANALYSIS RESULTS

A. Existing Customers

4. Peak hourly flow demand for existing ERU's (1264), plus additional ERU's (totalling 130) evenly distributed throughout the distribution node network was input into the Waterworks model with the elevated tank and large booster pump at the treatment plant on line. The results of this simulation, included as Exhibit 10-E, indicate a total instantaneous system demand of approximately 962 gpm. The flow contribution by the large booster pump and elevated tank is 853 gpm and 109 gpm, respectively. Minimum system pressure, occurring at node 157 is approximately 20 psi.

Similarly, existing ERU's (1264), plus additional ERU's (totalling 50) evenly distributed in the St. George Plantation area was input into the Waterworks model with the elevated tank and large booster pump at the treatment plant on line. The results of this simulation, included as Exhibit 10-F, indicate a total instantaneous system demand of 920 gpm. The flow contribution by the large booster pump and elevated tank is 853 gpm and 67 gpm respectively. Minimum system pressure, occurring at node 157 is approximately 20 psi.

The results of these simulations indicate that the Utility system, in its current configuration, can adequately serve up to 130 additional ERU's, depending on their location within the system, and maintain pressures under peak flow conditions of at least 20 psi, as required by Section 17-555, FAC.

EXHIBIT 10-E

ST. GEORGE ISLAND WATER DISTRIBUTION SYSTEM
EXISTING FLOWS
ONLY LARGE PUMP ON
PEAK HOURLY FLOW WITH EXISTING ELEVATED TANK ON LINE

PIPE TABLE

q#	Pipe	UpNode	DnNode	Input: Length ft	Input: Diameter in	Input: Roughness	Output: Flow US gpm	Output: Velocity ft/sec
1	1	101	1	140.00	12.00	120.00	961.17	2.73
2	2	1	2	500.00	8.00	120.00	443.99	2.83
3	3	2	3	330.00	4.00	120.00	20.70	0.53
4	4	3	4	185.00	4.00	120.00	12.42	0.32
5	5	2	5	180.00	8.00	120.00	417.08	2.66
6	6	5	6	200.00	8.00	120.00	337.41	2.15
7	7	6	7	500.00	8.00	120.00	330.51	2.11
8	8	7	8	450.00	8.00	120.00	325.68	2.08
9	9	8	9	440.00	8.00	120.00	317.40	2.03
10	10	9	10	595.00	8.00	120.00	309.81	1.98
11	11	10	11	1180.00	8.00	120.00	303.60	1.94
12	12	11	12	1070.00	8.00	120.00	274.61	1.75
13	13	12	13	1185.00	8.00	120.00	258.74	1.65
14	14	13	14	1200.00	8.00	120.00	247.01	1.58
15	15	14	15	1220.00	8.00	120.00	215.37	1.37
16	16	15	16	330.00	6.00	120.00	32.12	0.36
17	17	16	17	430.00	4.00	120.00	30.74	0.79
18	18	17	18	770.00	4.00	120.00	25.91	0.66
19	19	18	19	330.00	6.00	120.00	8.43	0.10
20	20	19	20	1210.00	8.00	120.00	176.49	1.13
21	21	20	21	550.00	2.00	120.00	-7.14	-0.73
22	22	20	22	2000.00	6.00	120.00	168.36	1.91
23	23	22	23	1400.00	6.00	120.00	157.32	1.79
24	24	23	24	850.00	6.00	120.00	151.80	1.72
25	25	24	25	1150.00	6.00	120.00	144.21	1.64
26	26	25	26	1150.00	6.00	120.00	132.48	1.50
27	27	26	27	2000.00	6.00	120.00	128.34	1.46
28	28	27	28	1300.00	6.00	120.00	121.44	1.38
29	29	28	29	500.00	6.00	120.00	113.85	1.29
30	30	29	30	2600.00	6.00	120.00	33.12	0.38
31	31	5	31	500.00	6.00	120.00	13.11	0.15
32	32	31	32	450.00	6.00	120.00	12.42	0.14
33	33	32	33	440.00	6.00	120.00	11.04	0.13
34	34	11	34	400.00	6.00	120.00	13.81	0.16
35	35	34	35	1070.00	2.00	120.00	13.12	1.34
36	36	35	36	1185.00	2.00	120.00	4.15	0.42
37	37	36	37	1200.00	2.00	120.00	-4.82	-0.49
38	38	37	38	1220.00	2.00	120.00	9.57	0.98
39	39	38	39	1210.00	2.00	120.00	2.67	0.27
40	40	39	40	1210.00	2.00	120.00	-4.23	-0.43
41	41	5	41	150.00	6.00	120.00	65.18	0.74
42	101	0	101	10.00	12.00	120.00	852.87	2.42
43	102	101	102	300.00	8.00	120.00	-108.99	-0.70
44	103	1	103	600.00	8.00	120.00	517.18	3.30
45	104	103	104	400.00	6.00	120.00	-32.75	-0.37
46	105	103	105	510.00	8.00	120.00	547.17	3.49
47	106	105	106	900.00	6.00	120.00	183.90	2.09

ST. GEORGE ISLAND WATER DISTRIBUTION SYSTEM
EXISTING FLOWS
ONLY LARGE PUMP ON
PEAK HOURLY FLOW WITH EXISTING ELEVATED TANK ON LINE

PIPE TABLE

	<-- Input -->						<-- Output -->	
q#	Pipe	UpNode	DnNode	Length ft	Diameter in	Roughness	Flow US gpm	Velocity ft/sec
48	107	106	107	630.00	8.00	120.00	182.52	1.17
49	108	107	108	570.00	2.00	120.00	15.18	1.55
50	109	105	109	1174.00	8.00	120.00	341.88	2.18
51	110	109	110	1174.00	8.00	120.00	328.08	2.09
52	111	110	111	900.00	6.00	120.00	-112.14	-1.27
53	112	111	112	360.00	8.00	120.00	-154.92	-0.99
54	113	111	113	860.00	8.00	120.00	22.08	0.14
55	114	110	114	983.00	8.00	120.00	424.35	2.71
56	115	114	115	1154.00	8.00	120.00	409.86	2.62
57	116	115	116	790.00	6.00	120.00	16.56	0.19
58	117	116	117	350.00	6.00	120.00	15.87	0.18
59	118	115	118	1177.00	8.00	120.00	373.29	2.38
60	119	118	119	1222.00	8.00	120.00	354.66	2.26
61	120	119	120	800.00	6.00	120.00	21.39	0.24
62	121	120	121	840.00	6.00	120.00	13.80	0.16
63	122	121	122	600.00	6.00	120.00	11.04	0.13
64	123	119	123	1250.00	8.00	120.00	318.78	2.03
65	124	123	124	1170.00	8.00	120.00	279.45	1.78
66	125	124	125	1150.00	8.00	120.00	266.34	1.70
67	126	125	126	920.00	8.00	120.00	254.61	1.63
68	127	126	127	978.00	8.00	120.00	245.64	1.57
69	128	127	128	1323.00	8.00	120.00	237.36	1.52
70	129	128	129	1150.00	8.00	120.00	219.42	1.40
71	130	129	130	805.00	8.00	120.00	211.83	1.35
72	131	130	131	3450.00	8.00	120.00	209.76	1.34
73	132	131	132	1035.00	8.00	120.00	195.27	1.25
74	133	132	133	1150.00	8.00	120.00	187.68	1.20
75	134	133	134	690.00	8.00	120.00	180.09	1.15
76	135	134	135	690.00	8.00	120.00	178.02	1.14
77	136	135	136	1322.00	8.00	120.00	169.05	1.08
78	137	136	137	1265.00	8.00	120.00	158.70	1.01
79	138	137	138	863.00	8.00	120.00	146.97	0.94
80	139	138	139	920.00	8.00	120.00	132.48	0.85
81	140	139	140	1150.00	8.00	120.00	117.30	0.75
82	141	140	141	690.00	8.00	120.00	106.26	0.68
83	142	141	142	690.00	8.00	120.00	94.53	0.60
84	143	142	143	402.00	8.00	120.00	92.46	0.59
85	144	143	144	460.00	8.00	120.00	90.39	0.58
86	145	144	145	460.00	8.00	120.00	68.31	0.44
87	146	145	146	633.00	8.00	120.00	66.24	0.42
88	147	146	147	288.00	8.00	120.00	64.17	0.41
89	148	147	148	460.00	8.00	120.00	50.37	0.32
90	149	148	149	633.00	8.00	120.00	47.61	0.30
91	150	149	150	1150.00	8.00	120.00	36.57	0.23
92	151	150	151	748.00	8.00	120.00	33.81	0.22
93	152	151	152	288.00	8.00	120.00	30.36	0.19
94	153	152	153	690.00	8.00	120.00	27.60	0.18

ST. GEORGE ISLAND WATER DISTRIBUTION SYSTEM
EXISTING FLOWS
ONLY LARGE PUMP ON
PEAK HOURLY FLOW WITH EXISTING ELEVATED TANK ON LINE

PIPE TABLE

	<---------- Input ---------->						<---------- Output ---	
	Pipe	UpNode	DnNode	Length ft	Diameter in	Roughness	Flow US gpm	Velocity ft/sec
95	154	153	154	403.00	8.00	120.00	25.53	0.16
96	155	154	155	403.00	8.00	120.00	23.46	0.15
97	156	155	156	690.00	8.00	120.00	20.70	0.13
98	157	156	157	460.00	8.00	120.00	18.63	0.12
99	158	123	158	320.00	6.00	120.00	18.63	0.21
100	159	158	159	1220.00	6.00	120.00	6.21	0.07
101	401	15	19	1210.00	8.00	120.00	175.66	1.12
102	402	18	21	990.00	4.00	120.00	12.66	0.32
103	403	14	37	400.00	6.00	120.00	24.74	0.28
104	404	20	40	400.00	6.00	120.00	4.92	0.06
105	405	41	104	960.00	6.00	120.00	63.11	0.72
106	406	107	112	1358.00	8.00	120.00	166.65	1.06
107	500	500	0	2.00	12.00	120.00	0.00	0.00
108	501	501	0	2.00	12.00	120.00	852.87	2.42

DEMAND 0.69 gpm/ERU

NODE TABLE

Node	Elevation ft	Demand US gpm	Pressure psi	HGL ft	HeadLoss ft	Status Open	XCoord
0	6.00	0.00	45.85	111.92	0.39		
1	6.00	0.00	45.67	111.50	2.39		
2	6.00	6.21	44.64	109.11	0.16		
3	6.00	8.28	44.57	108.95	0.03		
4	6.00	12.42	44.55	108.92	0.77		
5	6.00	1.38	44.31	108.35	0.58		
6	6.00	6.90	44.06	107.77	1.39		
7	6.00	4.83	43.46	106.38	1.21		
8	6.00	8.28	42.93	105.17	1.13		
9	6.00	7.59	42.44	104.04	1.46		
10	6.00	6.21	41.81	102.58	2.79		
11	6.00	15.18	40.60	99.79	2.10		
12	6.00	15.87	39.69	97.68	2.09		
13	6.00	11.73	38.79	95.60	1.94		
14	6.00	6.90	37.95	93.66	1.53		
15	6.00	7.59	37.28	92.13	0.05		
16	6.00	1.38	37.26	92.08	0.43		
17	6.00	4.83	37.08	91.65	0.56		
18	6.00	4.83	36.84	91.09	0.00		
19	6.00	7.59	36.83	91.09	1.05		
20	6.00	10.35	36.38	90.04	0.86		
21	6.00	5.52	36.75	90.90	6.45		
22	6.00	11.04	33.59	83.59	3.98		
23	6.00	5.52	31.86	79.61	2.26		
24	6.00	7.59	30.89	77.34	2.78		
25	6.00	11.73	29.68	74.56	2.38		
26	6.00	4.14	28.65	72.18	3.90		
27	6.00	6.90	26.96	68.28	2.29		
28	6.00	7.59	25.97	65.99	0.78		
29	6.00	80.73	25.63	65.21	0.41		
30	6.00	33.12	25.45	64.80	0.01		
31	6.00	0.69	44.30	108.33	0.01		
32	6.00	1.38	44.29	108.32	0.01		
33	6.00	11.04	44.29	108.31	0.01		
34	6.00	0.69	40.59	99.77	6.44		
35	6.00	8.97	37.81	93.33	0.85		
36	6.00	8.97	37.44	92.49	1.13		
37	6.00	10.35	37.93	93.62	4.10		
38	6.00	6.90	36.16	89.52	0.38		
39	6.00	6.90	35.99	89.14	0.90		
40	6.00	0.69	36.38	90.04	0.08		
41	6.00	2.07	44.27	108.26	0.02		
101	6.00	0.69	45.84	111.89	0.11		
102	7.00	0.00	45.45	112.00	3.81		
103	6.00	2.76	44.02	107.70	0.06		
104	6.00	30.36	44.05	107.76	3.59		
105	6.00	21.39	42.47	104.10	3.42		

DEMAND 0.69 gpm/ERU

NODE TABLE

<-Input->	<---------- Input ---------->	<----- Output ---->	<--- Opti
eadLoss ft	Status Open	Node	Elevation ft	Demand US gpm	Pressure psi	HGL ft	XCoord
0.58		106	6.00	1.38	40.99	100.69	
4.50		107	6.00	0.69	40.74	100.10	
3.46		108	6.00	15.18	38.79	95.61	
3.21		109	6.00	13.80	40.97	100.64	
1.37		110	6.00	15.87	39.58	97.43	
0.25		111	6.00	20.70	40.17	98.80	
0.02		112	6.00	11.73	40.28	99.05	
4.33		113	6.00	22.08	40.17	98.78	
4.76		114	6.00	14.49	37.71	93.11	
0.03		115	6.00	20.01	35.65	88.35	
0.01		116	6.00	0.69	35.63	88.31	
4.08		117	6.00	15.87	35.63	88.30	
3.86		118	6.00	18.63	33.88	84.26	
0.06		119	6.00	14.49	32.21	80.40	
0.03		120	6.00	7.59	32.18	80.35	
0.01		121	6.00	2.76	32.17	80.32	
3.24		122	6.00	11.04	32.17	80.31	
2.38		123	6.00	20.70	30.81	77.16	
2.14		124	6.00	13.11	29.78	74.79	
1.57		125	6.00	11.73	28.85	72.65	
1.56		126	6.00	8.97	28.17	71.08	
1.99		127	6.00	8.28	27.50	69.52	
1.49		128	6.00	17.94	26.64	67.53	
0.98		129	6.00	7.59	25.99	66.04	
4.12		130	6.00	2.07	25.57	65.06	
1.08		131	6.00	14.49	23.79	60.94	
1.12		132	6.00	7.59	23.32	59.86	
0.62		133	6.00	7.59	22.83	58.74	
0.61		134	6.00	2.07	22.56	58.12	
1.06		135	6.00	8.97	22.30	57.52	
0.90		136	6.00	10.35	21.84	56.46	
0.53		137	6.00	11.73	21.45	55.56	
0.47		138	6.00	14.49	21.22	55.02	
0.47		139	6.00	15.18	21.02	54.56	
0.23		140	6.00	11.04	20.82	54.09	
0.19		141	6.00	11.73	20.72	53.85	
0.11		142	6.00	2.07	20.63	53.67	
0.12		143	6.00	2.07	20.59	53.56	
0.07		144	6.00	22.08	20.54	53.44	
0.09		145	6.00	2.07	20.51	53.38	
0.04		146	6.00	2.07	20.47	53.29	
0.04		147	6.00	13.80	20.45	53.25	
0.05		148	6.00	2.76	20.44	53.21	
0.05		149	6.00	11.04	20.42	53.16	
0.03		150	6.00	2.76	20.39	53.11	
0.01		151	6.00	3.45	20.38	53.08	
0.02		152	6.00	2.76	20.38	53.07	

DEMAND 0.69 gpm/ERU

NODE TABLE

<-Input->	<---------- Input ---------->	<----- Output ---->	<--- Opti
adLoss Status	Node Elevation	Demand Pressure	HGL XCoord
ft Open	ft	US gpm psi	ft
0.01	153 6.00	2.07 20.37	53.05
0.01	154 6.00	2.07 20.36	53.04
0.01	155 6.00	2.76 20.36	53.03
0.01	156 6.00	2.07 20.35	53.02
0.02	157 6.00	18.63 20.35	53.01
0.01	158 6.00	12.42 30.80	77.15
1.04	159 6.00	6.21 30.80	77.14
0.19	500 6.00	45.85	111.92
0.04	501 6.00	45.85	111.92
0.00			
0.50		961.86 20.35	
1.06			
0.00			
0.00			

INFLOW TABLE

Node	Pumps	OpCurve	%Estimate	%Actual	Inflow US gpm	Status ON
102	1	PUMP1	1	0.11	-108.99	
501	1	PUMP2		0.89	-852.87	
500	1	PUMP3		0.00	0.00	C

PUMP1		PUMP2		PUMP3	
<------- Input ------>		<------- Input ------>		<------- Input ------>	
Flow	Head	Flow	Head	Flow	Head
US gpm	ft	US gpm	ft	US gpm	ft
0.00	105.00	0.00	250.00	0.00	190.00
500.00	105.00	100.00	250.00	80.00	185.00
1000.00	105.00	300.00	240.00	160.00	180.00
1500.00	105.00	500.00	215.00	240.00	155.00
		650.00	185.00	320.00	120.00
		800.00	135.00	400.00	70.00
		900.00	80.00	480.00	20.00
		1000.00	0.00	490.00	0.00

NODE NO.	CUSTOMERS (ERU'S) RUN1 EX. CUST.	RUN1 +DAGMT	ADDL.
0	0		
1	0		
2	7		2
3	10		2
4	16		2
5	0		2
6	8		2
7	5		2
8	10		2
9	9		2
10	7		2
11	20		2
12	21		2
13	15		2
14	8		2
15	9		2
16	0		2
17	5		2
18	5		2
19	9		2
20	13		2
21	6		2
22	15		1
23	7		1
24	10		1
25	16		1
26	5		1
27	9		1
28	10		1
29	116		1
30	47		1
31	0		1
32	1		1
33	15		1
34	0		1
35	12		1
36	12		1
37	14		1
38	9		1
39	9		1
40	0		1
41	2		1
101	0		1
102	0		0
103	3		1
104	43		1
105	30		1

NODE NO.	CUSTOMERS (ERU'S) RUN1 EX. CUST.	RUN1 +DAGMT	ADDL.
106	1		1
107	0		1
108	21		1
109	19		1
110	22		1
111	29		1
112	16		1
113	31		1
114	20		1
115	28		1
116	0		1
117	22		1
118	26		1
119	20		1
120	10		1
121	3		1
122	15		1
123	29		1
124	18		1
125	15	1	1
126	11	1	1
127	10	1	1
128	23	2	1
129	8	2	1
130	0	2	1
131	4	16	1
132	8	2	1
133	8	2	1
134	0	2	1
135	10	2	1
136	12	2	1
137	14	2	1
138	18	2	1
139	19	2	1
140	13	2	1
141	14	2	1
142	0	2	1
143	0	2	1
144	29	2	1
145	0	2	1
146	0	2	1
147	17	2	1
148	0	2	2
149	12	2	2
150	0	2	2
151	1	2	2
152	0	2	2

NODE NO.	CUSTOMERS (ERU'S) RUN1 EX. CUST.	RUN1 +DAGMT	ADDL.	
153	0	1	2	
154	0	1	2	
155	1	1	2	
156	0	1	2	
157	0	25	2	
158	16		2	
159	7		2	
TOTAL	1168	96	190	
				1394

EXHIBIT 10-F

ST. GEORGE ISLAND WATER DISTRIBUTION SYSTEM
EXISTING FLOWS
ONLY LARGE PUMP ON
PEAK HOURLY FLOW WITH EXISTING ELEVATED TANK ON LINE

PIPE TABLE

q#	Pipe	UpNode	DnNode	Input: Length ft	Input: Diameter in	Input: Roughness	Output: Flow US gpm	Output: Velocity ft/sec
1	1	101	1	140.00	12.00	120.00	919.80	2.61
2	2	1	2	500.00	8.00	120.00	415.71	2.65
3	3	2	3	330.00	4.00	120.00	18.20	0.46
4	4	3	4	185.00	4.00	120.00	11.20	0.29
5	5	2	5	180.00	8.00	120.00	392.61	2.51
6	6	5	6	200.00	8.00	120.00	308.70	1.97
7	7	6	7	500.00	8.00	120.00	303.10	1.93
8	8	7	8	450.00	8.00	120.00	299.60	1.91
9	9	8	9	440.00	8.00	120.00	292.60	1.87
10	10	9	10	595.00	8.00	120.00	286.30	1.83
11	11	10	11	1180.00	8.00	120.00	281.40	1.80
12	12	11	12	1070.00	8.00	120.00	255.16	1.63
13	13	12	13	1185.00	8.00	120.00	240.46	1.54
14	14	13	14	1200.00	8.00	120.00	229.96	1.47
15	15	14	15	1220.00	8.00	120.00	201.11	1.28
16	16	15	16	330.00	6.00	120.00	28.51	0.32
17	17	16	17	430.00	4.00	120.00	28.51	0.73
18	18	17	18	770.00	4.00	120.00	25.01	0.64
19	19	18	19	330.00	6.00	120.00	10.07	0.11
20	20	19	20	1210.00	8.00	120.00	170.06	1.09
21	21	20	21	550.00	2.00	120.00	-7.25	-0.74
22	22	20	22	2000.00	6.00	120.00	164.50	1.87
23	23	22	23	1400.00	6.00	120.00	154.00	1.75
24	24	23	24	850.00	6.00	120.00	149.10	1.69
25	25	24	25	1150.00	6.00	120.00	142.10	1.61
26	26	25	26	1150.00	6.00	120.00	130.90	1.49
27	27	26	27	2000.00	6.00	120.00	127.40	1.45
28	28	27	28	1300.00	6.00	120.00	121.10	1.37
29	29	28	29	500.00	6.00	120.00	114.10	1.29
30	30	29	30	2600.00	6.00	120.00	32.90	0.37
31	31	5	31	500.00	6.00	120.00	11.20	0.13
32	32	31	32	450.00	6.00	120.00	11.20	0.13
33	33	32	33	440.00	6.00	120.00	10.50	0.12
34	34	11	34	400.00	6.00	120.00	12.24	0.14
35	35	34	35	1070.00	2.00	120.00	12.24	1.25
36	36	35	36	1185.00	2.00	120.00	3.84	0.39
37	37	36	37	1200.00	2.00	120.00	-4.56	-0.47
38	38	37	38	1220.00	2.00	120.00	8.89	0.91
39	39	38	39	1210.00	2.00	120.00	2.59	0.26
40	40	39	40	1210.00	2.00	120.00	-3.71	-0.38
41	41	5	41	150.00	6.00	120.00	72.71	0.83
42	101	0	101	10.00	12.00	120.00	852.76	2.42
43	102	101	102	300.00	8.00	120.00	-67.04	-0.43
44	103	1	103	600.00	8.00	120.00	504.09	3.22
45	104	103	104	400.00	6.00	120.00	-41.21	-0.47
46	105	103	105	510.00	8.00	120.00	543.20	3.47

ST. GEORGE ISLAND WATER DISTRIBUTION SYSTEM
EXISTING FLOWS
ONLY LARGE PUMP ON
PEAK HOURLY FLOW WITH EXISTING ELEVATED TANK ON LINE

PIPE TABLE

#	Pipe	UpNode	DnNode	Input: Length ft	Input: Diameter in	Input: Roughness	Output: Flow US gpm	Output: Velocity ft/sec
7	106	105	106	900.00	6.00	120.00	181.91	2.06
8	107	106	107	630.00	8.00	120.00	181.21	1.16
9	108	107	108	570.00	2.00	120.00	14.70	1.50
0	109	105	109	1174.00	8.00	120.00	340.29	2.17
1	110	109	110	1174.00	8.00	120.00	326.99	2.09
2	111	110	111	900.00	6.00	120.00	-113.31	-1.29
3	112	111	112	360.00	8.00	120.00	-155.31	-0.99
4	113	111	113	860.00	8.00	120.00	21.70	0.14
5	114	110	114	983.00	8.00	120.00	424.90	2.71
6	115	114	115	1154.00	8.00	120.00	410.90	2.62
7	116	115	116	790.00	6.00	120.00	15.40	0.17
8	117	116	117	350.00	6.00	120.00	15.40	0.17
9	118	115	118	1177.00	8.00	120.00	375.90	2.40
0	119	118	119	1222.00	8.00	120.00	357.70	2.28
1	120	119	120	800.00	6.00	120.00	19.60	0.22
2	121	120	121	840.00	6.00	120.00	12.60	0.14
3	122	121	122	600.00	6.00	120.00	10.50	0.12
4	123	119	123	1250.00	8.00	120.00	324.10	2.07
5	124	123	124	1170.00	8.00	120.00	287.70	1.84
6	125	124	125	1150.00	8.00	120.00	275.10	1.76
7	126	125	126	920.00	8.00	120.00	262.50	1.68
8	127	126	127	978.00	8.00	120.00	252.70	1.61
9	128	127	128	1323.00	8.00	120.00	243.60	1.56
0	129	128	129	1150.00	8.00	120.00	224.70	1.43
1	130	129	130	805.00	8.00	120.00	217.00	1.39
2	131	130	131	3450.00	8.00	120.00	214.20	1.37
3	132	131	132	1035.00	8.00	120.00	199.50	1.27
4	133	132	133	1150.00	8.00	120.00	191.10	1.22
5	134	133	134	690.00	8.00	120.00	183.40	1.17
6	135	134	135	690.00	8.00	120.00	180.60	1.15
7	136	135	136	1322.00	8.00	120.00	171.50	1.09
8	137	136	137	1265.00	8.00	120.00	160.30	1.02
9	138	137	138	863.00	8.00	120.00	148.40	0.95
0	139	138	139	920.00	8.00	120.00	133.00	0.85
1	140	139	140	1150.00	8.00	120.00	117.60	0.75
2	141	140	141	690.00	8.00	120.00	105.70	0.67
3	142	141	142	690.00	8.00	120.00	93.80	0.60
4	143	142	143	402.00	8.00	120.00	91.00	0.58
5	144	143	144	460.00	8.00	120.00	88.90	0.57
6	145	144	145	460.00	8.00	120.00	65.80	0.42
7	146	145	146	633.00	8.00	120.00	63.70	0.41
8	147	146	147	288.00	8.00	120.00	60.90	0.39
9	148	147	148	460.00	8.00	120.00	46.90	0.30
0	149	148	149	633.00	8.00	120.00	44.10	0.28
1	150	149	150	1150.00	8.00	120.00	33.60	0.21
2	151	150	151	748.00	8.00	120.00	30.80	0.20

ST. GEORGE ISLAND WATER DISTRIBUTION SYSTEM
EXISTING FLOWS
ONLY LARGE PUMP ON
PEAK HOURLY FLOW WITH EXISTING ELEVATED TANK ON LINE

PIPE TABLE

g#	Pipe	UpNode	DnNode	Input: Length ft	Input: Diameter in	Input: Roughness	Output: Flow US gpm	Output: Velocity ft/sec
93	152	151	152	288.00	8.00	120.00	28.00	0.18
94	153	152	153	690.00	8.00	120.00	25.20	0.16
95	154	153	154	403.00	8.00	120.00	23.80	0.15
96	155	154	155	403.00	8.00	120.00	21.70	0.14
97	156	155	156	690.00	8.00	120.00	19.60	0.13
98	157	156	157	460.00	8.00	120.00	18.20	0.12
99	158	123	158	320.00	6.00	120.00	16.10	0.18
00	159	158	159	1220.00	6.00	120.00	4.90	0.06
01	401	15	19	1210.00	8.00	120.00	166.29	1.06
02	402	18	21	990.00	4.00	120.00	11.45	0.29
03	403	14	37	400.00	6.00	120.00	23.25	0.26
04	404	20	40	400.00	6.00	120.00	3.71	0.04
05	405	41	104	960.00	6.00	120.00	71.31	0.81
06	406	107	112	1358.00	8.00	120.00	166.51	1.06
07	500	500	0	2.00	12.00	120.00	0.00	0.00
08	501	501	0	2.00	12.00	120.00	852.76	2.42

DEMAND 0.7 gpm/ERU

NODE TABLE

dLoss ft	Status Open	Node	Elevation ft	Demand US gpm	Pressure psi	HGL ft	XCoord	YCoo:
0.36		0	6.00	0.00	45.88	111.98		
2.12		1	6.00	0.00	45.71	111.60		
0.12		2	6.00	4.90	44.80	109.48		
0.03		3	6.00	7.00	44.74	109.36		
0.69		4	6.00	11.20	44.73	109.33		
0.49		5	6.00	0.00	44.50	108.79		
1.18		6	6.00	5.60	44.29	108.31		
1.04		7	6.00	3.50	43.78	107.13		
0.97		8	6.00	7.00	43.33	106.09		
1.26		9	6.00	6.30	42.91	105.11		
2.43		10	6.00	4.90	42.36	103.85		
1.84		11	6.00	14.00	41.31	101.42		
1.82		12	6.00	14.70	40.51	99.59		
1.70		13	6.00	10.50	39.73	97.77		
1.35		14	6.00	5.60	38.99	96.07		
0.04		15	6.00	6.30	38.41	94.72		
0.37		16	6.00	0.00	38.39	94.68		
0.52		17	6.00	3.50	38.23	94.31		
0.01		18	6.00	3.50	38.00	93.79		
0.98		19	6.00	6.30	38.00	93.78		
0.83		20	6.00	9.10	37.58	92.80		
6.18		21	6.00	4.20	37.94	93.63		
3.83		22	6.00	10.50	34.90	86.62		
2.19		23	6.00	4.90	33.25	82.80		
2.71		24	6.00	7.00	32.30	80.61		
2.33		25	6.00	11.20	31.13	77.90		
3.85		26	6.00	3.50	30.12	75.57		
2.28		27	6.00	6.30	28.45	71.72		
0.78		28	6.00	7.00	27.47	69.45		
0.41		29	6.00	81.20	27.13	68.66		
0.01		30	6.00	32.90	26.95	68.25		
0.01		31	6.00	0.00	44.50	108.78		
0.01		32	6.00	0.70	44.49	108.77		
0.01		33	6.00	10.50	44.49	108.77		
5.67		34	6.00	0.00	41.30	101.41		
0.73		35	6.00	8.40	38.85	95.75		
1.02		36	6.00	8.40	38.53	95.01		
3.57		37	6.00	9.80	38.98	96.04		
0.36		38	6.00	6.30	37.43	92.46		
0.70		39	6.00	6.30	37.27	92.10		
0.10		40	6.00	0.00	37.58	92.80		
0.02		41	6.00	1.40	44.46	108.69		
0.04		101	6.00	0.00	45.87	111.96		
3.63		102	7.00	0.00	45.45	112.00		
0.10		103	6.00	2.10	44.14	107.97		
3.55		104	6.00	30.10	44.18	108.06		

DEMAND 0.7 gpm/ERU

NODE TABLE

<-Input->		<---------- Input ---------->	<----- Output ----->		<--- Optional -	
adLoss ft	Status Open	Node	Elevation ft	Demand US gpm	Pressure psi	HGL ft	XCoord	YCoo
3.35		105	6.00	21.00	42.61	104.42		
0.57		106	6.00	0.70	41.16	101.07		
4.24		107	6.00	0.00	40.91	100.50		
3.43		108	6.00	14.70	39.07	96.26		
3.19		109	6.00	13.30	41.12	100.99		
1.39		110	6.00	15.40	39.74	97.80		
0.25		111	6.00	20.30	40.34	99.19		
0.02		112	6.00	11.20	40.45	99.44		
4.34		113	6.00	21.70	40.34	99.18		
4.78		114	6.00	14.00	37.86	93.46		
0.03		115	6.00	19.60	35.79	88.68		
0.01		116	6.00	0.00	35.78	88.65		
4.14		117	6.00	15.40	35.77	88.64		
3.92		118	6.00	18.20	34.00	84.54		
0.05		119	6.00	14.00	32.30	80.62		
0.02		120	6.00	7.00	32.28	80.58		
0.01		121	6.00	2.10	32.27	80.55		
3.34		122	6.00	10.50	32.27	80.54		
2.51		123	6.00	20.30	30.86	77.28		
2.27		124	6.00	12.60	29.77	74.78		
1.66		125	6.00	12.60	28.79	72.51		
1.65		126	6.00	9.80	28.07	70.85		
2.08		127	6.00	9.10	27.36	69.20		
1.56		128	6.00	18.90	26.46	67.11		
1.02		129	6.00	7.70	25.78	65.56		
4.28		130	6.00	2.80	25.34	64.53		
1.13		131	6.00	14.70	23.49	60.25		
1.16		132	6.00	8.40	23.00	59.13		
0.64		133	6.00	7.70	22.50	57.97		
0.62		134	6.00	2.80	22.22	57.33		
1.09		135	6.00	9.10	21.95	56.70		
0.92		136	6.00	11.20	21.48	55.62		
0.54		137	6.00	11.90	21.08	54.70		
0.47		138	6.00	15.40	20.85	54.16		
0.47		139	6.00	15.40	20.64	53.69		
0.23		140	6.00	11.90	20.44	53.22		
0.19		141	6.00	11.90	20.34	52.98		
0.10		142	6.00	2.80	20.26	52.80		
0.11		143	6.00	2.10	20.21	52.70		
0.06		144	6.00	23.10	20.17	52.58		
0.08		145	6.00	2.10	20.14	52.52		
0.03		146	6.00	2.80	20.10	52.44		
0.03		147	6.00	14.00	20.09	52.40		
0.04		148	6.00	2.80	20.07	52.37		
0.05		149	6.00	10.50	20.05	52.33		
0.03		150	6.00	2.80	20.03	52.28		

DEMAND 0.7 gpm/ERU

NODE TABLE

<-Input->	<---------- Input ---------->	<----- Output ---->	<--- Optional -
adLoss Status	Node Elevation	Demand Pressure	HGL XCoord YCoo
ft Open		ft US gpm psi	ft
0.01	151 6.00	2.80 20.02	52.25
0.02	152 6.00	2.80 20.02	52.25
0.01	153 6.00	1.40 20.01	52.23
0.01	154 6.00	2.10 20.01	52.22
0.01	155 6.00	2.10 20.01	52.21
0.01	156 6.00	1.40 20.00	52.20
0.01	157 6.00	18.20 20.00	52.20
0.01	158 6.00	11.20 30.85	77.27
0.94	159 6.00	4.90 30.85	77.27
0.16	500 6.00	45.88	111.98
0.03	501 6.00	45.88	111.98
0.00			
0.63		919.80 20.00	
1.06			
0.00			
0.00			

INFLOW TABLE

<---------- Input ---------->				<------ Output ------>	<-Input->
Node	Pumps	OpCurve	%Estimate	%Actual	Inflow US gpm	Status ON
102	1	PUMP1	1	0.07	-67.04	
501	1	PUMP2		0.93	-852.76	
500	1	PUMP3		0.00	0.00	C

PUMP1		PUMP2		PUMP3	
<------- Input ------>		<------- Input ------>		<------- Input ------>	
Flow	Head	Flow	Head	Flow	Head
US gpm	ft	US gpm	ft	US gpm	ft
0.00	105.00	0.00	250.00	0.00	190.00
500.00	105.00	100.00	250.00	80.00	185.00
1000.00	105.00	300.00	240.00	160.00	180.00
1500.00	105.00	500.00	215.00	240.00	155.00
		650.00	185.00	320.00	120.00
		800.00	135.00	400.00	70.00
		900.00	80.00	480.00	20.00
		1000.00	0.00	490.00	0.00

NODE NO.	CUSTOMERS (ERU'S) RUN1 EX. CUST.	RUN1 +DAGMT ADDL.
0	0	
1	0	
2	7	
3	10	
4	16	
5	0	
6	8	
7	5	
8	10	
9	9	
10	7	
11	20	
12	21	
13	15	
14	8	
15	9	
16	0	
17	5	
18	5	
19	9	
20	13	
21	6	
22	15	
23	7	
24	10	
25	16	
26	5	
27	9	
28	10	
29	116	
30	47	
31	0	
32	1	
33	15	
34	0	
35	12	
36	12	
37	14	
38	9	
39	9	
40	0	
41	2	
101	0	
102	0	
103	3	
104	43	

NODE NO.	CUSTOMERS (ERU'S) RUN1 EX. CUST.	RUN1 +DAGMT	ADDL.
105	30		
106	1		
107	0		
108	21		
109	19		
110	22		
111	29		
112	16		
113	31		
114	20		
115	28		
116	0		
117	22		
118	26		
119	20		
120	10		
121	3		
122	15		
123	29		
124	18		
125	15	1	2
126	11	1	2
127	10	1	2
128	23	2	2
129	8	2	1
130	0	2	2
131	4	16	1
132	8	2	2
133	8	2	1
134	0	2	2
135	10	2	1
136	12	2	2
137	14	2	1
138	18	2	2
139	19	2	1
140	13	2	2
141	14	2	1
142	0	2	2
143	0	2	1
144	29	2	2
145	0	2	1
146	0	2	2
147	17	2	1
148	0	2	2
149	12	2	1
150	0	2	2

NODE NO.	CUSTOMERS (ERU'S) RUN1 EX. CUST.	RUN1 +DAGMT	ADDL.
151	1	2	1
152	0	2	2
153	0	1	1
154	0	1	2
155	1	1	1
156	0	1	1
157	0	25	1
158	16		
159	7		
TOTAL	1168	96	50
			1314

ENGINEER'S REPORT

SYSTEM CAPACITY ANALYSIS OF THE ST. GEORGE ISLAND UTILITY CO. LTD. WATER DISTRIBUTION SYSTEM

Prepared For:

St. George Island Utility Co. Ltd.

Prepared By:

Baskerville-Donovan, Inc.
316 South Baylen Street, Suite 300
P.O. Box 13370
Pensacola, Florida 32591

May 1992

Kiran Killeen
5/27/92

TABLE OF CONTENTS

BASKERVILLE-DONOVAN, INC.

ARCHITECTS ■ ENGINEERS ■ PLANNERS ■ SURVEYORS

May 28, 1992

Mr. John Kintz
Potable Water Section Supervisor
Florida Department of Environmental Regulation
160 Governmental Center
Pensacola, Florida 32501-5794

Re: St. George Island Utility Co., Ltd.
Capacity Analysis Report
Project No. 12801.00

Dear Mr. Kintz:

Transmitted herewith for review is the above referenced report. If you have any questions regarding its contents, please do not hesitate to call.

Sincerely,

BASKERVILLE-DONOVAN, INC.

James Waddell
Project Engineer

JW/pja

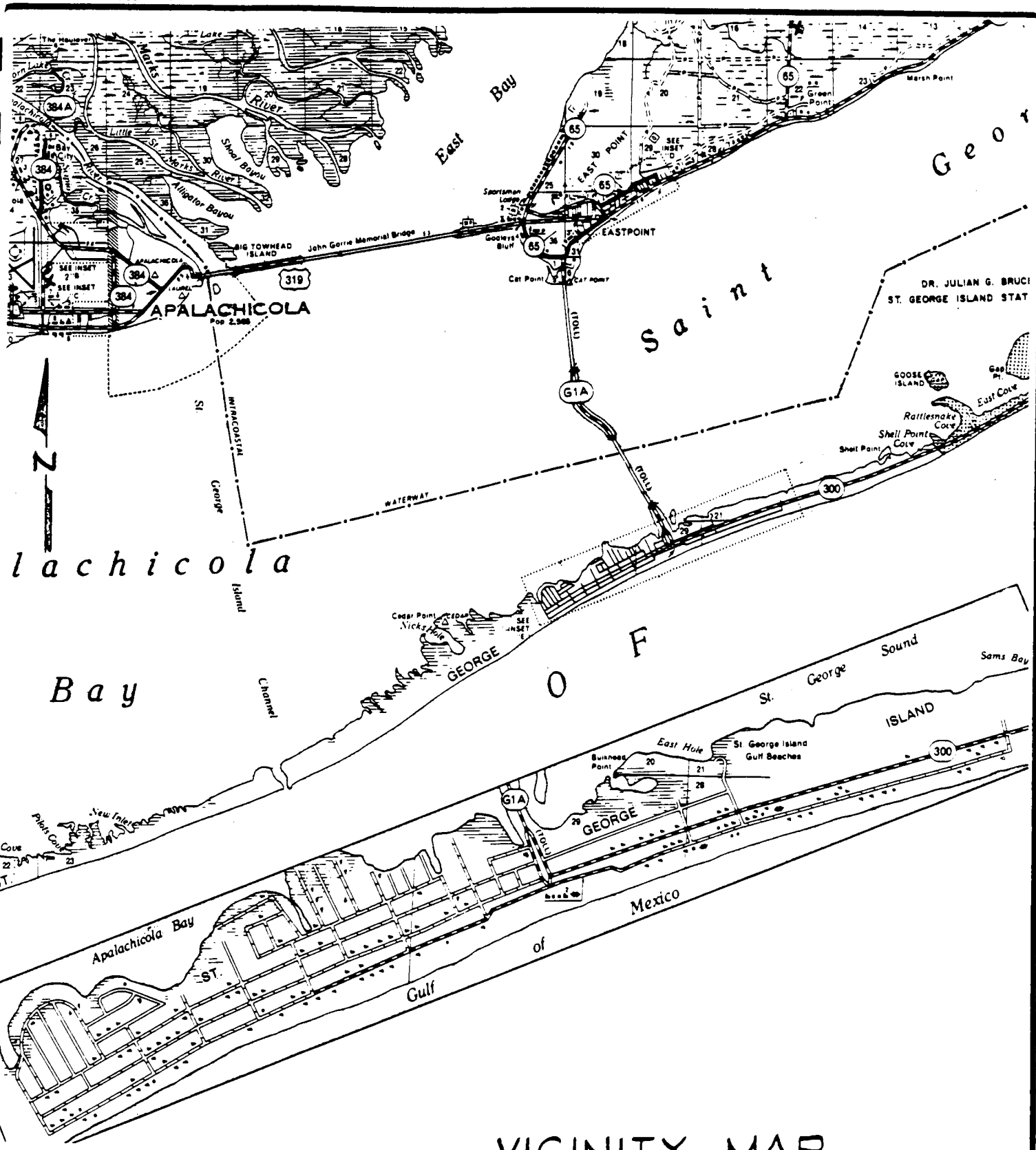
316 SOUTH BAYLEN STREET, SUITE 300, P.O. BOX 13370, PENSACOLA, FLORIDA 32591, (904) 438-9661, FAX: 433-6761

I. INTRODUCTION

St. George Island Utility Company, Ltd. (Utility) is a privately owned company which provides potable water service to customers on St. George Island, Florida (SGI). The Utility is presently under consent orders with the Florida Public Service Commission (PSC) and Florida Department of Environmental Regulation (FDER) to correct cited deficiencies in the Utility Supply, Treatment, and Distribution System.

Subsequent to the FDER Consent Order, a Partial Final Judgement was rendered in the Circuit Court, Second Judicial Circuit, Franklin County, Florida, whereby the Utility was ordered to accomplish required improvements to the Utility System, and provided a schedule for their completion.

The FDER Consent Order and Partial Final Judgement are included as Exhibit 1. Baskerville-Donovan, Inc. (BDI) has been retained by the Utility to provide engineering services to accomplish a portion of the work required by the Judgement. Our scope of services presently includes design and permitting of a third raw water well and a hydraulic analysis of the Utility Distribution System to determine existing capacity and recommend improvements to increase system capacity. These items will be discussed in more detail in a later section.



VICINITY MAP

BASKERVILLE-DONOVAN, INC.	Project ST. GEORGE ISLAND WATER SYS.
	Job No. 12801.00 Index
	Date MAY 26, 1992 By JFW
	Sheet 1 of 1

II. EXISTING SYSTEM OVERVIEW

A. Supply

Raw water supply for the system is currently provided by two wells, each rated at a design capacity of 250 gpm. These wells are located on the mainland in Eastpoint, Florida and are manifolded into a transmission main along in the right-of-way of the Bryant Patton Bridge/Causeway. The transmission main discharges raw water into a ground storage tank on St. George Island (SGI) at the Utility Water Treatment Plant.

A construction permit application for a third raw water well (Well No. 3) has been submitted by BDI on behalf of the Utility to FDER and is currently under review.

From a review of the project files, it is our understanding that the capacity proposed for Well No. 3 in the Northwest Florida Water Management District (NWFWMD) permits is the same as Well Nos. 1 and 2, (i.e., 250 gpm or 0.360 MGD maximum daily withdrawal, based on 24-hour flows). Well No. 3, operating in conjunction with Well Nos. 1 or 2 would yield approximately 250 gpm based on hydraulic calculations and modeling of the utility transmission main system. Calculations further show that should Well No. 3 be placed into operation alone, its pumping rate would be approximately 400 gpm. This flow rate should be permissible under the existing NWFWMD permits, provided that the maximum daily withdrawal is not exceeded. Thus, the mode of operation proposed for Well No. 3

is to serve as a back-up source of supply and pump separately at a rate of 400 gpm. It will provide alternate service with Well Nos. 1 and 2 pumping together (500 gpm). Subsequently, the maximum capacity of the raw water supply system, over a 24 hour period, is approximately 0.720 MGD.

B. Treatment

Treatment facilities provided by the Utility are located on Gulf Beach Drive and consists of gravity fed tray aeration and chlorination. Storage facilities located at the plant consist of a 300,000 gal. ground storage tank and a 150,000 gal. elevated storage tank. The capacity of the primary ground storage tank will be addressed in a later section.

Finished water is supplied by a 50 hp 650 gpm primary booster pump which operates on a pressure range of 43-47 psi as determined by the static water level in the elevated tank. The elevated tank has a height of 115' (ground to overflow). smaller 20 hp 250 gpm pump is provided as back-up. A standby generator is provided as backup in case of a loss of electrical power. A schematic layout of the treatment plant is included as Exhibit 2.

The sequence of treatment is as follows.

1. Raw water pumped from the mainland is discharged into a tray aerator system located above the ground storage tank.

2. Aerated water drains into the ground storage tank.

3. Water stored in the ground storage tank is pumped by the 50 hp primary pump into the elevated tank and distribution system.

4. Disinfection occurs at two points within the system, gaseous chlorination as the supply is pumped into the Distribution System, and by a satellite chlorinator located in St. George Plantation, near the west extreme of the Distribution System.

C. Distribution

The existing Distribution System consists of a watermain ranging in diameter from 2" to 12" and extends from the Julian G. Bruce State Park West to the Bob Sikes Cut. Areas served include the original unit subdivisions of SGI, the State Park, St. George Plantation, and commercial establishments in the vicinity of Franklin Boulevard.

Installation of the Distribution System was accomplished by phased construction, primarily during 1974 - 1978. System extensions via residential subdivision construction and minor improvements by Utility forces has also occurred.

III. PURPOSE AND SCOPE

The purpose of this report is to satisfy that portion of the

Partial Final Judgement relating to the hydraulic capacity of the Utility. More specifically:

> "the engineer shall develop a Certified Engineering Report along with supporting documentation in the form of system maps, calculations, records of conversations with consumers and operator, computer generated reports and other normal documentation describing the condition of this water system and its ability to properly and adequately serve additional customers. Information submitted shall include a system wide hydraulic analysis using methodology commonly accepted by the engineering community. It shall include flow conditions when the St. George Island State Park at the eastern end of the water system is at maximum occupancy and is refilling the park's water storage tanks. Also, flows shall be estimated for future growth at the Bob Sikes Cut using the maximum allowable population density based on the most dense zoning criteria available for Franklin County. This hydraulic analysis of the water system shall consider the extreme flow conditions above resulting from a peak flow period..."

It was originally ordered that the report be finalized after Well No. 3 has been operational for at least six months However, the purpose of Well No. 3 is to serve as a backup and an alternate source of supply to Well Nos. 1 and 2. Well No. 3, while increasing the reliability of the raw water supply system, will not increase the overall capacity of the system to meet existing demand or future demands, assuming Well Nos. 1 and 2 remain in service. Therefore, it has been requested by the Utility that this Engineer's Report be submitted in advance of the timetable established by the Partial Final Judgement.

IV. SYSTEM DEMAND CHARACTERISTICS

A. General

For the purposes of this report and at the request of FDER

personnel prior to this writing, the historical information reviewed in determining the hydraulic capacity of the Utility dates back to 1988. It is our understanding that during 1988, specifically on the 4th of July holiday, total flow was approximately .517 MGD, and the system was not capable of meeting that demand.

Further, since recorded flows on SGI vary seasonally, the months of primary interest are May, July, and September. These months are coincident with the major holiday weekends of Memorial Day, 4th of July, and Labor Day, respectively, when the resident and transient population on SGI is the highest and maximum water usage is expected.

B. Customer/Usage History

From Water Usage/Customer Records provided by the Utility (See Exhibit 3), the number of customers has increased as follows:

YEAR	NO. OF CUSTOMERS (3 MONTHS AVG.)	% INCREASE
1988	588	--
1989	691	18%
1990	729	5%
1991	855	17%

Thus far in 1992 the number of active connection totals 896, representing a 5% increase. The subject of current Utility commitments in terms of connections will be discussed in a

later section.

Historical flow trends for the primary months compiled from monthly operating reports (See Exhibit 4) and information provided by the Utility indicate that since 1988 the following flows have occurred:

3 MONTHS AVERAGE
(MAY, JULY, SEPTEMBER)

YEAR	ADF (MGD)	MDF (MGD)	ACTUAL PEAKING FACTOR (MDF/ADF)
1988	.292	.517	1.77
1989	.263	.399	1.52
*1991	.243	.424	1.74

* 1990 Data not used due to missing and/or unreliable data, as per conversations with Utility personnel.

The above information illustrates that water usage on SGI is highly variable. These figures represent the maximum range of flows as the resident and transient population is higher. Winter flows are typically less as the resident and transient population is lower.

C. Current Use

Referring to Exhibit 5, as of April 30, 1992 there are 896 connections being served by the Utility. Additionally, there are approximately 130 presold connections in which customers

pay a minimum monthly charge, but do not receive water service. Also included in the customer count are 96 presold taps owned by Andrew Jackson Savings Bank 80 are for a private developer and 16 are for Nick's Hole Phase I Subdivision). This comprises a total customer count of 1122. It has been ordered that all customers, active as well as presold taps, be considered in the determination of the hydraulic capacity of the system.

V. HYDRAULIC CAPACITY ANALYSIS

A. Software

The software employed to perform calculations relating to the hydraulic capacity of the Utility System is Water Works- All In One PC Software, by Synex Systems Corporation. It is a Lotus 1-2-3 add-in program for the design and analysis of water pipe networks. BDI is licensed to use this software.

B. Program Settings

The following parameters have been used in the network analysis of the Utility system:

Parameter	Units/Method
Flow	GPM
Headloss coefficient	C=120 (Hazem-Williams)*
Pipe Length/Size	U.S. Units (LF/Inches dia.)

* A conservative value of the Hazem-Williams coefficient was

selected in consideration of the age of the distribution system pipe network and account for minor losses.

C. Distribution System Node Map

Following the protocol required by Waterworks, the Utility Distribution System has been reduced to a system of nodes and pipe numbers to evaluate the results of the analysis. The distribution system map, compiled from record drawings and information provided by Utility personnel, generally include pipe ~~sites~~ sizes 4" dia. and larger. Some 2" in dia. line has been included where such pipes form a system loop. Dead-end pipes (all sizes) which branch from the distribution mains were not included in the analysis. Demands actually served by those dead-end pipes have been loaded on the system at nodes on the distribution main closest to their location. A distribution system node map is included as Exhibit 6 A and 6 B. 6B

D. Customer Demand Input

Customer demand placed on the system has been input in the form of equivalent residential units (ERU). Average daily demand assumed in this report is 300 gpd/ERU. This ERU consumption is less than the normally published value of 350 gpd/ERU. However, recent flow records (See Exhibit 7) indicate a lower demand.

Commercial accounts served by the Utility have been converted to a representative number of ERU's based on average monthly flows from April through October in 1988 and 1991 (See Exhibit

8). This time period was selected to account for higher summer flows.

As referenced in section IV.C the report, the approximate number of residential connections served by the Utility (active and presold) is 1122. The number of commercial ERU's calculated is 140. Thus the total number of existing ERU's is 1,264.

E. Peak Flow Period

In the analysis of water distribution systems, the ability of the system to meet peak hourly demand is of primary importance. Peak hourly demands usually occur about three times a day.

1. Morning Peak - 6:00 - 8:00 AM.
2. Noon Peak - 11:00 - 2:00 PM.
3. Evening Peak - 5:00 - 7:00 PM.

Though actual times may vary, this peak flow period may be expected to have a normal duration of about two to three hours.

The peak hourly flow rate is obtained by multiplying average daily flow by an appropriate peaking factor. For the purposes of this report, the method of calculating the appropriate peaking factor is taken from GLUMRB, Recommended Standards For Sewage Works, 1978 edition (Ten States Standards):

$$\text{Peaking Factor PF} = \frac{18 + \sqrt{P}}{4 + \sqrt{P}}$$

where P is population in 1000's

The calculation of the peak hourly flow rate for the existing customer count (1264) is illustrated as follows:

ERU demand = 300 gpd/ERU, assuming 100 gpd.

(No. of ERU's = 1,264)

1264 ERU x 3 persons/ERU = 3,792 or 3.8 thousand persons

$$PF = \frac{18 + \sqrt{3.8}}{4 + \sqrt{3.8}} = \frac{3.4}{}$$

$$\text{Peak Hourly Demand} = \frac{1{,}264 \text{ ERU} \times 300 \text{ gpd/ERU}}{1440} \times 3.4$$

$$= 895 \text{ gpm}$$

F. Case Studies

To comply with the conditions of the Partial Final Judgement, the following flow conditions have been evaluated.

1. Existing Customers, equivalent to 1264 ERU's
   - A. Average Daily Flow Demand
   - B. Peak Hourly Flow Demand
2. Future Customers
   - A. Average daily flow demand at the end of 10 years
   - B. Peak hourly flow demand at the end of year 2, 6, and 10.

With regard to Case 2, the following growth/expansion of the system was anticipated:

1. Application of a 1.5 growth factor system wide (5% growth per year for 10 years, or 1.5 x 1122 ERU's = 560 ERU's).

2. Anticipated Development at Bob Sikes Cut -

* Sunny Day Development - 84 Lot Subdivision, owner George Mahr (Amended DRI and Franklin County Development Order).
* Covington Properties - 289 ERU's (Proposed Amendment to DRI and Franklin County Development Order (See Exhibit 9).

VI. ANALYSIS RESULTS

A. Existing Customers

1. Average daily flow demand for existing ERU's (1264) was input into the Waterworks model with the existing elevated tank on line. The results of this simulation, included as Exhibit 10-A, indicate a total instantaneous system demand of approximately 265 gpm. Minimum system pressure, occurring at node 157 (Bob Sikes Cut) is 43 psi. Minimum system pressure on existing system is deemed acceptable to accommodate existing average daily flow demand.

2. Peak hourly flow demand for existing ERU's (1264) was input into the Waterworks model with the elevated tank and large booster pump at the treatment plant on line. The results of this simulation, included as Exhibit 10-B, indicate a total instantaneous system demand of approximately 885 gpm. The flow contribution by the large booster pump and elevated tank is 853 gpm and 32 gpm, respectively. Minimum system pressure, occurring at node 157 (Bob Sikes Cut) is approximately 25 psi.

3. This simulation was extended to evaluate the systems performance at peak hourly demand with both booster pumps and the elevated tank on line. The results of that simulation, included as Exhibit 10-C, indicate a flow contribution of 851 gpm and 341 gpm from the large and small booster pump respectively. With system demand remaining at 885 gpm, the existing elevated tank is filling at a rate of 307 gpm. Minimum system pressure remains the same.

4. The existing system was then modeled with the existing elevated tank off line, through the use of an altitude valve, and both booster pumps on. Flow contributions are 694 gpm and 191 gpm for the larger and smaller pumps, respectively. Minimum system pressures range from 55 psi at the State Park property line to 53 psi at Bob Sikes Cut. Maximum system pressure increased from 46 psi to 74 psi.

B. Future Customers

The analysis presented thus far has not evaluated the capacity of the system to handle additional ERU's. As previously mentioned, future flows must account for development at Bob Sikes Cut. A natural growth rate of 5% per year (56 ERU's) has also been added to the system over a period of 10 years (560 ERU's). This 10 year period is initiated with year one (1) being the Utility servicing its existing commitment of 1264 ERU's. The following simulations analyze growth of the system and identify the need for improvements.

1. Year two (2) peak hourly demand, which consists of existing ERU's, Sunny Day Development (84), Covington and Properties - year 1 (17), and 5% island wide growth for a total of 1,421 ERU's, was input into the Waterworks model with the existing elevated tank off line, and both pumps on. The results of this simulation, included as Exhibit 11, indicate a total instantaneous demand of approximately 980 gpm. Flow contribution by the larger and smaller pump is 740 gpm and 240 gpm, respectively. Minimum pressures at the east and west ends of the system are 48 psi and 31 psi, respectively.

2. Year three (3) through year six (6) peak hourly demand, which consists of the above ERU's plus 4 year island wide growths at 5% and Covington Properties through year 6 comprises a total of 1917 ERU's. This demand was input into the Waterworks model with the existing elevated tank off line, both pumps on-line, and a 50,000 gal. ground storage tank (new facility) located at node 155 (Bob Sikes Cut). The results of this simulation, included as Exhibit 12, indicate a total instantaneous demand of approximately 1,265 gpm. Minimum pressures at the east and west ends of the system are 40 psi and 24 psi, respectively. The ground storage tank will serve those ERU's (289) west of node 155.

3. Year seven (7) through ten (10) average daily demand, which includes the above ERU's, plus 5% growth island wide (280) for a total of 2,197 ERU"s was input into the Waterworks

model with the existing elevated tank on-line, both pumps off, a new elevated storage tank at node 137 (Windjammer Village), off line for average daily flow conditions, and the ground storage tank at node 155 omitted. The results of this simulation, included as Exhibit 13 - A, indicate a total instantaneous demand of 461 gpm. Minimum system pressures at the east and west ends are 42 psi and 31 psi, respectively.

4. Year seven (7) through ten (10) peak hourly demand of 2,197 ERU's was input into the Waterworks mode with the existing elevated tank off line, both pumps on, new elevated tank at node 137 on-line, and the ground storage tank at node 155 omitted. The results of this simulation, included as Exhibit 13 B, indicate a total instantaneous demand of 1428 gpm. Minimum system pressures at the east and west ends are 38 psi and 28 psi, respectively.

C. Impact on Supply and Storage

1. Supply: The existing supply wells No. 1 and 2 in conjunction with the proposed well No. 3 are capable of pumping 500 gallons per minute for 24 hours per day. This provides a supply capacity of 720,000 gal. per day. This capacity is in excess of the average daily demand of the system of 660, 000 gal. per day in year 2002. Therefore, it is obvious that the system supply capacity is adequate.

This supply capacity in conjunction with the storage capacity discussed in the next section will be adequate to satisfy the maximum day demands in the system.

2. Storage: The existing water system storage consists of a 300,000 gal. ground storage tank with an assumed effective capacity of 250,000 gal. and a 150,000 gal. elevated tank, giving a combined storage capacity of 400,000 gal. Therefore, 300,000 gallons of additional storage will be required to satisfy the requirements of F.A.C. Rule 17-555.320 (6). This rule states that storage equal to one half maximum daily demand should be provided. This requirement disregards the effect of the pumping capacity of both the supply pumps and the distribution pumps on the storage requirement.

For a more rational determination of storage volume a study involving accurate estimation of average daily demand and maximum daily demand per ERU is necessary. Such a study is not within the scope of this report. After demands per ERU are determined more accurately, storage requirements may be estimated.

VII. CONCLUSIONS AND RECOMMENDATIONS

1. The existing water distribution system should function satisfactorily without modifications through year 1992, for all existing and committed ERU's. The system should maintain adequate pressures throughout the system under peak hourly

flow.

2. By 1994, if assumed development at Bob Sikes Cut (Sunny Day Development (MAHR) and Covington Properties - year 1) occurs along with 5% ERU growth throughout the system, system modifications will be required. These modifications include, but are not necessarily limited to installation of an altitude valve to isolate the existing elevated tank during peak flows and modification of existing pump controls to allow parallel operation of the larger and smaller booster pumps at the treatment plant. The distribution system would then have the capacity to serve 1421 ERU's

3. For years three (3) through six (6) (1995-1998) of the analysis period, it is assumed that growth at Bob Sikes Cut and island wide growth will continue. From these projections, it is concluded that 50,000 gal. ground storage tank (GST) and booster pumps should be constructed in 1995 to accommodate this demand. The location of the GST in the Waterworks model is at node 155, near Bob Sikes Cut. The distribution system would then have the capacity to serve a total of 1917 ERU's.

4. For years seven (7) through (10) of the analysis period (1999-2002), the GST at Bob Sikes Cut would be omitted from the system and a new elevated storage tank constructed near node 137 (Windjammer Village). With these improvements, the system should have the capacity to serve 2,197 ERU's.

5. In the modeling and analysis of the distribution system, the booster pumps at the treatment plant in some cases operate at points beyond their published performance curves. It is recommended that their capacity be evaluated through field flow tests. Should the pumps not adequately perform at the assumed ranges, modifications and/or replacement of the pumps may be necessary.

6. Though not specifically addressed in this report, all of the analyses presented have been based on the existing distribution pipe network. Line improvements to provide a looped system where possible would increase the reliability and performance of the system. Hydraulic capacity would not be increased by line improvements alone, but would also require some of the system modifications discussed herein.

Florida Department of Environmental Regulation

Northwest District • 160 Governmental Center • Pensacola, Florida 32501-5794 • 904-436-8300

Bob Martinez, Governor | Dale Twachtmann, Secretary | John Shearer, Assistant Secretary
Robert Kriegel, Deputy Assistant Secretary

NOV 2 0 1989

CERTIFIED, RETURN
RECEIPT REQUESTED

Mr. Gene D. Brown
St. George Island Utility Company, LTD
Post Office Box 1109
Tallahassee, Florida 32308

Dear Mr. Brown:

Enclosed is a copy of the executed Consent Order concerning the potable water facility at the St. George Island Utility Company, LTD.

Please review the document for the agreed upon actions and dates by which they are to be completed.

If you have any questions regarding this matter, please contact John Kintz at (904) 436-8380. Your continued cooperation is appreciated.

Sincerely,

Robert V. Kriegel
Deputy Assistant Secretary

RVK/jkm
Attach: Executed Consent Order
cc: Cliff McKeown
Bob Crouch
Richard Tuten

EXHIBIT 1

Received
NOV 22 1989
DER, Tallahassee
Branch Office

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

Complainant

vs.

SAINT GEORGE ISLAND UTILITIES COMPANY, LTD. A FLORIDA PARTNERSHIP

Respondent.

In the Office of the Northwest District

OGC FILE NO: 88-1100

CONSENT ORDER

This Consent Order is entered into between the State of Florida Department of Environmental Regulation (hereinafter "the Department") and Saint George Island Utilities Company Ltd. (hereinafter "Respondent").

The Department finds and Respondent admits the following:

1. The Department is the administrative agency of the State of Florida with the authority to administer and enforce the Florida Safe Drinking Water Act, Sections 403.850-403.864, Florida Statues, and the rules promulgated thereunder in Florida Administrative Code Chapters 17-16, 17-550 and 17-555.

2. Respondent is a business in the State of Florida and a person within the meaning of Section 403.852(5), Florida Statutes.

3. Respondent owns and operates a potable water supply system (hereinafter "the system") and is the supplier of water to the residents of St. George Island. The system consists of two wells, ground storage reservoir, aerator, water distribution system and associated appurtenances. The water treatment plant is located on Gulf Beach Drive at West 2nd Street, Latitude 29°39'45"N, Longitude 84°52'05"W.

4. Respondent's system supplies drinking water for human consumption to residents of Saint George Island. The system has approximately 711 service connections used by a year-round resident population of approximately 2,488 persons.

5. On March 10, 1987, a Department inspector conducted an inspection of the Saint George Island Utilities Company Ltd. water system. Results of the inspection were forwarded to the Respondent in a Department letter dated March 20, 1987. The survey revealed numerous deficiencies including:

A. No cross connection control program.

B. No back up chlorinator.

C. Operation and maintenance logs were incomplete.

D. Insufficient chlorine residual at remote locations in the distribution system.

E. Insufficient finished water storage.

6. On March 15, 1988, a follow up inspection was made. Results of the inspection were forwarded to Respondent in a Department letter dated March 28, 1988. The inspection revealed the following deficiencies.

A. No cross connection control program.

B. The back up chlorinator was not installed on line in a parallel mode with the primary chlorinator.

C. Operation and maintenance logs were incomplete.

D. Insufficient chlorine residual at remote locations in the distribution system.

E. Insufficient finished water storage.

7. On October 13, 1988 a sanitary survey inspection was made. Results of the inspection were forwarded to the Respondent in a Department letter dated October 21, 1988. The survey revealed numerous deficiencies including:

A. No cross connection control program.

B. The back up chlorinator was inoperable.

C. There were no operation and maintenance logs.

D. Insufficient chlorine residual at remote locations in the distribution system.

E. Insufficient finished water storage.

F. The auxiliary generator did not operate in the automatic mode.

G. Well #1 is operating at approximately 30 per cent of its normal capacity.

H. The raw water tap at Well #1 is in poor condition.

I. The aerator does not remove sufficient hydrogen sulfide.

8. On February 15, 1989, Department representatives met with Respondent to discuss the violations and a possible

resolution. A schedule of actions to resolve the violations was discussed and an agreeable resolution was reached.

Therefore, having reached a resolution of the matter pursuant to Florida Administrative Code Rule 17-103.110(3), the Respondent and the Department mutually agree and it is

ORDERED:

9. Within 90 days of the effective date of this Consent Order, Respondent shall establish and implement a formal cross-connection program. Respondent shall complete an audit of the system to identify the degree of hazard from potential cross-connections at such places as the wastewater treatment plants, seafood processing plants, marinas, private wells, etc. The program shall also include adequate training through an American Water Works Association (AWWA) affiliated course which shall be provided to the manager of the cross-connection control program. The manager shall inform the Department of the progress of this program by forwarding a copy of system audit and also forwarding copies of the monthly inspections made to Cliff McKeown.

10. Respondent has replaced the back up chlorinator and agrees to maintain both chlorinators in an operable condition at all times in the future.

11. Respondent has established an operation and maintenance log and updates it on a daily basis. The log shall include the following information:

Plant name, signature and certification number of the operator and maintenance person(s) attending the plant, the

specific operation and maintenance performed, test results, samples collected and major repairs made. Respondent shall insure that a copy of the operation and maintenance log is mailed along with the daily operation summary to the Department's Tallahassee Branch Office so that both are received on or before the 15th of the month following the month for which the report is made. These reports shall be continued on a monthly basis until the requirement is cancelled by the Department.

12. Respondent has obtained the services of a registered professional engineer to design and supervise construction of an elevated water storage tank and chlorine booster station. The Phase I elevated tank shall be at least 150,000 gallons capacity and of such a height as to adequately supply sufficient pressure and volume to all parts of the system's service area to support both the existing system's maximum daily demand and the maximum daily demand resulting from the additional residential connections agreed to in Paragraph 17. The Respondent further agrees to timely provide additional elevated storage (Phase II) to support the increased demand beyond that agreed to in paragraph 17.

A. Construction shall begin on the elevated storage tank on or before January 1, 1990. Construction shall be completed and the tank placed in use, by April 30, 1990.

B. Respondent has constructed a chlorine booster station. If the existing chlorine booster station is inadequate, Respondent agrees to update it so that

acceptable free chlorine residual exists throughout the system at all times.

13. Within 60 days of the effective date of this Consent Order Respondent shall repair the auxiliary generator so that when a power failure occurs, the generator will start automatically and operate the water system in order to provide at least one half of the system maximum daily demand. Respondent also agrees to exercise the generator 1 hour per week every week under full load.

14. On or before December 1, 1989, Respondent shall submit an application for a permit for a new potable water supply well (Well #3).

15. Respondent has replaced the raw water tap at Well #1.

16. On or before December 1, 1989, Respondent shall obtain the services of a registered professional engineer to evaluate the existing aerator or other treatment methodology. The aerator must be designed to remove 90% of the hydrogen sulfide present in the raw water. Construction or repair must begin and be completed within 180 days of the effective date of this Consent Order.

17. Respondent may make up to 200 equivalent residential connections until Well #3 and the Phase I elevated water storage tank (150,000 gallons) are in use. After the 200 new connections are made to the system, a certified engineering report reviewing the system's capability to handle additional connections above this number shall be provided to the Department for review. Any of the pre-paid connections that

are placed into service must be counted as part of the 200 connections.

18. Within 30 days after the effective date of this Consent Order, Respondent shall reimburse the Department for costs and expenses incurred in resolving this matter in the sum of $1,220.00. The effective date of this Consent Order shall be that date of the Certification of Service which will be affixed to the signature page after execution by Respondent and the Department. Payment shall be made by cashiers' check, certified check or money order payable to the Department of Environmental Regulation and shall be sent to the Northwest District, 160 Governmental Center, Pensacola, Florida 32501-5794.

19. Within 30 days of the effective date of this Consent Order, Respondent shall make payment to the Department for settlement of the matters alleged in this Consent Order in the sum of $3,205. Payment shall be made by cashiers' check, certified check or money order payable to the Department of Environmental Regulation and shall be sent to the Northwest District, 160 Governmental Center, Pensacola, Florida 32501-5794.

20. If any event occurs which causes delay or the reasonable likelihood of delay in the implementation of the requirements of this Consent Order. Respondent shall have the burden of proving that the delay was or will be caused by circumstances beyond the reasonable control of Respondent, and could not have been or cannot be overcome by due diligence. Upon occurrence of such event, Respondent shall promptly notify the Department orally and shall within seven (7) calendar days

notify the Department, in writing, of the anticipated length and cause of delay, the measures taken or to be taken to prevent or minimize the delay and the time table by which Respondent intends to implement these measures. If the parties can agree that the delay or anticipated delay has been or will be caused by circumstances beyond the reasonable control of Respondent, the time for performance hereunder shall be extended for a period equal to the delay resulting from such circumstances. Such agreement shall be confirmed by letter from the Department accepting or if necessary, modifying the extension request. Respondent shall adopt all reasonable measures necessary to avoid or minimize delay. Failure of Respondent to comply with the notice requirements of this paragraph shall constitute a waiver of Respondent's right to request an extension of time to complete the requirements of this Consent Order. Increased cost of performance of any of the activities set forth in this Consent Order or changed economic circumstances shall not be considered circumstances beyond the control of Respondent. A determination by the Department that the delay has been or will be caused by circumstances within the control of Respondent shall be deemed an agency action subject to the provisions of paragraph 22 of this Consent Order.

21. In the event Respondent experiences a delay which results in a waiver of Respondent's right to request an extension or in the event the Department determines that the delay has been or will be caused by circumstances within the control of Respondent or in the event Respondent fails to meet

any compliance provisions of this Consent Order, Respondent shall pay a stipulated penalty of $100.00 for each day that the delay or non-compliance occurs.

22. In the event that Respondent disagrees with any determination made by the Department regarding Respondent's responses, duties and obligations made pursuant to this Consent Order, Respondent may file a Petition for Formal or Informal Administrative Hearing Proceeding, if Respondent objects to the Department's determination, pursuant to Section 120.57, Florida Statues, and Chapters 17-103 and 28-5, Florida Administrative Code. The petition must conform with the requirements of Florida Administrative Code Rule 28-201, and must be received by the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301, within 21 days after receipt of notice from the Department of any determination Respondent wishes to challenge. Failure to file a petition within this time period shall constitute a waiver by Respondent of its right to request an administrative proceeding under Section 120.57, Florida Statutes. The Department's determination, upon expiration of the 21 day time period if no petition is filed, or the Department's Final Order as a result of the filing of a petition, shall be incorporated by reference into this Consent Order and made a part of it. All other aspects of the Consent Order shall remain in full force and effect at all times.

In the event Respondent seeks an administrative proceeding pursuant to this paragraph, the Department in lieu of or in addition to holding the administrative hearing may file suit to

obtain judicial resolution of the issues. In the event the Department files suit pursuant to this paragraph, both parties retain their rights as set forth in this paragraph.

23. Respondent shall be publish the following notice in a newspaper of general circulation in Franklin County, Florida. The notice shall be published one time only within 14 days after execution of the Consent Order by the Department.

State of Florida Department of Environmental Regulation
Notice of Proposed Agency Action

The Department of Environmental Regulation gives notice of agency action of entering into a Consent Order with the Saint George Island Utilities Company, Ltd. pursuant to Florida Administrative Code Rule 17-103.110. The Consent Order requires the upgrading of the Saint George Island Utilities Company Ltd. potable water system; and payment of Department expenses.

The Consent Order is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at the Department of Environmental Regulation, 160 Governmental Center, Pensacola, Florida.

Persons whose substantial interests are affected by the above proposed agency action have a right pursuant to Section 120.57, F.S., to petition for an administrative determination (hearing) on the proposed action. The Petition must conform to the requirement of FAC Chapters 17-103 and 28-5, and must be filed (received) with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within 21 days of publication of this notice. Failure to file a petition within the 21 days constitutes a waiver of any right such person has to an administrative determination (hearing) pursuant to Section 120.57, F.S.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final

action may be different from the proposed agency action. Persons whose substantial interests will be affected by a decision of the Department have the right to intervene in the proceeding. A petition for intervention must be filed pursuant to Model Rule FAC 28-5.207, at least five days before the final hearing and be filed with the Hearing Officer if one has been assigned at the Division of Administrative Hearings, Department of Administration, 2009 Apalachee Parkway, Tallahassee, Florida 32301. If no Hearing Officer has been assigned, the petition is to be filed with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to an administrative determination (hearing) under Section 120.57, F.S.

Respondent shall provide proof of publication to the Department within seven (7) days of publication.

24. Respondent shall allow all authorized representatives of the Department access to the property at reasonable times for the purpose of determining compliance with this Consent Order and the rules and regulations of the Department.

25. Entry of this Consent Order does not relieve Respondent of the need to comply with all applicable Federal, State and local laws, regulations, or ordinances.

26. The Department, for and in consideration of complete and timely performance by Respondent of the obligations agreed to in this Consent Order, hereby agrees to waive its right to seek judicial imposition of damages, or civil or criminal penalties for the violations outlined in this Consent Order. Respondent waives its right to a hearing or judicial review of the terms of this Consent Order.

27. The terms and conditions set forth in the Consent Order may be enforced in a court of competent jurisdiction pursuant to Sections 120.69 and 403.121, Florida Statutes. Failure to comply with terms of this Consent Order shall constitute a violation of Section 403.161(1)(b), Florida Statutes.

28. Respondent is fully aware that a violation of the terms of this Consent Order may subject Respondent to judicial imposition of damages, civil penalties of up to $5,000 per offense, and criminal penalties.

29. The Department hereby expressly reserves the right to initiate appropriate legal action to prevent or prohibit the future violation of applicable statutes or the rules promulgated thereunder.

30. All plans, applications and information required by this Consent Order to be submitted to the Department shall be sent to the Water Facilities Program Administrator Northwest District Department of Environmental Regulation 160 Governmental Center, Pensacola, Florida 32501-5794.

31. No modification of the terms of this Consent Order shall be effective until reduced to writing and executed by both Respondent and the Department.

32. This Consent Order is the final action of the Department pursuant to Section 120.69, Florida Statutes, and Florida Administrative Code Rule 17-103.110(3), and it is final and effective on the date filed with the clerk of the Department unless a petition is filed in accordance with the preceding

paragraphs. Upon the timely filing of a petition this Consent Order will not be effective until further order of the Department.

FOR RESPONDENT:

Nov. 8, '89
Date

GENE D. BROWN, General Partner of
Saint George Island Utilities
Company, Ltd.

DONE AND ENTERED this 17th day of Nov, 1989, in Pensacola, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

ROBERT V. KRIEGEL
Deputy Assistant Secretary

160 Governmental Center
Pensacola, Florida 32501-5794
(904) 436-8300

CERTIFICATE OF SERVICE

This is to certify that this CONSENT ORDER and all copies were mailed before the close of business on November 20, 1989 to the listed person.

FILING AND ACKNOWLEDGEMENT FILED, on this date, pursuant to £ 120.52(10), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Vienna Caldwell
Clerk

Nov. 20 1989
Date

Received
NOV 22 1989

IN THE CIRCUIT COURT
SECOND JUDICIAL CIRCUIT
FRANKLIN COUNTY, FLORIDA

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION,

Plaintiff,

v. Case No: 90-335

GENE D. BROWN, d/b/a SAINT
GEORGE ISLAND UTILITIES
COMPANY, and SAINT GEORGE
ISLAND UTILITIES COMPANY, LTD.,
a Florida Corporation,
Defendants.

PARTIAL FINAL JUDGMENT

THIS MATTER having come on to be heard upon the Stipulation for Entry of Partial Judgment of the parties hereto, and the Court having reviewed the pleadings, the Stipulation, and being otherwise advised in the premises, it is HEREBY ORDERED, ADJUDGED AND DECREED that:

1. The aforesaid stipulation, a copy of which is attached hereto, is APPROVED and made a part of this Partial Final Judgment, and the parties are ordered to comply therewith.

2. The Plaintiff, STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION, shall have and recover of the

Defendants, Gene D. Brown and SAINT GEORGE ISLAND UTILITIES COMPANY, LTD., the sum of $4,425.00 (four thousand four hundred and twenty-five dollars), together with interest at the statutory rate until paid, as reimbursement for the Department's costs and expenses incurred to date in this case, for which let execution issue forthwith.

3. The Court retains jurisdiction to enforce the terms of this Partial Final Judgment upon petition of any of the parties, and to rule on any issues not resolved herein.

DONE AND ORDERED this 30th day of April, 1992 in Chambers, Apalachicola, Franklin County, Florida.

Circuit Judge

Copies furnished to:

Richard L. Windsor,Esq.

Thomas Pelham, Esq.

Gene D. Brown, Esq.

IN THE CIRCUIT COURT
SECOND JUDICIAL CIRCUIT
FRANKLIN COUNTY, FLORIDA.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

Plaintiff,

vs. Case No. 90-335

GENE D. BROWN, d/b/a SAINT
GEORGE ISLAND UTILITIES
COMPANY, and SAINT GEORGE
ISLAND UTILITIES COMPANY, LTD.,
a Florida Corporation

Defendants.
_____/

STIPULATION FOR ENTRY OF PARTIAL FINAL JUDGMENT

IT IS HEREBY stipulated and agreed by Plaintiff and Defendants that for purposes of trial the issues relating to imposition of civil penalties may be bifurcated and determined at a subsequent hearing, and that a partial judgment may be entered granting other relief sought in the complaint of the State of Florida Department of Environmental Regulation (DER), and particularly the following factual findings and injunctive relief:

FACTS

1. During the pendency of the Consent Order, OGC No. 88-1100 (hereinafter "C. O."), some progress has been made

by Defendants toward resolving the issue of an adequate cross connection control program; completion of the work already begun and certain improvements to the program will benefit the public and users of the potable water system.

2. Defendants have done some work on the water system's aerator during the pendency of the C. O.; the required goal of removal of 90% of hydrogen sulfide from the water has not yet been met.

3. Proper operation of the water system requires that a third well (not yet in existence) be completed and put into service. A second permit application for the new well was submitted to the Department in early 1992. Until the new well is completed and properly placed into service, no new connections to the system beyond the number previously agreed upon by the Defendants and the Department would be appropriate.

4. Improvements to the design and operation of the chlorination system must be made in order that the Department is assured of 100% reliability of the chlorination system and that chlorination levels are maintained at safe and adequate levels throughout the community public water system at all times.

INJUNCTIVE RELIEF

5. The Defendants shall review and improve the cross connection control program . Items required are:

a. A data sheet shall be completed by Defendants; it shall include in each instance the customer billing name, street address, control device type, serial number, installation date, and initial and subsequent test dates, service meter number, meter book page number and customer telephone number. This data compilation shall be provided to the Department and a copy provided to the court on or before June 1, 1992.

b. All presently untested control devices shall be tested on or before July 1, 1992 and the test results provided to the Department and this court.

c. All devices shall be re-tested 12 months following installation.

d. All data sheets, correspondence, test results, shut off orders and any other materials pertaining to the cross connection control program shall be submitted to the Department within 5 working days of the date such materials are generated, and filed individually. This requirement shall begin on the date of the partial judgment.

e. Each service connection with a device installed and with an initial satisfactory test shall be tested again 12 months after installation. These customers shall be notified 30 days before the end of 12 months by mail by Defendants using a format acceptable to DER. Any customer that does not provide a passing test to the water system and to DER shall be allowed 5 days to repair or replace the device and provide a passing test to the water system and to DER or service shall be discontinued until a passing test is received.

f. The Defendants shall comply fully with the water system's cross connection control program according to the policy statement previously submitted to and accepted by the Department. The court shall retain jurisdiction to make such modifications or further orders as may become necessary in this matter concerning important public health issues.

6. The Defendants shall cause the system's backup chlorinator to be connected to the water system at all times and operable in all regards. The regular and the backup chlorinator shall be interchangeable, and both shall have automatic cylinder switching devices and two chlorine gas cylinders connected to each chlorinator at all times.

Each chlorine cylinder shall be mounted on an accurate weighing scale, weighed daily, and the weight recorded on an Operation and Maintenance Log. Both chlorinators shall additionally be equipped with a loss of chlorine alarm that is both visual and audible. A chlorine leak detector shall be installed in the chlorine room. All equipment shall at all times be kept in good working order. In the event of downtime exceeding 30 days Defendants shall immediately obtain a backup device. Defendants shall adequately secure the chlorination room.

7. The Operation and Maintenance Log for the water system shall be modified to include each information heading area contained in paragraph 11 of the C.O. A Maintenance Log shall be kept up to date on each major water plant component including but not limited to each well, each water storage area, each chlorinator, each high service pump and the auxiliary generator. Copies of these logs shall be submitted to the Department on the 5th of each month following the month for which the report is made.

8. Defendants shall assure that the chlorine booster station is locked at all times. This station shall be

inspected daily and a separate Operation and Maintenance Log maintained on it. A loss of electrical power warning light shall be placed at the booster station and at the main water plant along with a clearly legible sign stating "POWER OFF-LOSS OF DISINFECTION CAPABILITY-PLEASE CONTACT OPERATOR AT 927-2648". These signs must have letters at least 3" high in colors contrasting the sign's background color. This station shall be continuously operated so that an adequate chlorine residual is maintained at the west end of the water distribution system.

9. Defendants shall cause the auxiliary power unit to be repaired so that the automatic startup switch and generator has 100% reliability. The automatic startup switches' electrical components shall be installed in a NEMA weather proof housing. Bars, screens or louvers shall be placed on the generator shed so that unauthorized entry will not occur. The generator will be operated under load for a least one hour each week. The operating sequence shall be started when main power to the water plant is shut off. The generator shall then start and operate the largest high service pump and one chlorinator. Any downtime exceeding 30 days shall result in purchase of and stocking of spares.

10. By July 1, 1992, Defendants shall retain an engineer registered in Florida to evaluate the existing aerator and raw water quality with respect to Hydrogen Sulfide Content. The existing aerator will be evaluated using accepted engineering practices. By August 1, 1992 a recommendation regarding repair, replacement, modification or additional treatment shall be developed and submitted to DER in the form of a complete construction permit application. Within 60 days following issuance of the permit Defendants shall complete construction and return the completed aerator to service. Beginning June 1, 1992, Defendants shall cause to be tested (at a Department of Health and Rehabilitative Services Certified Drinking Water Laboratory) samples for Hydrogen Sulfide collected from the following locations:

1) Each well - from the raw water tap after the well has been operated for 15 minutes;
2) The water treatment plant prior to aeration (may not be sampled in the aerator);
3) The water plant after aeration, but before chlorination;
4) The water plant after chlorination;
5) Entrance to the plantation;
6) West end of the distribution system;

7) Last tap before the chlorine booster station

8) First tap after the chlorine booster station

9) Mid point between the water plant and State Park entrance.

The sampling and testing for Hydrogen Sulfide shall be done every 2 weeks year round. Chain of Custody Sheets shall be completed on each sample point. Sample points shall not be changed without written permission from the Department. Defendant may apply for a modification to the sampling protocol, from biweekly to monthly upon a showing of a good cause.

11. By September 1, 1992, Defendants shall complete Well Number three.

12. Defendants shall retain an engineer registered in Florida to evaluate the water system. The engineer shall develop a Certified Engineering Report along with supporting documentation in the form of system maps, calculations, records of conversations with consumers and operator, computer generated reports and other normal documentation describing the condition of this water system and its ability to properly and adequately serve additional customers. Information submitted shall include a system wide hydraulic analysis using methodology commonly accepted

by the engineering community. It shall include flow conditions when the St. George Island State Park at the eastern end of the water system is at maximum occupancy and is refilling the park's water storage tanks. Also flows shall be estimated for future growth at the Bob Sikes Cut using the maximum allowable population density based on the most dense zoning criteria available for Franklin County. This hydraulic analysis of the water system shall consider the extreme flow conditions above resulting from a peak flow period. This report shall be finalized after Well Number 3 has been operational for at least 6 months. Data collection may begin before this period.

13. A Monthly Report shall hereafter be generated by Defendants and submitted to DER showing the total number of connections, number of connections with meters installed and number of connections that used water during the previous billing cycle. This report shall be submitted so as to be received by DER on the 5th of every month beginning in May 1, 1992. Defendants shall deliver meter books to DER for examination upon request, within 3 calendar days of a request for same.

14. Defendants shall remit $4,425 to the DER by cashier's check immediately in payment of costs and

expenses incurred in investigation and resolution of this matter.

15. Defendants shall establish an escrow account for construction of Well Number 3 and improvements to the water system. Among the authorized signatures essential to the withdrawal of funds from said account shall be the Department's Northwest District Director of District Management or his designee. The amount of the account shall be no less than $75,000. This account shall be opened in a bank within the city limits of Tallahassee, Florida and shall be titled St. George Island Utilities Co. Ltd. Water System Improvement Account. This account will be in place by May 1, 1992.

16. Defendants shall retain an engineer registered in Florida to develop a current and up to date water distribution system map. This map shall include main sizes, materials, locations, locations of services, fire hydrants, flush stands and other appurtenances. Valves and hydrants shall be numbered. Water main sections shall have a separate identification system, so as to clearly identify each section of main from a valve or hydrant. This map will be complete and submitted to DER by September 1, 1992.

By October 1, 1992, each system valve shall be marked in the field by a clearly identifiable manner. Copies of the system plans shall be delivered to; DER (2 copies), PSC, local building officials, local utilities including but not limited to cable TV, electrical and telephone companies, fire department and Plantation Homeowners Association.

17. Defendants shall develop and implement a written sampling plan establishing a procedure for all samples required by DER. The plan shall identify each water quality parameter separately, its sampling frequency, person to collect the sample, laboratory to test the sample and date the next sample is due. This sampling plan is to be submitted to DER before May 15, 1992.

18. Defendants shall construct a chain link fence with a locked gate around the water treatment plant. The fence shall be 6 feet high with an angled barbed wire top. Construction shall be complete by July 1, 1992.

19. Defendants shall increase elevated storage capacity as follows:

a. Within 60 days of the need being identified by the Department preliminary design will be finished and submitted to DER;

b. Within the 90 days following such notification funding will be available and obtained;

c. Within the following 30 days design will be finalized and a permit application submitted to the Department. Should the application be incomplete, the applicant will furnish the requested information within 30 days of the request. If the additional information is deemed by the Department to be insufficient, inadequate or not submitted, then no more connections shall be made to the water system. This includes connections that do not have a service meter installed at the time. Defendant will then within 30 days submit a statement to the Department regarding completing the application and providing a date certain when the requested information will be submitted;

d. Within 90 days following issuance of a construction permit, construction will be completed. The second elevated water storage tank will be placed in operation only after the Department receives the engineer of record certification of completion of construction and the Department has issued approval to Defendants to place the second elevated water storage tank into service.

e. Failure to comply with the above provisions will result in the number of service connections remaining at a total of 911 equivalent residential connections.

20. The court shall retain jurisdiction to grant such further relief, or to modify this partial judgment, as may be necessitated by environmental or public health exigencies.

21. This stipulation shall not be deemed an admission by any party regarding the determination of penalties, the amount and necessity of which shall be determined at a subsequent hearing.

FOR DEFENDANTS:

GENE D. BROWN
3836 Killearn Court
Tallahassee, FL 32308

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION,
Plaintiff

By: _____
RICHARD L. WINDSOR
Assistant General Counsel
2600 Blair Stone Road
Tallahassee, FL
32399-2400

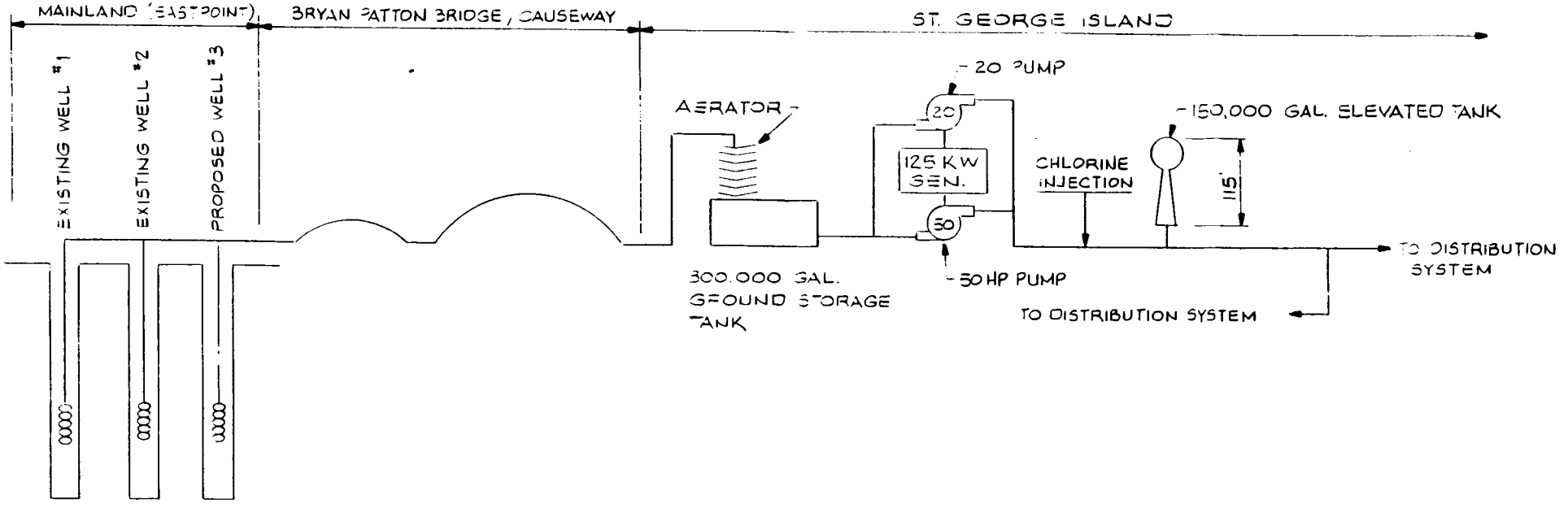


EXHIBIT 2

EXISTING SUPPLY / TREATMENT SYSTEM

ST. GEORGE ISLAND WATER SYSTEM
FRANKLIN COUNTY, FLORIDA

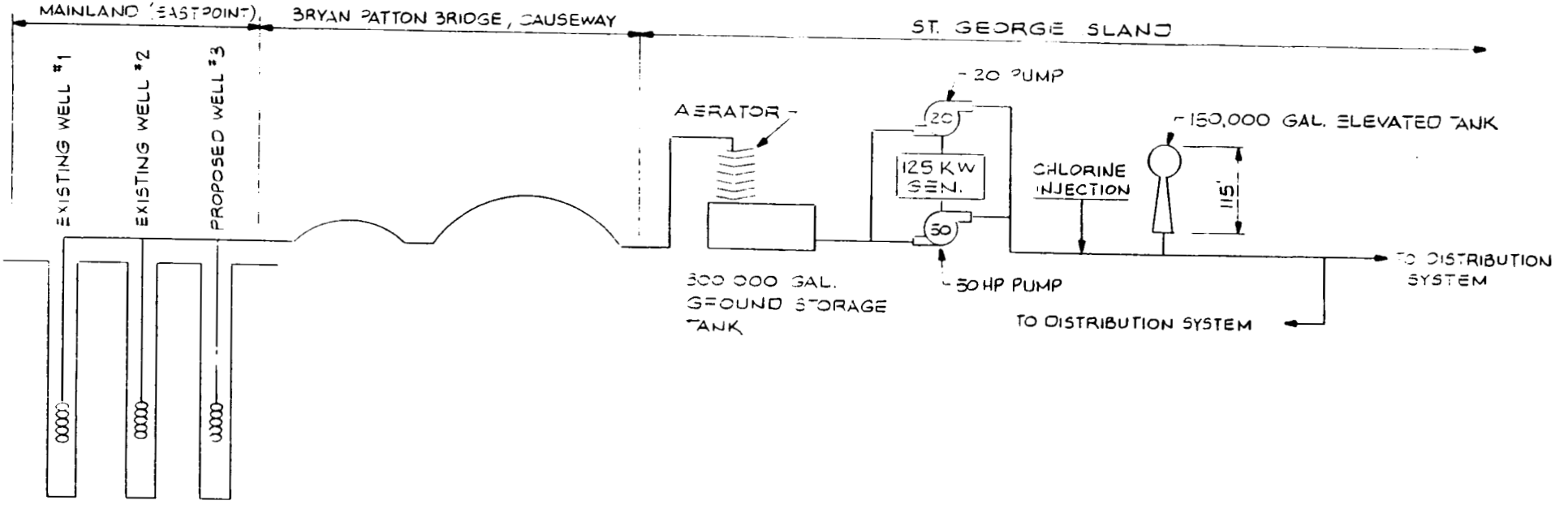


EXHIBIT 2

EXISTING SUPPLY / TREATMENT SYSTEM

ST GEORGE ISLAND WATER SYSTEM
FRANKLIN COUNTY, FLORIDA

May 12, 1992

TO: Gene Brown

FROM: A. Hills A. Hills

The following is the information that James Wydell requested on Commercial Accounts from 1988 to 1991. I've included the water usage for the first four months of 1992. The Commercial Accounts are as follows:

Acct. 476 Villas of St. George
Acct. 861 Townhomes of St. George
Acct. 479 Buccaneer Inn II
Acct. 536 Buccaneer Inn I
Acct. 495 St. George Inn
Acct. 466 Happy Pelican
Acct. 474 Islander Restaurant
Acct. 468 Mini Convenience Store
Acct. 471 Sunshine Food Stores

The documentation over the past years isn't very good for determining how many customers were capable of using water. The following information should be close:

	1988	1989	1990*	1991
May	569	691	708	850
July	617	n/a	740	854
Sept	578	n/a	739	860
AVG.	588	691	729	855

cc: James Wydell - Backerville Donovan
Hank Garrett

EXHIBIT 3

VILLAS OF ST. GEORGE - ACCT. 476 OLD ACCT. 298

Water Usage ->	1988	1989	1990	1991	1992	AVERAGE
Jan	133900	145900	122200	165300	100900	133640
Feb	126600	168300	149400	49000	81000	114860
March	256200	256200	201300	141500	125200	196080
April	258700	261700	397000	182900	51400	230340
May	324100	356500	184700	114300		244900
June	401000	292700	374600	272200		335125
July	323400		333700	247000		301367
Aug	332300		299500	362800		331533
Sept	119700		149000	157400		142033
Oct	204800		110200	78000		131000
Nov	179500	100000	169800	85300		133650
Dec	105000		139500	72500		105667
Year	2765200	1581300	2630900	1928200	358500	2400195
Average	230433	225900	219242	160683	89625	200016

TOWNHOMES OF ST. GEORGE - ACCT. 861 OLD ACCT. 592

Water Usage ->	1988	1989	1990	1991	1992	AVERAGE
Jan	103000	200	188700	232700	247500	154420
Feb	120300	16500	215600	154200	51500	111620
March	0	6100	186700	43700	262800	99860
April	76700	8000	173500	97400	211600	113440
May	79100	10000	221200	172500		120700
June	59200	96000	234800	168600		139650
July	24200		141000	131190		98797
Aug	24200		165200	205600		131667
Sept	0		194700	245600		146767
Oct	0		197100	198000		131700
Nov	33200	142800	233900	259000		167225
Dec	0		195300	70200		88700
Year	519900	279600	2348300	1978690	773400	1504545
Average	43325	39943	195692	164891	193350	125379

BUCCANEER INN II - ACCT. 479 OLD ACCT. 301

Water Usage ->	1988	1989	1990	1991	1992	AVERAGE
Jan	28200	10700	48800	9200	5600	20500
Feb	80200	19200	30300	7400	7300	28880
March	47800	22400	76400	35300	26000	41580
April	30300	29400	73200	67900	25900	45340
May	72700	118200	17200	70300		69600
June	111700	52100	244300	139800		136975
July	70400		114400	113500		99433
Aug	86400		114400	11300		70700
Sept	7700		59500	50700		39300
Oct	22000		111300	37700		57000
Nov	3500	53200	82700	81900		55325
Dec	2500		21500	23600		15867
Year	563400	305200	994000	648600	64800	680500
Average	46950	43600	82833	54050	16200	56708

BUCCANEER INN I - ACCT. 536 & 10000536
(OLD ACCT. # LARGE SIDELARGE SIDESMALL SIDESMALL SIDE

Water Usage ->	1991	1992	1991	1992	AVERAGE
Jan		2200		71700	36950
Feb		500		49400	24950
March		3600		102600	53100
April		5800		102300	54050
May					ERR
June					ERR
July					ERR
Aug					ERR
Sept					ERR
Oct					ERR
Nov	2000		1100		1550
Dec	800		45000		22900
Year	2800	12100	46100	326000	ERR
Average	1400	3025	23050	81500	ERR

ST. GEORGE INN - ACCT. 495 OLD ACCT. 315

Water Usage ->	1988	1989	1990	1991	1992	AVERAGE
Jan	32400	61900	0	33700	41400	33880
Feb	35900	39300	200	20800	32800	25800
March	46700	32000	13700	35400	53300	36220
April	54900	27400	11800	26900	69800	38160
May	90900	28400	10900	48600		44700
June	81200	19000	22100	66620		47230
July	58200		18000	39170		38457
Aug	53400		53400	49300		54033
Sept	30600		39000	63800		44467
Oct	58800		35900	44700		46467
Nov	55600	0	48000	44600		37050
Dec	39200		49200	27300		38567
Year	643800	208000	302200	500890	197300	485030
Average	53650	29714	25183	41741	49325	40419

HAPPY PELICAN - ACCT. 466 OLD ACCT. 286

Water Usage ->	1988	1989	1990	1991	1992	AVERAGE
Jan	13030	18260	14400	11700	14100	14298
Feb	19710	26690	13900	11200	14200	15719
March	32620	0	195900	22900	14300	35142
April	37840	11200	24700	23360	14000	37682
May	34070	25100	13200	18060		22392
June	46850	15200	18400	22970		25855
July	20370		12100	15860		16110
Aug	53030		279000	15800		115943
Sept	27760		10300	16600		18220
Oct	11270		9300	12600		11057
Nov	19820	17500	10700	12500		15130
Dec	17070		5700	12700		11823
Year	333440	113950	607600	196250	86600	339372
Average	27787	16279	50633	16354	14150	28281

ISLANDER RESTAURANT - ACCT. 474 OLD ACCT. 295

Water Usage ->	1988	1989	1990	1991	1992	AVERAGE
Jan	63100	29000	4700	1100	43200	28220
Feb	50500	35900	4410	15400	36300	28502
March	45500	29300	6790	51860	36000	33890
April	34600	36900	6100	46030	35000	31726
May	46900	48900	4500	49490		37423
June	45500	51900	4500	55600		39375
July	38900		3200	57290		33130
Aug	52400		3100	49800		35100
Sept	19900		1500	50700		24033
Oct	28200		1400	34600		21400
Nov	25100	151900	1400	40200		54650
Dec	17300		500	24400		14067
Year	467900	383700	42100	476470	150500	381516
Average	38992	54814	3508	39706	37625	31793

MINI CONVENIENCE STORE - ACCT. 468 OLD ACCT. 289
(OLD ACCT. #

Water Usage ->	1988	1989	1990	1991	1992	AVERAGE
Jan	37500	28000	53900	38800	65000	44640
Feb	35000	31200	47300	28000	31700	34640
March	33700	30600	41900	39000	46100	38260
April	33400	34900	43300	44820	19900	35264
May	50600	36700	37600	26040		37735
June	85200	41600	62100	34800		55925
July	44400		54300	42530		47077
Aug	45500		55100	53300		51300
Sept	17600		46500	81800		48633
Oct	23800		73200	35000		44000
Nov	21400	22400	74100	35600		38375
Dec	20600		96600	19900		45700
Year	448700	225400	685900	479590	162700	521549
Average	37392	32200	57158	39966	40675	43462

SUNSHINE FOOD STORES - ACCT. 471 OLD ACCT. 292
(OLD ACCT. #

Water Usage ->	1988	1989	1990	1991	1992	AVERAGE
Jan	3140	13940	6400	23500	11000	11596
Feb	4540	6440	6530	36400	12000	13182
March	6130	10490	1940	32500	11800	12572
April	7620	6190	5270	18110	15400	10518
May	6530	7410	16530	24950		13855
June	10430	21030	20080	39930		22868
July	6010		3540	62750		24100
Aug	8400		0	47900		18767
Sept	13360		0	68000		27120
Oct	4120		10	53300		19143
Nov	18770	10590	9390	7000		11438
Dec	21260		9260	6400		12307
Year	110310	76090	78950	420740	50200	197465
Average	9193	10870	6579	35062	12550	16455

State Park - Account #593

Water Usage ->	1988	1989	1990	1991	AVERAGE	AVG. VS. 1991 DIFFENCE	REVENUE LOST
Jan	2027400	618100	226700	126400	749650	623250	$1,040.63
Feb	294500	654800	308500	54800	328150	273350	$456.49
March	654600	341300	435000	107600	384625	277025	$462.63
April	79200	439900	572200	183000	318575	135575	$226.41
May	0	843400	762200	242100	461925	219825	$367.11
June	697300	939200	933400	295700	716400	420700	$702.57
July	826400	553300	504700	206300	522675	316375	$528.35
Aug	54800	606800		360000	340533		$0.00
Sept	54800	461800		200000	238867		$0.00
Oct	368800	588600	206500	60000	305975	245975	$410.78
Nov	569200	728600	161000	70000	382200	221200	$369.40
Dec	543300	442300	20900	50000	264125	243225	$406.19
Year	6170300	7218100	4131100	1955900	5013700	2976500	$4,970.75
Average	514192	601508	413110	162992	417808		

4yr. AVG

EXHIBIT 4

FLOW HISTORY
MAXIMUM DEMAND MONTHS

YEAR	MONTH	NO. OF CUSTOMERS	ADF (MGD)	MDF (MGD)
1988	MAY	569	.265	
	JULY	617	.345	.517
	SEPT	578	.267	
1989	MAY	691	.228	
	JULY	691	.312	.399
	SEPT	691	.249	
*1991	MAY	850	.235	
	JULY	854	.289	.424
	SEPT	860	.207	

* 1990 Data not used due to missing and/or unreliable data, as per conversations with Utility personnel.

RESIDENT ACCOUNT NBER	NAME	SERVICE ADDRESS	BOOK /SEQ	FIELD #1 DEPOSIT	FIELD #1 RATE CODE
0000001	ST. GEORGE PLANTATION OWNERS	NORTH ENTRANCE PLANTATION	1.001	0.00	R2
0002	ST. GEORGE PLANTATION OWNERS	SOUTH ENTRANCE PLANTATION	1.003	0.00	R2
0003	ST. GEORGE PLANTATION OWNERS	GUARD HOUSE	1.005	0.00	R1 x
0000004	JIM DUNKIN	1 OSPREY VILLAGE	1.007	0.00	R1
0005	ROLF G. SCHERMAN	3 OSPREY VILLAGE	1.009	40.00	R1
0006	MFG. VENTURES	4 OSPREY	1.011	40.00	R1
0000007	MFG. VENTURES	5 OSPREY	1.013	40.00	R1
0000008	RON BROWER	6 OSPREY VILLAGE	1.015	25.00	R1
0009	CHARLES TITSHAW	11 OSPREY VILLAGE	1.017	25.00	R1
0010	APALACHICOLA STATE BANK	14 OSPREY	1.019	40.00	R1
0000011	MFG. VENTURES	20 OSPREY	1.021	40.00	R1
0012	STEPHEN DAY % RESORT REALTY	23 SEA DUNE VILLAGE	1.023	0.00	R1
0013	JACK BUFORD	11B SEA DUNE VILLAGE	1.025	25.00	R1
0000014	PETER V. AMATO	21A SEA DUNE VILLAGE	1.027	0.00	R1
0015	DARRELL PROCTOR	19A SEA DUNE VILLAGE	1.029	25.00	R1
0016	W. E. VANCE	18A SEA DUNE VILLAGE	1.031	0.00	R1
0000017	ALICE D. COLLINS REALTY	16A SEA DUNE VILLAGE	1.033	40.00	R1
0000018	G. R. CROFTON	13A SEA DUNE VILLAGE	1.035	0.00	R1
0019	TOM TIFFIN	10A SEA DUNE VILLAGE	1.037	0.00	R1
0020	DAVID V. KERNS	9A SEA DUNE VILLAGE	1.039	0.00	R1
000021	TOM W. HOFFER	7A SEA DUNE VILLAGE	1.041	0.00	R1
0022	ERNE BOWERS	6B SEA DUNE VILLAGE	1.043	25.00	R1
0023	BOB WILGUS	5B SEA DUNE VILLAGE	1.045	0.00	R1
000024	GERALD A. BUTTERFIELD	5A SEA DUNE VILLAGE	1.047	0.00	R1
0025	WILLIAM DODD	1B SEA DUNE VILLAGE	1.049	0.00	R1
0026	DIANE CHASTAIN	11 BAY PINE VILLAGE	1.051	25.00	R1
000027	ED MINGLEDORFF	10 BAY PINE VILLAGE	1.054	0.00	R1
000028	NORMAN FEETS	20 SEA PINE VILLAGE	1.056	0.00	R1
0029	DOROTHY PONDY	21 SEA PINE VILLAGE	1.057	25.00	R1
0030	WILLIAM R. ELLINGTON	33 SEA PINE VILLAGE	1.059	0.00	R1
000031	DON BOYD	25 SEA PINE VILLAGE	1.061	0.00	R1
0032	TILLETT/WRIGHT	27 SEA PINE VILLAGE	1.063	25.00	R1
0033	LARRY JOHNSTON	28 SEA PINE VILLAGE	1.065	0.00	R1
000034	RICHARD FELHAM	29 SEA PINE VILLAGE	1.067	0.00	R1
0035	THOMAS COLLINS	16 SEA PIN VILLAGE	1.069	0.00	R1
0036	WILLIAM SOLBURG	10 BAY PALM VILLAGE	1.071	0.00	R1
000037	GEORGE F. BAILEY	5 BAY PALM	1.073	0.00	R1
000038	JULIA CRAWFORD	6 BAY PALM VILLAGE	1.075	0.00	R1 x
0039	JOHN E. BENTE	2 SEA PALM VILLAGE	1.077	25.00	R1
0040	NICK LASLAVIC	6 SEA PALM VILLAGE	1.079	0.00	R1
000041	LEE KNOWLES	15 SEA PALM VILLAGE	1.081	0.00	R1
0042	GUY MARSH	20 SEA PALM VILLAGE	1.083	25.00	R1
0043	WILLIAM R. CLARK, JR.	33 SEA PALM VILLAGE	1.085	0.00	R1
000044	DENNIS HOWE	27 SEA PALM VILLAGE	1.087	0.00	R1
0045	JOHN P. DODDS	29 SEA PALM VILLAGE	1.089	0.00	R1
0046	CINDY STOCK	30 SEA PALM VILLAGE	1.091	25.00	R1
000047	HAMPTON DEWS	70 SEA PALM VILLAGE	1.093	0.00	R1
000048	HARRY A. BUZZETT	40 SEA PALM VILLAGE	1.095	25.00	R1
0049	T. A. FIELD	44 SEA PALM VILLAGE	1.097	0.00	R1
0050	SUNCOAST REALTY	45 SEA PALM VILLAGE	1.099	0.00	R1

EXHIBIT 5

RESIDENT ACCOUNT NUMBER	NAME	SERVICE ADDRESS	BOOK /SEQ	FIELD #1 DEPOSIT	FIELD #1 RATE CODE
0000051	WILLIAM M. SHORT	64 SEA PALM VILLAGE	1.101	0.00	R1
0052	PHILIP H. WELLS	54 SEA PALM VILLAGE	1.103	0.00	R1
0053	CHARLES RITTER	56 SEA PALM VILLAGE	1.105	0.00	R1
0000054	TOM ADAMS	58 SEA PALM VILLAGE	1.107	25.00	R1
0055	BILL DEYO, JR.	60 SEA PALM VILLAGE	1.109	25.00	R1
0056	DR. K. S. SERAI	20 BAY PALM VILLAGE	1.111	0.00	R1
0000057	MARTIN J. WILLIAMS	19 BAY PALM VILLAGE	1.113	25.00	R1 X
00058	FELICAN POINT HOMEOWNERS	FELICAN POINT TENNIS CT.	1.115	0.00	R1
0059	WALTER ARMISTEAD	14 FELICAN POINT	1.117	47.78	R1
0060	TIDAL INVESTMENTS	17 FELICAN POINT	1.119	0.00	R1
0000061	WILDER PROPERTIES, INC.	NICK'S HOLE ENTRANCE	1.121	0.00	R2 X
0062	PHIL B. WHITAKER	3 & 4 NICK'S HOLE	1.123	0.00	R2 X
0063	T. E. ALLEN III	LOT 8 NICK'S HOLE	1.125	0.00	R1 X
000064	DR. WINSTON BALL	19 SANDPIPER VILLAGE	1.127	0.00	R1
00065	WILLIAM POLORONIS	5 PEBBLE BEACH VILLAGE	1.129	0.00	R1
0066	AMALIA F. READ	8 PEBBLE BEACH VILLAGE	1.131	0.00	R1
0067	JOSIE DAVIS	9 PEBBLE BEACH VILLAGE	1.135	25.00	R1
000068	MARK BALDINO	11 PEBBLE BEACH VILLAGE	1.137	0.00	R1
0069	LEONARD PEPPER	12 PEBBLE BEACH VILLAGE	1.139	0.00	R1
0070	PHILLIP M. PAYNE III	21 SANDPIPER VILLAGE	1.142	0.00	R1
000071	R. FUNK 1202 KILDONAN DR.	24 SANDPIPER VILLAGE	1.143	25.00	R1
0072	TOM TIFFIN	28 SANDPIPER VILLAGE	1.145	0.00	R1
0073	THOMAS DAY	30 SANDPIPER VILLAGE	1.147	0.00	R1
000074	LEONARD J. GRUBBS	34 SANDPIPER VILLAGE	1.149	0.00	R1
00075	DAHLEN RITCHEY	50 PEBBLE BEACH VILLAGE	1.151	0.00	R1
0076	DOROTHY SLAGHT	51 PEBBLE BEACH VILLAGE	1.153	0.00	R1
00077	TERRA INC.	52 PEBBLE BEACH VILLAGE	1.155	0.00	R1
000078	WILLIAM KRUEGER	56 PEBBLE BEACH VILLAGE	1.157	25.00	R1
0079	VERA ANN RECHSTEINER	11 WINDJAMMER VILLAGE	1.159	0.00	R1
0080	WOODY MILEY	9 WINDJAMMER VILLAGE	1.161	25.00	R1
000081	WILLIAM P. LANGDALE, JR.	7 WINDJAMMER VILLAGE	1.163	0.00	R1
0082	GEORGE KLEINE	6 WINDJAMMER VILLAGE	1.165	0.00	R1
0083	JOHN SPOHRER	74 PEBBLE BEACH VILLAGE	1.167	0.00	R1
000084	GWEN HENKEL	65 PEBBLE BEACH VILLAGE	1.169	25.00	R1
00085	J. B. ROODENBERY, JR.	68 PEBBLE BEACH VILLAGE	1.171	25.00	R1
0086	MATTHEW MORGAN	67 PEBBLE BEACH VILLAGE	1.173	0.00	R1
0087	PAM MILLER	71 PEBBLE BEACH VILLAGE	1.175	0.00	R1 X
000088	GIL TROUTMAN	4 TURTLE BEACH VILLAGE	1.177	25.00	R1
0089	MATTHEW MORGAN	5 TURTLE BEACH VILLAGE	1.179	0.00	R1
0090	JON CAMINEZ	8 TURTLE BEACH VILLAGE	1.181	0.00	R1
000091	KIM CHMYUNG-HI	9 TURTLE BEACH VILLAGE	1.183	0.00	R1
0092	JOANNE SOBERAY	10 TURTLE BEACH VILLAGE	1.185	0.00	R1 X
0093	JERRY HENDERSON	25 WINDJAMMER VILLAGE	1.187	0.00	R1
000094	MASON BEAN	17 WINDJAMMER VILLAGE	1.189	0.00	R1
00095	ERIC LOEVINGER	13 TURTLE BEACH VILLAGE	1.191	25.00	R1
0096	SIVASAILAM THIAGARAJAN	32 TURTLE BEACH VILLAGE	1.193	0.00	R1
0097	EVE MORRIS	42 TURTLE BEACH VILLAGE	1.195	0.00	R1
000098	RAY SOLOMON	35 TURTLE BEACH VILLAGE	1.197	25.00	R1
0099	JERRY HOLMES	37 TURTLE BEACH VILLAGE	1.199	0.00	R1
0100	R. M. SILER	38 TURTLE BEACH VILLAGE	1.201	25.00	R1

RESIDENT ACCOUNT USER	NAME	SERVICE ADDRESS	BOOK /SEQ	FIELD #1 DEPOSIT	FIELD #1 RATE CODE
000101	ANCHOR REALTY & MTG.	39 TURTLE BEACH VILLAGE	1.203	0.00	R1
0102	GARY ULRICH	40 WINDJAMMER VILLAGE	1.205	0.00	R1
0103	LES BLOOM	38 WINDJAMMER VILLAGE	1.207	0.00	R1
000104	DELAND/NOELL	36 TURTLE BEACH VILLAGE	1.209	0.00	R1
0105	LARRY HALE	35 WINDJAMMER VILLAGE	1.211	0.00	R1
0106	CHARLES M. DORN	57 TURTLE BEACH VILLAGE	1.213	0.00	R1
000107	ZEK BARDHI	47 TURTLE BEACH VILLAGE	1.215	25.00	R1
000108	ST. GEORGE PLANTATION OWNERS	48 TURTLE BEACH/RONDESIC	1.217	0.00	R1
0109	ST. GEORGE PLANTATION OWNERS	48 TURTLE CLUBHOUSE/POOL	1.219	0.00	R4 X
0110	JACK BUFORD (JULIUS)	49 TURTLE BEACH VILLAGE	1.221	0.00	R1
000111	J. J. GLEATON	50 TURTLE BEACH VILLAGE	1.223	0.00	R1
0112	AARON TAYLOR	51 TURTLE BEACH VILLAGE	1.225	25.00	R1
0113	RICHARD PLESSINGER	53 TURTLE BEACH VILLAGE	1.227	0.00	R1
000114	HELDO CO. C/O ROBERT LINK	4 BAY VIEW VILLAGE	1.229	0.00	R1
0115	CLARK BLOODWORTH	5 BAY VIEW VILLAGE	1.231	25.00	R1
0116	MFG. VENTURES	65 PLANTATION BEACH VILL.	1.233	40.00	R1
0117	KATHY FROELICH	38 PLANTATION BEACH VILL.	1.235	0.00	R1 X
000118	GEORGE LEWIS	32 PLANTATION BEACH VILL.	1.237	0.00	R1 X
0119	DAVID JASIN	34 PLANTATION BEACH VILL.	1.239	0.00	R1 X
0120	ROY PLAUT, JR.	1 PLANTATION BEACH VILL.	1.241	25.00	R1
000121	MIKE & GEENA FIRST	2 PLANTATION BEACH VILL.	1.243	0.00	R1
0122	JOHN WIGHT	4 PLANTATION BEACH VILL.	1.245	0.00	R1
0123	JAMES TUNNELL	6 PLANTATION BEACH VILL.	1.247	0.00	R1
000124	CHARLES L. BOND	5 PLANTATION BEACH VILL.	1.249	0.00	R1
0125	JOHN CADDELL	8 PLANTATION BEACH VILL.	1.251	0.00	R2
0126	ELLIS C. SMITH	27 PLANTATION BEACH VILL.	1.253	0.00	R1
00127	SUSAN BOYD	29 PLANTATION BEACH VILL.	1.255	0.00	R1
000128	JAMES MCCONNAUGHAY	23 PLANTATION BEACH VILL.	1.257	25.00	R1
0129	AUGUST FONTAINE	42 PLANTATION BEACH VILL.	1.259	0.00	R1
0130	MFG. VENTURES	58 PLANTATION BEACH VILL.	1.261	40.00	R1
000131	VIVIAN KADIS	23 PLANTATION BEACH VILL.	1.263	0.00	R1
0132	VAN REED	26 PLANTATION BEACH VILL.	1.265	0.00	R1
0133	GREGORY SULLIVAN	12 PLANTATION BEACH VILL.	1.267	0.00	R1
000134	DAWN G. MURPHY	14 PLANTATION BEACH VILL.	1.269	0.00	R1
0135	HARRY L. TUCKER	15 PLANTATION BEACH VILL.	1.271	0.00	
0136	HARRY TUCKER	16 PLANTATION BEACH VILL.	1.273	25.00	R1
00137	OLIVIER MONOD	19 PLANTATION BEACH VILL.	1.275	0.00	R1
000138	ROBERT WILKINSON	20 PLANTATION BEACH VILL.	1.277	25.00	R1
0139	LYNN WILSON	22 PLANTATION BEACH VILL.	1.279	25.00	R1
0140	ROBERT WILKINSON	47 PLANTATION BEACH VILL.	1.281	0.00	R1
00141	MFG. VENTURES	52 PLANTATION BEACH VILL.	1.283	40.00	R1
0142	MICHAEL A. BELL	54 PLANTATION BEACH VILL.	1.285	25.00	R1
0143	JOSEPH A. D'AIELLO	55 PLANTATION BEACH VILL.	1.287	0.00	R1
00144	ST. GEORGE ISLAND INVESTORS	25 BAY VIEW VILLAGE	1.289	0.00	R1
0145	CAIRO INGRAM	24 BAY VIEW VILLAGE	1.291	0.00	R1
0146	JOANNE GOBERAY	23 BAY VIEW VILLAGE	1.293	0.00	R1
00147	JOSEPH LUENSCHLOSS	21 BAY VIEW VILLAGE	1.295	25.00	R1
00148	RUSSELL D. HUNTER	19 BAY VIEW VILLAGE	1.297	40.00	R1
0149	JAMES TUNNELL	4 INDIAN BAY VILLAGE	1.299	0.00	R1
0150	SONNY MARSHALL	9 INDIAN BAY VILLAGE	1.302	75.00	R1

RESIDENT ACCOUNT NUMBER	NAME	SERVICE ADDRESS	BOOK /SEQ	FIELD #1 DEPOSIT	FIELD #1 RATE CODE
00151	PATRICK ROFFEY	32 TREASURE BEACH VILLAGE	1.304	25.00	R1
00152	GERHARD SOMMER	33 TREASURE BEACH VILLAGE	1.305	0.00	R1
0000153	ROBERT WILKINSON	1 TREASURE BEACH VILLAGE	1.307	0.00	R1
00000154	R. C. BALFOUR III	4 TREASURE BEACH VILLAGE	1.309	0.00	R1
00155	JAMES R. SULLIVAN	5 TREASURE BEACH VILLAGE	1.311	25.00	R1
000156	TOM FITZGERLAD	6 TREASURE BEACH VILLAGE	1.313	0.00	R1
0000157	ANDREW RALPH HARWOOD	8 TREASURE BEACH VILLAGE	1.315	0.00	R1
00158	WILLIAM KESSLER	17 INDIAN BAY VILLAGE	1.317	0.00	R1
00159	ALEX MEYER	18 INDIAN BAY VILLAGE	1.319	0.00	R1
0000160	LEO A. SMITH	19 INDIAN BAY VILLAGE	1.321	0.00	R1
00161	RAY STANYARD	46 TREASURE BEACH VILLAGE	1.323	25.00	R1
00162	MFG. VENTURES	48 TREASURE BEACH VILLAGE	1.325	40.00	R1
0000163	WICKHAM R. CARTER III	24 TREASURE BEACH VILLAGE	1.327	40.00	R1X
00000164	JERRY DEMERY	25 TREASURE BEACH VILLAGE	1.329	25.00	R1X
00165	GARY GUELTZOW C/O ANCHOR REALT	26 TREASURE BEACH VILLAGE	1.331	40.00	R1X
00166	E&S PARISH C/O ANCHOR REALTY	12 TREASURE BEACH VILLAGE	1.334	40.00	R1
0000167	JOSEPHINE B. MOORE	13 TREASURE BEACH VILLAGE	1.335	0.00	R1
00168	SEA GULL ASS C/O ANCHOR REALTY	14 TREASURE BEACH VILLAGE	1.337	40.00	R1
00169	MILTON H. DEVIS	16 TREASURE BEACH VILLAGE	1.339	0.00	R1
000170	EUGENE HUNTER	17 TREASURE BEACH VILLAGE	1.341	0.00	R1
00171	RICHARD KOWALSKI	18 TREASURE BEACH VILLAGE	1.343	0.00	R1
00172	JEROME W. KOWALSKI	23 INDIAN BAY VILLAGE	1.345	25.00	R1
000173	JOHN STRICKLAND	24 INDIAN BAY VILLAGE	1.347	0.00	R1
00174	REGIVAL FYE	27 INDIAN BAY VILLAGE	1.349	0.00	R1
00175	JAMES H. GREEN	58 PELICAN BEACH VILLAGE	1.351	25.00	R1
00176	GUSTKE, BLUSIEWICZ, DOWLEY	57 PELICAN BEACH VILLAGE	1.353	40.00	R1
000177	MICHAEL R. BRITTON	55 PELICAN BEACH VILLAGE	1.355	0.00	R1
00178	DONALD PFAENDER	1 PELICAN BEACH VILLAGE	1.357	25.00	R1
00179	ROBERT WILKINSON	37 PELICAN BEACH VILLAGE	1.359	0.00	R1
000180	CHARLES E. HAWKINS	31 PELICAN BEACH VILLAGE	1.361	25.00	R1X
00181	JOHN HANES	2 PELICAN BEACH VILLAGE	1.367	0.00	R1
00182	DAVID MOORE	5 PELICAN BEACH VILLAGE	1.365	0.00	R1
000183	RICHARD A. BURMAN	29 PELICAN BEACH VILLAGE	1.368	0.00	R1
000184	RUTH O'DONNELL	10/1/2	5.126	40.00	R1
00185	MFG. VENTURES	3 BAY COVE VILLAGE	1.371	40.00	R1
00186	JAMES KENT, JR.	4 BAY COVE VILLAGE	1.373	0.00	R1
000187	R. O. PERSONS, JR.	7 BAY COVE VILLAGE	1.375	0.00	R1
00188	BRUCE KRUEGER	31 BAY COVE VILLAGE	1.377	0.00	R1
00189	BILLY G. BLACKBURN, JR.	53 PELICAN BEACH VILLAGE	1.379	25.00	R1X
000190	JOSEPH B. BURGESS	48 PELICAN BEACH VILLAGE	1.381	0.00	R1
00191	ISHMAEL H. JOHNSON, JR.	50 PELICAN BEACH VILLAGE	1.383	0.00	R1
00192	ROBERT WILKINSON	43 PELICAN BEACH VILLAGE	1.385	0.00	R1
000193	GENE BELANGER	23 PELICAN BEACH VILLAGE	1.387	0.00	R1
000194	RODERICK & KATHERINE DAVIS,III	13 PELICAN BEACH VILLAGE	1.389	40.00	R1
00195	RICHARD BURMAN	14 PELICAN BEACH VILLAGE	1.391	0.00	R1
00196	WILLIAM G. THAMES	15 PELICAN BEACH VILLAGE	1.393	0.00	R1
000197	TERRELL C. TEMPLIN	16 PELICAN BEACH VILLAGE	1.395	25.00	R1
00198	GEORGE HORMEL	20 PELICAN BEACH VILLAGE	1.397	0.00	R1X
00199	SHIRLEY HUGHES	22 PELICAN BEACH VILLAGE	1.399	40.00	R1X
000200	THOMAS L. OUTLAW	26 BAY COVE VILLAGE	1.401	0.00	R1

RESIDENT ACCOUNT NUMBER	NAME	SERVICE ADDRESS	BOOK /SEQ	FIELD #1 DEPOSIT	FIELD #1 RATE CODE
0201	LARRY C. STRONGOSKI	13 BAY COVE VILLAGE	1.403	0.00	R1
0202	GENE BELANGER	29 DOLPHIN BEACH VILLAGE	1.405	0.00	R1
000203	CARMEN FIGUEROA	41 DOLPHIN BEACH VILLAGE	1.407	0.00	R1
00204	HERMAN W. LAYFIELD	40 DOLPHIN BEACH VILLAGE	1.409	0.00	R1
0205	WILLIAM E. SWAB	39 DOLPHIN BEACH VILLAGE	1.411	0.00	R1
0206	JIM EGGERS	8 DOLPHIN BEACH VILLAGE	1.413	0.00	R1 X
000207	ROBERT W. MCMILLAN	29 DOLPHIN BEACH VILLAGE	1.415	25.00	R1
0208	RICK LUDWIG	30 DOLPHIN BEACH VILLAGE	1.417	25.00	R1 X
0209	HOWARD BERLINER C/O ANCHOR REA	31 DOLPHIN BEACH VILLAGE	1.419	40.00	R1 X
000210	CLARENCE KNIGHT	7 DOLPHIN BEACH VILLAGE	1.421	0.00	R1
0211	PHILLIP R. LUBBERS	9 DOLPHIN BEACH VILLAGE	1.423	0.00	R1
0212	JAMES MOORE	25 DOLPHIN BEACH VILLAGE	1.425	0.00	R1
000213	DANIEL Y. SUMNER	26 DOLPHIN BEACH VILLAGE	1.427	0.00	R1
00214	GLEN WOODSUM	27 DOLPHIN BEACH VILLAGE	1.429	0.00	R1
0215	STEVEN D. WARREN	21 BAY COVE VILLAGE	1.431	0.00	R1
0216	ROGER BERNOT	13 DOLPHIN BEACH VILLAGE	1.433	0.00	R1
000217	RONALD F. VALENTINE	10 DOLPHIN BEACH VILLAGE	1.435	0.00	R1
0218	JERRY OSTERYOUNG	20 DOLPHIN BEACH VILLAGE	1.437	25.00	R1
0219	ROBERT E. HAILS	12 DOLPHIN BEACH VILLAGE	1.439	0.00	R1
000220	FLOYD LEWELLYN	14 DOLPHIN BEACH VILLAGE	1.441	0.00	R1 X
0221	C. DON SIMMONS	23 DOLPHIN BEACH VILLAGE	1.443	0.00	R1
0222	FRANK SANCHEZ	19 DOLPHIN BEACH VILLAGE	1.445	0.00	R1
000223	CHUCK ELVER	20 HERON BAY VILLAGE	1.447	0.00	R1
00224	MARY FLOWERS	17 DOLPHIN BEACH VILLAGE	1.449	25.00	R1
0225	THOMAS H. TOWNSON	21 DOLPHIN BEACH VILLAGE	1.451	40.00	R1
0226	B. L. COSEY	10 OYSTER BAY VILLAGE	1.453	0.00	R1 X
000227	JOSEPHINE MOORE	74 SEA PALM VILLAGE	1.455	0.00	R1
0228	7 FLAGS DEVELOPMENT CORP.	45 PELICAN BEACH VILLAGE	1.380	40.00	R1
0229	ELDEN W. BUTZBAUGH, JR.	11 DOLPHIN BEACH VILLAGE	1.434	25.00	R1
000230	JAMES TARRER	16/89/5	2.001	55.84	R1 X
0231	KENNETH COLLINS	1/89/5	2.004	25.00	R1
0232	WILLIAM SANDERS	4/89/5	2.005	0.00	R1
000233	JOSEPH POGGI	1/90/5	2.007	0.00	R1 X
00234	EDNA G. ROLLINS	2/90/5	2.009	0.00	R1
0235	CLEVE RANDOLPH	18/89/5	2.011	0.00	R1
0236	BUDDY FREDERICK	19/89/5	2.013	93.94	R1
000237	RALLS JENNINGS	20/89/5	2.015	25.00	R1
0238	FRED LAWHON	22/89/5	2.017	25.00	R1
0239	MARCUS WAGER	29/87/5	2.019	53.10	R1
000240	DEBORAH DAVIS	24/87/5	2.021	0.00	R1
0241	MARILYN WALKER	19/88/5	2.023	0.00	R1 X
0242	GLENN PRICKETT	9/90/5	2.025	25.00	R1
000243	ROBERT C. ABBEY	13/87/5	2.027	25.00	R1 X
00244	TINA SHIVER	24/86/5	2.029	0.00	R1
0245	LEE EDMISTON	7/87/5	2.031	0.00	R1
0246	DON HAMMOCK	30/86/5	2.033	0.00	R1
000247	LARRY TROY	32/86/5	2.035	25.00	R1
0248	RAYMOND BANKS	1/87/5	2.037	0.00	R1
0249	JAMES ABBOTT	1/81/5	2.039	0.00	R1
000250	JEANNE WRAY	2/81/5	2.041	46.58	R1

RESIDENT ACCOUNT NUMBER	NAME	SERVICE ADDRESS	BOOK /SEQ	FIELD #1 DEPOSIT	FIELD #1 RATE CODE
0000251	JOHN ANDREWS	2/86/5	2.043	59.42	R1
0252	THOMAS GROSS	3/86/5	2.045	0.00	R1
0253	HERBERT M JENKINS	21/85/5	2.046	0.00	R1
0000254	WILLIAM F. MITCHELL	4/83/5	2.049	25.00	R1
0255	GARY L. PONTIUS	14/85/5	2.051	0.00	R1
0256	ANCHOR REALTY	1/82/5	2.053	0.00	R1
0000257	JOHN RAFNEL	13/85/5	2.055	0.00	R1
0258	BILLY J. HICKS	27/78/5	2.057	25.00	R1
0259	GAIL HERZICH	10/85/5	2.059	40.00	R1
0260	WILLIAM BENDA	3/85/5	2.061	0.00	R1
0000261	PRIMARY CARE, INC.	6/81/5	2.063	0.00	R1
0262	GEORGE CRUM	3/81/5	2.065	25.00	R1
0263	SKIP SHIVER	3/78/5	2.067	0.00	R1
000264	ALMA GARRETT	1/76/5	2.069	25.00	R1
0265	E. W. TEAGUE	2/76/5	2.071	25.00	R1
0266	THOMAS H. BLAYDEE	4/76/5	2.073	0.00	R1
000267	KENNETH W. ENDICOTT	5/76/5	2.075	0.00	R1
0268	WILLIAM ROGGERS	6/76/5	2.077	0.00	R1
0269	VIRGINIA C. HOLMES	4/77/5	2.079	25.00	R1
0270	ROBERT HOUD	9/76/5	2.081	40.00	R1
000271	DONALD HARTSFIELD	12/76/5	2.083	0.00	R1
0272	NELLE LANDRUM	13/76/5	2.085	25.00	R1
0273	HARRY LANDRUM	14/76/5	2.088	0.00	R1
000274	INGA JENSEN	15/76/5	2.089	0.00	R1
0275	MARTY BLAINE	12/78/5	2.091	0.00	R1
0276	ROBERT CARTER	11/78/5	2.093	0.00	R1
000277	SANDRA WALKER	7/77/5	2.095	0.00	R1
000278	HAROLD HAGHENBECK	13/78/5	2.100	40.00	R1
0279	GERRIT MULDERS	16/76/5	2.099	25.00	R1
0280	CHRIS CROZIER	19/76/5	2.101	84.04	R1
000281	JAMES E. SELLERS	14/78/5	2.103	0.00	R1
0282	NEIL LAWS	5/79/5	2.105	0.00	R1
0283	H. W. MCCALL	20/78/5	2.107	25.00	R1
000284	CLYDE LAW	22/78/5	2.109	0.00	R1
0285	JOYCE BECK	25/79/5	2.111	40.00	R1
0286	MICHAEL HUMPHREY	26/78/5	2.113	25.00	R1
000287	GEORGE SURRATT	26/79/5	2.115	0.00	R1
000288	JEFF VONIER	11/79/5	2.117	0.00	R1
0289	ROBERT CROZIER	20/76/5	2.119	0.00	R1
0290	AL FAULKNER	2/71/5	2.121	0.00	R1
000291	DON D. REEDER	2/73/5	2.123	0.00	R1 X
0292	VIVIAN SHERLOCK	5/71/5	2.125	0.00	R1
0293	ALAN D. MCALLISTER	6/71/5	2.127	25.00	R1
000294	LOUIE HICKS	7/71/5	2.129	0.00	R1
0295	WAYNE J. FOSTER	8/73/5	2.131	25.00	R1
0296	RAY TAYLOR	9/71/5	2.133	25.00	R1
000297	ROBERT FUNDERBURK	1/72/5	2.135	40.60	R1
000298	JIM BENNETT	10/71/5	2.137	39.32	R1
0299	C. E. MARKLEY	11/71/5	2.139	0.00	R1
0300	TONY COLVIN	2/72/5	2.141	25.00	R1 X

ESIDENT OUNT MBER	NAME	SERVICE ADDRESS	BOOK /SEQ	FIELD #1 DEPOSIT	FIELD #1 RATE CODE	
00301	JOHN E. LINEHAN	12/71/5	2.143	25.00	R1	
00302	JOHN M. WHIDDON	13/71/5	2.145	25.00	R1	
000303	ROSEMARY EVANS	14/71/5	2.147	0.00	R1	
000304	BILLY SCHULTZ	15/71/5	2.149	0.00	R1	
00305	BILL JONES	16/71/5	2.151	0.00	R1	
00306	WILLIAM HOWELL	17/71/5	2.153	0.00	R1	
000307	PHILLIP SPRATT	18/71/5	2.155	30.40	R1	
00308	W. C. WALLACE	4/72/5	2.157	25.00	R1	
00309	JOHN P. DODDS	21/71/5	2.159	0.00	R1	
000310	MICHAEL -BARBARA ROEBUCK	9/73/5	2.161	25.00	R1	
00311	MARY STOUT	11/73/5	2.163	0.00	R1	
00312	MACK HARBUCK	9/74/5	2.165	42.66	R1	X
000313	ROBERT AMMONS	1-2/69/5	2.167	25.00	R1	
000314	DENISE (MOSCONIA) ROUX	24/69/5	2.169	0.00	R1	
00315	JEANNETTE PETERSON	1/70/5	2.171	25.00	R1	
00316	TOMMY HICKS	23/69/5	2.173	0.00	R1	
000317	ELIZABETH POSEY	22/69/5	2.175	0.00	R1	
00318	THOMAS WOODWARD	21/69/5	2.177	0.00	R1	
00319	C. H. BENEFIELD	20/69/5	2.179	0.00	R1	
000320	LEAH NEEDER	18/69/5	2.181	25.00	R1	
00321	M. (SUMMERWIND) BROWN	7/70/5	2.183	0.00	R1	
00322	JOHN A. JOHNSON	11/69/5	2.185	73.30	R1	
000323	BILLY THOMAS	5/66/5	2.187	0.00	R1	
000324	BILL HINKLEY	9/69/5	2.189	0.00	R1	
00325	MARION HOLMES	5/69/5	2.191	0.00	R1	
00326	T. M. WHITNEY	4/69/5	2.193	0.00	R1	
000327	PAUL HARRELL	4/67/5	2.195	0.00	R1	
00328	DON THOMPSON	4/68/5	2.197	0.00	R1	
00329	GEORGE GROSE	3/68/5	2.199	0.00	R1	
000330	CHARLES N. SMITH	3/67/5	2.201	0.00	R1	
00331	LLOYD V. WARNKEN	2/67/5	2.203	0.00	R1	
00332	GEORGE D. PLYMEL, SR.	2/68/5	2.205	0.00	R1	
000333	JAMES HEALY	1/68/5	2.207	0.00	R1	
000334	DONALD PIOTROWSKI	1/65/5	2.209	25.00	R1	
00335	CHARLES HURST	3/65/5	2.211	0.00	R1	X
00336	LEWIS WARD	6/65/5	2.213	0.00	R1	X
000337	BILLY J. THOMAS	3/66/5	2.215	55.18	R1	
00338	AARON LOVETT	10/65/5	2.217	0.00	R1	
00339	RONALD & SHARON WALLACE	4/62/5	2.219	40.00	R1	
000340	J. V. GANDER	2/62/5	2.221	25.00	R1	
00341	FRED BOND	9/64/5	2.223	0.00	R1	
00342	JAMES STEELE	1/62/5	2.225	0.00	R1	
000343	CLARK PORTER	6/63/5	2.227	0.00	R1	
000344	CLIFTON HOPKINS	6/64/5	2.229	0.00	R1	
00345	R. H. KILPATRICK	5/64/5	2.231	25.00	R1	
00346	JEANNE WRAY	5/63/5	2.233	0.00	R1	
000347	JOHNNIE FLETCHER	4/64/5	2.235	0.00	R1	
00348	ROBERT CROZIER	3/64/5	2.237	0.00	R1	
00349	VICTOR LAMAR JOHNSON	3/63/5	2.239	40.00	R1	X
000350	DONALD R. STALLINGS	2/63/5	2.241	32.88	R1	

SIDENT CCOUNT MBER	NAME	SERVICE ADDRESS	BOOK /SEQ	FIELD #1 DEPOSIT	FIELD #1 RATE CODE
000351	SOUTHERN SEA FOOD	1/64/5	2.243	40.00	R1
0352	RICHARD STEPHENSON	7/62/5	2.245	25.00	R1
0353	ANDY DURHAM	9/62/5	2.247	0.00	R1
000354	R. W. STEPHENSON	6/23/1W	2.249	0.00	R1
0355	CLAUDE WILDER	10/66/5	2.251	25.00	R1 X
0356	WAYNE COLLIER	11/23/1W	2.253	40.00	R1
000357	JACKEL PINKI	4/23/1W	2.255	0.00	R1
000358	THERESA SPOHRER	3/23/1W	2.257	25.00	R1
0359	W. F. BLANKS	16/61/5	2.259	0.00	R1X
0360	MICHAEL & DOROTHY LONG	12/60/5	2.261	40.00	R1
000361	HAROLD RUDD	15/61/5	2.263	0.00	R1
0362	E. W. CARRELL	14/61/5	2.265	0.00	R1
0363	BOB HERREN	13/61/5	2.267	0.00	R1
000364	CONNIE CRUSOE	9/60/5	2.269	0.00	R1
0365	WILLIAM TULLY	8/60/5	2.271	0.00	R1
0366	JEAN MCMILLAN (SCOTT FAIN)	11/61/5	2.273	40.50	R1
0367	GEORGE AVANT	5/60/5	2.275	0.00	R1
000368	STANLEY M. WEBER	7/61/5	2.277	40.00	R1
0369	CLARENCE COOK	5/61/5	2.279	25.00	R1
0370	C. W. ANSLEY	2/60/5	2.281	0.00	R1
00371	TONY LITTLE	1/60/5	2.283	0.00	R1
0372	W. ANDERSON	3/61/5	2.285	0.00	R1
0373	LESTER SHEETS	2/61/5	2.287	40.00	R1
00374	EDWARD M. HARRELL	1/61/5	2.289	25.00	R1
0375	MARY WALDORFF	1/59/5	2.291	0.00	R1
0376	JEAN LARRAMORE-EDWARDS	2/59/5	2.293	0.00	R1
00377	JAMES MORTON	3/59/5	2.295	40.00	R1
00378	JOHN WARD	4/59/5	2.297	25.00	R1
0379	JACK BULLOCH	26/60/5	2.299	25.00	R1
0380	LEONARD GRUBBS	3/58/5	2.301	0.00	R1
00381	WILLIE GUS CHANCY	25/60/5	2.303	0.00	R1
0382	PAUL W. LONBOM	22/60/5	2.305	40.00	R1
0383	DAVID B. CROY	18/60/5	2.307	0.00	R1
00384	FRED C. MILLENDER	9/58/5	2.309	0.00	R1
0385	BILL LEE	10/58/5	2.311	0.00	R1 X
0386	DONNA FLOYD	15/60/5	2.313	25.00	R1
0387	JOHN LUTTRELL	10/22/1W	2.315	0.00	R1
00388	CARLTON ETHRIDGE	14/57/5	2.317	25.00	R1
0389	BETTE R. BOLAND	13/57/5	2.319	0.00	R1
0390	DOC W. PORTERFIELD	15/58/5	2.321	46.20	R1
00391	THOMAS MOLONY	17/58/5	2.323	0.00	R1
0392	ARIGENA VONIER	18/58/5	2.325	0.00	R1
0393	MARTHA BRADY	9/57/5	2.327	0.00	R1
00394	ANDREW PITTS	7/57/5	2.329	0.00	R1
0395	JAMES ROZAR	20/58/5	2.331	53.10	R1
0396	HUBERT KADEL	6/57/5	2.333	0.00	R1
0397	HUBERT KADEL	5/57/5	2.335	25.00	R1
00398	JAMES DUFFEE	4/57/5	2.337	0.00	R1
0399	CHESTER CLARK	3/57/5	2.339	0.00	R1
0400	ANDREW PITTS	23/58/5	2.341	25.00	R1

ESIDENT ACCOUNT NUMBER	NAME	SERVICE ADDRESS	BOOK /SEQ	FIELD #1 DEPOSIT	FIELD #1 RATE CODE
0401	W. L. MILAM	5/55/5	2.343	25.00	R1
0402	J. H. SPRATT	4/55/5	2.345	0.00	R1
0403	BRUFORD FLOWERS	9/56/5	2.347	25.00	R1
0404	ANDREW A. PITTS	5/56/5	2.349	0.00	R1
0405	JAMES HANKINS	4/56/5	2.351	25.00	R1
0406	SCOTT ANDERSON	1/54/5	2.353	25.00	R1
0407	JOANIE BALES	2/54/5	2.355	45.10	R1
0408	GORDON WALDO	5/54/5	2.357	0.00	R1
0409	BOBBY J. ROBINSON	10/53/5	2.359	25.00	R1
0410	JANICE JACKSON	6/54/5	2.361	40.00	R1
0411	JOSEPH HALL	1/52/5	2.363	0.00	R1
0412	LEGETTE BARRETT	3/52/5	2.365	0.00	R1
0413	DAVID JOHNSON	10/52/5	2.367	78.80	R1
0414	DONALD WATSON	12/54/5	2.369	0.00	R1
0415	JACK TAYLOR	1/51/5	2.371	0.00	R1
0416	MONTE W. PHILLIPS	2/51/5	2.373	25.00	R1
0417		3/51/5	2.375	0.00	R1
0418	A. WILLIAM IRVINE	9/52/5	2.377	0.00	R1
0419	DOMINIC BARAGONA	7/52/5	2.379	25.00	R1
0420	DIANA PRICKETT	6/52/5	2.381	25.00	R1
0421	GRETCHEN SCHMID	14/15/1W	2.383	82.68	R1
0422	JANE BAMBURG	15/15/1W	2.385	0.00	R1
0423	MIKE HUMHREY	6/55/5	2.387	25.00	R1
0424	TOM CHRISTENSON	12/15/1W	2.389	40.56	R1
0425	DAVID WALKER	22/22/1W	2.391	40.00	R1
0426	BOBBY JAMES	20-21/3/1W	2.393	65.94	R1X
0427	JOHN BONN	5/14/1W	2.395	0.00	R1
0428	HELEN SPOHRER--PHEONIX HARBOUR	OLD MARINA/TRACT A	2.399	0.00	R1
0429	PAUL BYRD	7/51/5	2.400	53.10	R1
0430	WILLIAM CHALECKE	1/15/1W	2.401	0.00	R1
0431	ROBERT W. CLARK	10/14/1W	2.403	0.00	R1
0432	ROBERT K. LIGHT	8/13/1W	2.405	0.00	R1
0433	DAVID TUPLIN	6/13/1W	2.407	25.00	R1
0434	CARLA ETHERIDGE	20/15/1W	2.409	25.00	R1
0435	SUNCOAST REALTY	20/16/1	2.411	25.00	R1
0436	MIKE BURTON	18/15/1	2.413	0.00	R1
0437	CYNTHIA RHEW	16/15/1	2.415	40.00	R1
0438	CURTIS CAQUETTE	17/15/1W	2.417	25.00	R1
0439	PAM PRINCE	15/15/1W	2.419	25.00	R1
0440	ROBERT GAVIGAN	17/22/1W	2.421	0.00	R1
0441	FRED MILLS	17/21/1W	2.423	0.00	R1
0442	A. J. JERNIGAN	15/22/1W	2.425	25.00	R1
0443	BRUCE DRYE	14/21/1W	2.427	25.00	R1x
0444	CLARENCE HOOKS	13/22/1W	2.429	0.00	R1 x
0445	DIANE HUNT	16/24/1W	2.431	40.00	R1
0446	BOB CLARK	11/21/1W	2.433	25.00	R1
0447	JOANN WINGLER	1/24/1W	2.435	25.00	R1
0448	R. L. BRYAN	15/24/1W	2.437	25.00	R1
0449	STANLEY RAINWATER	10/75/5	2.439	55.80	R1
0450	H. E. FELT	9/75/5	2.441	25.00	R1

IDENT COUNT BER	NAME	SERVICE ADDRESS	BOOK /SEQ	FIELD #1 DEPOSIT	FIELD #1 RATE CODE
00451	TONY A. SHIVER	21/74/5	2.443	40.00	R1
452	R. E. ASHMORE	6/75/5	2.445	0.00	R1
453	RICHARD MOOREFIELD	11/80/5	2.447	25.00	R1
00454	THOMAS HARE	16/79/5	2.449	0.00	R1
455	ROBERT POWELL	20/79/5	2.451	0.00	R1
456	ROCKDALE SAND & STONE	5/80/5	2.453	25.00	R1
00457	FLETCHER HERNDON	22/79/5	2.455	0.00	R1
00458	JOHN LAW	•4/80/5	2.457	66.72	R1X
459	PAUL J. LILLIS	23/79/5	2.459	0.00	R1
460	KAUKO P. MATHESON	10/83/5	2.461	25.00	R1
00461	DANNY BROWN	9/82/5	2.463	0.00	R1
462	GAIL FLORES	16/86/5	2.465	0.00	R1
463	JUDY THOMPSON	6/90/5	2.467	0.00	R1
00464	JUANITA WHIDDON	5/90/5	2.469	25.00	R1
465	GUS PITTS	1-2/1/1W	3.002	0.00	R1
466	HAPPY PELICAN	28-29/1/1W	3.003	0.00	R1
00467	HARRY A'S TAVERN & PACKAGE	4-5/1/1W	3.005	0.00	R1
00468	MINI CONVENIENCE STORE	10/1/1W	3.007	0.00	R1
469	SUNCOAST REALTY	15-18/1/1W	3.009	59.04	R1
470	APALACHICOLA STATE BANK	19-21/1/1W	3.011	0.00	R1
00471	SUNSHINE FOOD STORES	16/6/1W	3.013	0.00	R1
472	SURVIVORS	•22-23/6/1W	3.015	0.00	R1X
473	GULF STATE BANCORP.	4-9/6/1W	3.017	0.00	R1
00474	ISLANDER RESTAURANT	1-2/7/1W	3.019	0.00	R1
00475	HELEN SPOHRER	•11-12/5/1W	3.022	0.00	R1X
476	VILLAS OF ST. GEORGE	7-8/10/1W	3.023	0.00	RS
00477	ISLAND UTILITIES	15-16/9/1W	3.025	322.02	R1
00478	WALTER ARMISTEAD	7/8/1W	3.027	25.00	R1
479	BUCCANEER INN II	19-20/10/1W	3.029	0.00	RS
480	RICK RUCKER	11-12/10/1W	3.031	25.00	R1
00481	ROSEHILL LAND COMPANY	• REALTY SALES OFFICE	3.033	0.00	R1X
482	ISLAND OASIS	•9/6/1E	3.035	0.00	R1X
483	ANCHOR REALTY & MTG.	12-15/6/1E	3.037	25.00	R1
00484	GULF COAST REALTY OF SGI	10-11/8/1E	3.039	0.00	R1X
00485	BUBBA'S BEACH CLUB	4-5/8/1E	3.041	0.00	R1
486	**NEW-ACCOUNT**	•5-6/5/1E	3.043	0.00	R1X
00487	HAROLD E. FREDERICK	•25-29/5/1E	3.045	0.00	R2X
00488	FIRST UNITED METHODIST CHURCH	•11-12/4/1E	3.048	0.00	R1X
489	ISLAND EMPORIUM	31-32/5/1E	3.049	40.00	R1
490	JAMES HOLZHAUSEN	21/5/1E	3.051	58.38	R1X
00491	JOHN COLLINS/ADC WAREHOUSE	17/2/1E	3.053	0.00	R1
492	ST. JOSEPH TELEPHONE COMPANY	•17-18/5/1E	3.055	25.00	R1X
493	GUN HEAT & AIR CONDITIONING	•26/1/1E	3.057	25.00	R1X
00494	JANIS DRAKE	24-25/1/1E	3.059	0.00	R1
00495	ST. GEORGE INN	16-24/6/1E	3.061	0.00	R1
496	OYSTER COVE RESTAURANT	14-17/3/1E	3.064	0.00	R1
00497	SGI VOLUNTEER FIRE DEPT.	8/14/1E	3.065	0.00	R1
00498	HARRY D. MCGHIN	20/16/1E	3.067	0.00	R1
499	FIRST BAPTIST CHURCH	17/29/4	3.069	0.00	R1
500	DALE HERNDON	1/22/1E	3.071	0.00	R1

ESIDENT OUNT MBER	NAME	SERVICE ADDRESS	BOOK /SEQ	FIELD #1 DEPOSIT	FIELD #1 RATE CODE	
0501	FIRST BAPTIST CHURCH	/14/29/4	3.073	0.00	R1	
0502	SANDRA J. NAPIER	/16/22/1E	3.075	40.00	R1	
000503	RICK RUCKER	/15/21/1E	3.077	0.00	R1	
000504	CARL HOFFMAN	/9/22/1E	3.079	0.00	R1	
0505	HAROLD HARDEN	/2/36/4	3.081	25.00	R1	
0506	DALE BODZIONY	/3/36/4	3.083	0.00	R1	
000507	JOHN STRICKLAND	/5/36/4	3.085	25.00	R1	
0508	PEGGY POWERS	/6/36/4	3.087	25.00	R1	
0509	JOHN SCULLY	/26/35/4	3.090	0.00	R1	
000510	CHARLOTTE I. JENSEN C/O DOWNEY	/25/35/4	3.091	25.00	R1	
0511	ROBERT O. SHEPHARD, JR.	/4/39/4	3.093	40.00	R1	
0512	LARRY KIENZLE	/10/37/4	3.095	25.00	R1	
000513	NICK YONCLAS	/7/39/4	3.097	0.00	R1	
000514	OLLIE GUNN	/1/48/4	3.099	93.68	R1	X
0515	DOUGLAS J. WINGATE	/22/42/4	3.101	0.00	R1	
0516	ROBERT RAY	/7/43/4	3.103	0.00	R1	
000517	VICTOR COBB	/5/44/4	3.105	0.00	R1	
0518	K. L. CARR	/1/45/4	3.107	25.00	R1	
0519	BARBARA KESTER	/2/45/4	3.109	0.00	R1	
000520	T. B. HOWARD	/3/45/4	3.111	25.00	R1	
0521	ROBERT C. BOCK	/4/45/4	3.113	0.00	R1	
0522	CHRIS FLOYD	/11/48/4	3.115	25.00	R1	
000523	WENDELL LACY	/10/45/4	3.117	28.10	R1	
000524	E. R. THOMPSON	/11/45/4	3.119	25.00	R1	
0525	W. C. CHAMBERS	/1/49/4	3.121	25.00	R1	
0526	BILLY CHARLES HORTON	/14/48/4	3.123	0.00	R1	
000527	WILLIAM BURNS	/17/48/4	3.125	25.00	R1	
0528	MARVIN R. MCINTOSH	/9/49/4	3.127	25.00	R1	
0529	JOHN MCEACHERN	/8/49/4	3.129	0.00	R1	
000530	JAMES C. BYRD	/23/48/4	3 131	0.00	R1	
0531	JOHN W. BIGGERS	/14/46/4	3.133	25.00	R1	
0532	SAM LIPSCOMB	/6/50/4	3.135	40.00	R1	
0533	RICHARD F. FIORENTINO	/11/49/4	3.137	0.00	R1	
000534	JIMMIE COOPER	/1/TRACT 33	3.139	0.00	R1	
0535	SGI BEAUTIFICATION COMM.	/MEDIAN LANSCAPING	7.001	25.00	R1	
0536	BUCCANEER INN I	/19-20/10/1W	3.143	40.00	C3	
000537	MARION GUESS	/1/12/1W	4.001	0.00	R1	
0538	JAMES K. HESTER	/2/11/1W	4.003	25.00	R1	
0539	TYLER PROSKINE	/4/11/1W	4.005	25.00	R1	
000540	JAMES HOWARD	/5/11/1W	4.007	0.00	R1	
0541	RICHARD COLLINS	/1/17/1W	4.009	0.00	R1	
0542	GEORGE H. KIRKLAND III	/1/18/1W	4.011	40.00	R1	
0543	G. ADKINS C/O ALICE COLLINS R.	/2/18/1W	4.013	0.00	R1	
000544	BEN LAWSON	/3/18/1W	4.015	0.00	R1	
0545	BILL JONES	/4/17/1W	4.017	0.00	R1	
0546	JEFF MCGEE	/5/17/1W	4.019	25.00	R1	
000547	FEARCE L. BARRETT	/6/17/1W	4.021	0.00	R1	
0548	ROBERT D. SNYDER	/8/18/1W	4.023	0.00	R1	X
0549	DAVIS TEMP	/10/18/1W	4.025	0.00	R1	
000550	HAL GLAZE	/3/19/1W	4.027	0.00	R1	

ESIDENT OUNT MBER	NAME	SERVICE ADDRESS	BOOK /SEQ	FIELD #1 DEPOSIT	FIELD #1 RATE CODE
0551	BARBARA RIDDLE	4/19/1W	4.029	25.00	R1
0552	R.H. KILPATRICK	6/19/1W	4.031	40.00	R1
000553	W.E. MIDDLETON	7/19/1W	4.033	0.00	R1X
0554	J.K. DUFFES	8/19/1W	4.035	25.00	R1X
0555	VICKIE CUMMINGS	3/20/1W	4.038	0.00	R1
0556	MONA ERIKSON	9/20/1W	4.039	25.00	R1X
000557	JANE MIKLOS	9/19/1W	4.041	0.00	R1X
0558	CONRAD GLEBER	10/20/1W	4.043	25.00	R1X
0559	STEVE BAIRD	2/25/1W	4.045	25.00	R1
000560	MARK BANE, BETTY CHURCH	1/26/1W	4.047	0.00	R1
0561	DOROTHY JOHNSTON	2/26/1W	4.049	0.00	R1
0562	J.M. JORDAN JR.	4/26/1W	4.051	0.00	R1
000563	JAMES GARRETT	5/26/1W	4.053	0.00	R1X
000564	DON MAY	7/26/1W	4.055	0.00	R1
0565	BOBBY COOK	7/25/1W	4.057	0.00	R1
0566	J. SLAPPEY C/O GULF COAST REAL	1/A/3	4.059	55.46	R1
000567	W.D. BELL	2/A/3	4.061	25.00	R1
0568	DR. OH (PRIMA VILLA)	4/A/3	4.063	25.00	R1
0569	DAVID E. FINDLEY	13/F/3	4.065	25.00	R1
000570	H. DAVID STORY	5/A/3	4.067	40.00	R1
0571	A.C. CHURCH	7/A/3	4.072	0.00	R1
0572	FRED SUBER	16/F/3	4.071	0.00	R1
000573	KENNETH MICK	15/F/3	4.073	25.00	R1
000574	HARVEY HILL	8/A/3	4.075	0.00	R1
0575	REGINALD CASH	10/A/3	4.077	0.00	R1
0576	MAMIE S. HURST	13/F/3	4.079	40.00	R1
000577	C.E. HELMS	19/G/3	4.081	0.00	R1
0578	RONALD HOCK	4/B/3	4.083	0.00	R1X
0579	JAMES WALT C/O GULF COAST REAL	16/G/3	4.085	0.00	R1
000580	BRIAN KRONTZ	15/G/3	4.087	0.00	R1
0581	JACK HARMON	7/B/3	4.089	0.00	R1
0582	JAMES SMITH C/O ANCHOR REALTY	8/B/3	4.091	0.00	R1
0583	HAROLD E. HODGE	9/B/3	4.093	25.00	R1
000584	DOROTHY ROLSTAD	14/G/3	4.095	0.00	R1
0585	HARRIETT SMITH	1/C/3	4.097	0.00	R1
0586	WILLIAM S. NEWTON	3/C/3	4.099	0.00	R1X
0587	WILLIAM E. BALL III	5/C/3	4.101	25.00	R1
0588	HUGH M. AUSTIN	7/C/3	4.103	40.00	R1
0589	DWIGHT MARSHALL	8/C/3	4.105	0.00	R1X
00590	NANCY EDWARDS	22/I/3	4.107	25.00	R1
0591	VIVIAN M. SHERLOCK	2/D/3	4.109	0.00	R1
0592	COLIN M. GALLANT D.D.S.	21/I/3	4.111	40.00	R1
0593	LEONARD F. HOWARD	3/D/3	4.113	0.00	R1
00594	DAVID LADD C/O SUNCOAST REALTY	5/D/3	4.115	25.00	R1
0595	HATTIE BOSTICK	6/D/3	4.117	0.00	R1
0596	E.L. SUBER	15/I/3	4.119	25.00	R1
00597	M. GREENE	7/D/3	4.121	0.00	R1
00598	HARRY MIXSON	9/D/3	4.123	25.00	R1
00599	FRANCINE B. ALDRIDGE	10/D/3	4.125	0.00	R1
00600	STEVEN RASH	12/I/3	4.127	40.00	R1

ESIDENT OUNT MBER	NAME	SERVICE ADDRESS	BOOK /SEQ	FIELD #1 DEPOSIT	FIELD #1 RATE CODE	
0601	LEE SIMMONS	1/E/3	4.129	0.00	R1	
0602	RONALD BRASWELL	22/J/3	4.131	25.00	R1	
0603	THOMAS B. WEBB	20/J/3	4.135	25.00	R1	
0604	HENRY SMITH III	2/E/3	4.137	25.00	R1	
0605	DONALD KIRKSEY	3/E/3	4.139	25.00	R1	
0606	JOHN WIGHT	4/E/3	4.141	0.00	R1	
0607	WALT COWARD C/O GULF COAST REA	6/E/3	4.143	40.00	R1	
0608	SUNCOAST REALTY (BEMAN)	5/E/3	4.145	0.00	R1	X
0609	MARTHA G. DIMON	15/J/3	4.147	40.00	R1	
0610	SANFORD LISS	8/E/3	4.149	0.00	R1	
0611	CHARLES WAKEN	9/E/3	4.151	25.00	R1	
0612	CLAUDIA BURTON	10/E/3	4.153	40.50	R1	
0613	W.L. HARTSFIELD	12/J/3	4.155	25.00	R1	
0614	GREGORY PARKER	9/J/3	4.157	25.00	R1	
0615	HUGH REICHERT	8/D/3	4.159	25.00	R1	
0616	SCHIEBER GORDON	7/D/3	4.161	25.00	R1	
0617	LIPPINCOTT/MACKENZIE	5/D/3	4.163	0.00	R1	
0618	CHARLES W. MOBLEY JR	3/D/3	4.165	0.00	R1	
0619	TWENTY NORTH REALTY	4/J/3	4.167	57.00	R1	
0620	THOMAS CLINE	1/J/2	4.169	0.00	R1	
0621	JOANNA DOLLOFF	10/N/3	4.171	0.00	R1	
0622	ROBERT DAVIS	10/I/3	4.173	0.00	R1	
0623	CHARLES W. SHIERLING	9/I/3	4.175	25.00	R1	
0624	P.G. MORRISON	7/N/3	4.177	0.00	R1	
0625	LINDA PROTSMAN	6/N/3	4.179	0.00	R1	
0626	BOBBY STRICKLAND	3/I/3	4.181	25.00	R1	
0627	C.R. MCKEMIE	11/M/3	4.183	25.00	R1	
0628	EUNICE MIRABELLA	11/H/3	4.185	0.00	R1	
0629	ROBERT BOUY	9/M/3	4.187	0.00	R1	
0630	LAMAR HARTSFIELD	8/H/3	4.189	25.00	R1	
0631	RICHARD O'MARA	7/H/3	4.191	0.00	R1	
0632	JERRY MARTIN	6/H/3	4.193	0.00	R1	X
0633	DR. RICHARD A. LAFLEUR	5/M/3	4.195	40.00	R1	
0634	KENNETH R. HOFFMAN	4/M/3	4.197	40.00	R1	
0635	ROSE CLARK	2/M/3	4.199	25.00	R1	
0636	FLORENE MCCOMB	3/H/3	4.201	25.00	R1	
0637	JAMES B. DAVIS	3/M/3	4.203	0.00	R1	
0638	SANDRA MARKS	1/M/3	4.205	0.00	R1	
0639	JOHN D. SPEISER	9/G/3	4.207	0.00	R1	
0640	MARION HARRIS C/O SUNCOAST REA	9/L/3	4.209	0.00	R1	
0641	ROBERT GILL C/O SUNCOAST REALT	7/G/3	4.211	40.00	R1	
0642	WAYNE MURPHY	6/G/3	4.213	0.00	R1	
0643	LUCRETIA MIHALICH	2/G/3	4.215	92.02	R1	
0644	DAN CHASE	1/G/3	4.217	0.00	R1	
0645	WARREN CADWALLADER	10/K/3	4.219	41.86	R1	
0646	WILLIAM WILGUS	11/F/3	4.221	25.00	R1	
0647	JOHN FICKLEN	22/G/3	4.223	0.00	R1	
0648	DONALD E. WATERS SR.	7/K/3	4.225	0.00	R1	
0649	PEPPER GHAZVINI (WINDWALKER)	5/K/3	4.227	40.00	R1	
0650	HARRELL & KARLENE REVELL	5/F/3	4.229	40.00	R1	

ESIDENT ' OUNT ..MBER	NAME	SERVICE ADDRESS	BOOK /SEQ	FIELD #1 DEPOSIT	FIELD #1 RATE CODE
0651	WILLIAM H. HICKS	3/L/3	4.231	0.00	R1
0652	KATHLEEN FORREST	1/F/3	4.233	40.00	R1
000653	LUCY KIZIRIAN	6/24/1W	4.235	0.00	R1
0654	JAN E. POWELL	6/21/1W	4.237	25.00	R1
0655	GEORGE BRIGGS	5/21/1W	4.239	0.00	R1
000656	CINDY JOHNSON	2/21/1W	4.241	40.00	R1
000657	RODNEY ALLEN, WAVERLY HILLS	11/17/1W	4.243	0.00	R1
0658	E.M. ANDERSON	1/20/1W	4.245	0.00	R1
..0659	HARRY ARNOLD	9/16/1W	4.247	86.34	R1
000660	THOMAS MILLER	8/16/1W	4.250	0.00	R1
0661	ROGER W. BUTLER	5/16/1W	4.251	0.00	R1
0662	HAROLD SHADBURN	2/16/1W	4.253	38.92	R1
000663	W.Y. BRACKIN	3/13/1W	4.255	0.00	R1
000664	ANTHONY BIGGICA	2/13/1W	4.257	25.00	R1
0665	VAN PONDER	3/K/3	4.230	40.00	R1
..0666	ADELE CASH	3/13/1E	5.001	0.00	R1
000667	RICHARD HODGKINS	1/16/1E	5.003	25.00	R1
0668	UNITED METHODIST CHURCH	4/16/1E	5.005	25.00	R1
0669	NANCI TRIPPITELLI C/O SUNCOAST	3/16/1E	5.007	40.00	R1
000670	ONEZ O'NEAL	6/16/1E	5.009	25.00	R1
0671	R. B. EGGART	10/16/1E	5.011	0.00	R1
0672	PHILIP BRACHMAN	11/16/1E	5.013	25.00	R1
000673	DAVID WALKER	3/21/1E	5.015	40.00	R1
000674	A. P. FLOYD	4/21/1E	5.017	0.00	R1
0675	A. E. MIDDLEBROOKS	5/21/1E	5.019	25.00	R1
..0676	A.C. YOUNG, JR.	6/21/1E	5.021	40.00	R1
000677	KENNY KNOX	8/21/1E	5.023	25.00	R1
0678	GRADY UNDERWOOD	9/21/1E	5.025	40.00	R1X
0679	WILBUR HOLLIS	1/K/2	5.027	0.00	R1
000680	KIM FISH	2/K/2	5.030	25.00	R1
0681	EARL CASH	3/F/2	5.033	25.00	R1
0682	REX A. WHITEMAN	4/F/2	5.037	40.00	R1
000683	LLOYD SUMMER, III	6/F/2	5.041	0.00	R1
000684	JAMES B. LACKEY	6/K/2	5.043	40.00	R1
0685	PHYLIS VITALI C/O ALICE COLLIN	7/F/2	5.045	0.00	R1
..0686	ZSUZSANNA PASZTOR	8/F/2	5.047	0.00	R1
000687	H. G. LEAVINS	10/K/2	5.049	0.00	R1X
0688	SANDRA PRINCE	1/G/2	5.051	0.00	R1
0689	J. A. CRUMLEY	2/L/2	5.055	0.00	R1
000690	KRISTINE POWELL	3/L/2	5.059	25.00	R1
0691	JAMES LEE GUERNSEY	9/L/2	5.063	0.00	R1
0692	GARY BROOKS	11/G/2	5.065	25.00	R1
000693	QUENTON HERNDON	5/H/2	5.067	0.00	R1
000694	CLAY SCHNITKER	6/H/2	5.071	0.00	R1
0695	ESTATE OF IKE WILLIAMS, JR.	8/M/2	5.073	25.00	R1
0696	RAY A. WESTER, JR.	9/H/2	5.075	25.00	R1X
000697	JAMES F. KEMP	10/M/2	5.079	0.00	R1
0698	THOMAS G. MALOOF	1/I/2	5.081	25.00	R1
0699	RALPH REDDICK	2/I/2	5.085	25.00	R1
000700	TIM QUICK	3/N/2	5.089	40.00	R1

SIDENT COUNT MBER	NAME	SERVICE ADDRESS	BOOK /SEQ	FIELD #1 DEPOSIT	FIELD #1 RATE CODE
000701	GUY MARSH	5/I/2	5.093	0.00	R1
0702	GARY CATES	6/N/2	5.095	25.00	R1
0703	OLLIE GUNN JR.	11/N/2	5.097	40.00	R1
000704	CHARLES BRANNON	1/O/2	5.099	0.00	R1
0705	DORIS Y. BRAY	8/I/2	5.103	40.00	R1
0706	MYERS SHULER	1/J/2	5.105	0.00	R1
000707	MARGARET GARVUE	2/J/2	5.107	0.00	R1
000708	ROBERT GARDNER	2/O/2	5.111	0.00	R1
0709	PAUL LONBOM	3/J/2	5.113	0.00	R1
0710	ALBERT F. DUNCAN	5/O/2	5.115	25.00	R1
000711	JIMMY MEEKS	6/J/2	5.119	0.00	R1
0712	JIM HOLZHAUSEN	7/O/2	5.123	61.54	R1
0713	KELLY	6/15/1W	2.386	0.00	R1
000714	WILLIAM NICHOLS	11/J/2	5.127	25.00	R1
0715	SUZANNE LATHAM	12/J/2	5.129	0.00	R1 X
0716	R. J. MATHEWS, JR.	TRACT 1E	5.133	25.00	R1
000717	MALCOLM BURTON	2/TRACT 1E	5.135	0.00	R1
000718	JEAN WEBB	9/E/2	5.139	0.00	R1
0719	ANCHOR REALTY	15/J/2	5.141	0.00	R1 X
0720	ROBERT DUBAY	5/E/2	5.143	0.00	R1
000721	DAN RUHL, JR.	4/E/2	5.145	0.00	R1
0722	MICHAEL SIMMONS	13/J/2	5.147	0.00	R1
0723	ALEXANDER HINSON	21/J/2	5.149	0.00	R1
000724	J. W. LAMBERT	22/J/2	5.153	0.00	R1
0725	CLEM HALLMAN	1/E/2	5.157	65.82	R1
0726	ROBERT CROZIER	12/I/2	5.161	0.00	R1
000727	WILLIAM KIRKSEY	10/O/2	5.165	0.00	R1
000728	JOHN HORTON	9/O/2	5.171	0.00	R1
0729	RICK JOHNSON	14/I/2	5.173	25.00	R1
0730	COLUMBUS COLONIES/FRANK JON	8/O/2	5.177	0.00	R1
000731	MONTE PHILLIPS	6/O/2	5.181	0.00	R1
0732	C. W. HARBIN	5/O/2	5.183	0.00	R1
0733	CECIL BUTLER	3/O/2	5.185	0.00	R1
000734	CAROL MCCORMICK	22/I/2	5.187	0.00	R1
0735	ROBERT DUBAY	13/H/2	5.189	0.00	R1
0736	JOHN LIVELY	10/C/2	5.195	0.00	R1
000737	VIRGINIA GLASS	14/H/2	5.200	0.00	R1
000738	JAMES R. TODD	15/H/2	5.203	25.00	R1
0739	ROBERT ROBUCK	8/C/2	5.205	0.00	R1
0740	ANN J. ROBUCK	16/H/2	5.207	0.00	R1
000741	JOSEPH S. STRAKA, III	8/L/3	4.249	40.00	R1 X
0742	ANN CHOPPIN	17/H/2	5.211	0.00	R1
0743	CLIFF MADSEN	5/C/2	5.215	0.00	R1
000744	H. L. JEFFORDS	3/C/2	5.217	0.00	R1
0745	ARTHUR LITTLE	20/H/2	5.219	0.00	R1
0746	MARILYN HELMS	22/H/2	5.223	40.00	R1
0747	LOWRY BLACKBURN	1/C/2	5.225	0.00	R1 X
000748	ORPHA RUSSELL	10/B/2	5.229	0.00	R1
0749	LARRY CLIETT	8/B/2	5.233	73.84	R1
0750	G. WHITE C/O GULF COAST REALTY	15/G/2	5.235	0.00	R1

RESIDENT ACCOUNT NUMBER	NAME	SERVICE ADDRESS	BOOK /SEQ	FIELD #1 DEPOSIT	FIELD #1 RATE CODE
0000751	JAMES N. ROUKOSKI	9/B/2	5.237	40.00	R1
00752	LINDA K. DEBRUYNE	16/G/2	5.239	0.00	R1
00753	JIM RUDNIK	5/B/2	5.241	0.00	R1
0000754	A. F. HARDEE	4/B/2	5.245	0.00	R1
00755	PEYTON MCQUARY	18/G/2	5.247	25.00	R1
00756	FRANK FLYNN	3/B/2	5.249	0.00	R1
0000757	JERRY CARNES	20/G/2	5.251	0.00	R1
00758	RUTH C. REGISTER	2/B/2	5.255	0.00	R1
00759	LAWRENCE R. MALONE	1/B/2	5.259	0.00	R1
00760	DENNIS BOYLE	10/A/2	5.263	0.00	R1
0000761	WALTER AUTREY	9/A/2	5.265	0.00	R1
00762	W. E. BURKE	8/A/2	5.267	0.00	R1
00763	JOHN W. OWEN	14/F/2	5.269	0.00	R1
0000764	DOYLE R. PRATT	15/F/2	5.271	0.00	R1
00765	JOHN DODDS	17/F/2	5.273	0.00	R1
00766	JOAN SWANSON	18/F/2	5.275	25.00	R1
000767	T. W. LINDSEY	5/A/2	5.279	0.00	R1
0000768	ROBERT BALDWIN	4/A/2	5.283	25.00	R1
00769	JOAN SWANSON	18/F/2	5.285	0.00	R1
00770	TONY ANDERSON	19/F/2	5.289	25.00	R1
000771	M. E. PITTMAN	2/A/2	5.291	25.00	R1
00772	HARVEY NEISLER	22/F/2	5.293	0.00	R1
00773	GARY MAHONEY	8/20/1E	5.295	25.00	R1
000774	WALTER HOCH	7/20/1E	5.297	36.78	R1
00775	W. D. LINES /BLUCHER B. LINES	6/19/1E	5.299	25.00	R1X
00776	ELIZABETH ATKINSON	5/19/1E	5.301	0.00	R1X
00777	LEONARD MCCRDAN	6/20/1E	5.303	25.00	R1
000778	JAMES B. SAXON	5/20/1E	5.305	0.00	R1
00779	CHUCK STAFFORD	4/19/1E	5.307	0.00	R1
00780	JOHN F. OESHGER	3/19/1E	5.309	0.00	R1
000781	LOWRY BLACKBURN	4/20/1E	5.311	61.38	R1
00782	LUCILLE CAGLE	2/19/1E	5.313	0.00	R1
00783	SMITH BEACH HOUSE	9/17/1E	5.315	0.00	R1
000784	E. HOWARD CARSON, SR.	8/18/1E	5.317	43.40	R1
00785	SUNCOAST REALTY	7/18/1E	5.319	0.00	R1
00786	TOM TYRONE	6/18/1E	5.321	25.00	R1
00787	DAN RUHL	5/18/1E	5.325	25.00	R1
000788	JANE HARRELL	2/18/1E	5.327	0.00	R1X
00789	GEORGE KIRVIN	5/11/1E	5.329	0.00	R1
00790	JAMES C. HALL	2/12/1E	5.335	0.00	R1
00791	ROBLEY J. LIGHT	1/12/1E	5.339	0.00	R1
00792	ELLERBEE C/O LIGHTHOUSE PT. FR	7/I/2	5.096	40.00	R1X
00793	LEE NOEL C/O SUNCOAST REALTY	15/10/1E	5.365	0.00	R1
00794	LEE NOEL C/O SUNCOAST REALTY	16/10/1E	5.367	0.00	R1
00795	ROBERT PILCHER	1/TRACT 3	6.001	25.00	R1
00796	ROBERT S. LEGG	2/TRACT 3	6.003	25.00	R1
00797	DENNIS SMITH	3/TRACT 3	6.005	0.00	R1
00798	DENNIS SMITH	4/TRACT 3	6.007	0.00	R1
00799	MIKE ROEHR	4/TRACT 5	6.009	0.00	R1
00800	TERRY LEWIS C/O RESORT REALTY	5/TRACT 5	6.011	0.00	R1

RESIDENT ACCOUNT NUMBER	NAME	SERVICE ADDRESS	BOOK /SEQ	FIELD #1 DEPOSIT	FIELD #1 RATE CODE
000801	CONNIE CROWLEY	4/TRACT 39E	6.013	25.00	R1
0802	PHILLIP SWARTZ	3/TRACT 7	6.015	0.00	R1
000803	CHIDORA PROPERTIES/OLSEN	9 DUNES ST. GEORGE	6.017	75.44	R1
000804	FORD THOMPSON	4 DUNES ST. GEORGE	6.019	0.00	R1
0805	BENJAMIN MASSEY	TRACT 6E	6.023	0.00	R1
0806	SUSAN SPEARS C/O GULF COAST RE	6/TRACT 6	6.025	0.00	R1
000807	FRANK GOMEZ	5/TRACT 6	6.029	0.00	R1
0808	PETER RIPLEY	1/TRACT 6	6.031	0.00	R1
0809	DENNIS SMITH C/O SUNCOAST REAL	1/TRACT 9	6.035	40.00	R1
000810	W. H. HARWELL	TRACT 9	6.039	0.00	R1
000811	JOHN K. FOLGER	TRACT 10	6.043	0.00	R1
0812	RON J. BROWN	5/TRACT 42E	6.045	0.00	R1
000813	JOHN ALDERMAN	3/TRACT 42	6.047	0.00	R1
000814	DAVID E. [illegible]	7/TRACT 42	6.049	0.00	R1
0815	HERB JUPPE	1/TRACT 44	6.051	0.00	R1
0816	HEATHER HILTON	3/TRACT 44	6.055	0.00	R1
000817	LARRY MCMANUS	8/TRACT 44	6.059	0.00	R1
0818	ELEGE HARRISON	2 SANDS ST. GEORGE	6.063	25.00	R1
0819	ROBERT HEIDE	DUNES ST. GEORGE	6.065	0.00	R1
000820	JOE DOWNEY C/O SUNCOAST REALTY	7/TRACT 13-14	6.067	0.00	R1
000821	SUNCOAST REALTY #563	6/TRACT 14	6.069	0.00	R1
0822	DOUG NARGIZ	5/TRACT 14	6.071	25.00	R1
000823	DEAN SCHEER	TRACT 12	6.073	0.00	R1
000824	SHIRLEY REDD	1/TRACT 48	6.075	0.00	R1
0825	**NEW-ACCOUNT (4.11)**	2/TRACT 48	6.077	0.00	R1
0826	KATHY GILBERT	9/TRACT 48	6.079	25.00	R1
000827	C. J. HESTER, JR.	3/TRACT 15	6.081	0.00	R1X
0828	JOHN COLLINS	6 EAST BAY ESTATES	6.085	0.00	R1
0829	MRS. T. C. METZNER	9/TRACT 49	6.089	0.00	R1
000830	EAST BAY ESTATES	EAST BAY EST. POOL	6.091	0.00	R1X
000831	JAMES G. DAVISON	2/EAST BAY ESTATES	6.093	25.00	R1
0832	EAST BAY ESTATES	3/EAST BAY ESTATES	6.095	0.00	R1
000833	WILLIAM H. BRADLEY	1/GULF PEARL ESTATE	6.099	0.00	R1
000834	ROYCE HODGE	3/TRACT 17E	6.101	0.00	R1
0835	ROYCE HODGE	4/GULF PEARL ESTATE	6.105	0.00	R1
0836	ROYCE HODGE	5/TRACT 17	6.107	0.00	R1
000837	JOHN MEAGH	6/TRACT 50E	6.109	0.00	R1
0838	LEWIS JAMES	1/TRACT 18	6.111	25.00	R1
0839	JOHN TOUCHTON	2/TRACT 51	6.113	0.00	R1
000840	OTIS HORTON	4/TRACT 51	6.115	0.00	R1
000841	STEVE REILLY	TRACT 20	6.117	0.00	R1
0842	JIMMIE CROWDER	TRACT 19	6.119	25.00	R1
000843	R. RYAN MAXWELL	1/TRACT 21E	6.121	0.00	R1
000844	R. H. KILPATRICK	2/TRACT 22	6.123	25.00	R1
0845	J. GAULT ALLEE	TRACT 22	6.125	0.00	R1
0846	GULF COAST REALTY	2 SHELL HARBOUR	6.128	0.00	R1
000847	BEN BARRS	TRACT 23	6.130	0.00	R1
000848	JOHN BALL	1/TRACT 24	6.133	0.00	R1X
0849	MARTHA MCPHERSON	4 SHELL HARBOUR	6.135	0.00	R1X
000850	JEFF MCMILLAN	5/TRACT 25	6.137	25.00	R1

ESIDENT 4 OUNT ..MBER	NAME	SERVICE ADDRESS	BOOK /SEQ	FIELD #1 DEPOSIT	FIELD #1 RATE CODE
0851	CECIL MABE C/O ANCHOR REALTY	1/TRACT 25	6.139	40.00	R1 X
0852	JAMES H. COBB	8 SHELL HARBOUR	6.141	0.00	R1
000853	E. M. POWELL	10 SHELL HARBOUR	6.143	0.00	R1
0854	CLIFF HANSON	5/TRACT 27E	6.145	0.00	R1
0855	CHARLES HURT	9 SHELL HARBOUR	6.147	0.00	R1
00856	CLARENCE GISSENDANNER	15 SHELL HARBOUR	6.149	0.00	R1
000857	LARRY BURKE	17 SHELL HARBOUR	6.151	25.00	R1
0858	CHARLES WALL	23 SHELL HARBOUR	6.153	25.00	R1
.0859	ALBERS C/O LIGHTHOUSE REALTY	24 SHELL HARBOUR	6.155	0.00	R1
000860	RICHARD HOLZHAUSEN	28 SHELL HARBOUR	6.157	0.00	R1
0861	TOWNHOMES OF ST. GEORGE	SEWAGE PLANT	6.159	0.00	R1
0862	STATE OF FLORIDA - STATE PARK	STATE PARK	6.161	0.00	10
000863	MARVIN W. CARLSON	B-1 300 OCEAN MILE	6.163	25.00	R1
000864	HOMER A. OOTEN	B-2 300 OCEAN MILE	6.165	25.00	R1
0865	EVELYN STRIPLING	B-3 300 OCEAN MILE	6.169	25.00	R1
.0866	LESLIE EMHOFF	B-4 300 OCEAN MILE	6.175	0.00	R1
000867	LESLIE EMHOFF	B-5 300 OCEAN MILE	6.177	0.00	R1
0868	DAVID COOK	B-6 300 OCEAN MILE	6.179	25.00	R1
0869	HELEN WILLIAMS	C-1 300 OCEAN MILE	6.181	0.00	R1
000870	WILLIAM P SIMMONS	C-2 300 OCEAN MILE	6.183	0.00	R1
0871	RICHARD B. SMITH	C-3 300 OCEAN MILE	6.185	0.00	R1
0872	J. P. RAKEL	C-4 300 OCEAN MILE	6.187	25.00	R1
00873	WILLIAM BALDOCK	C-5 300 OCEAN MILE	6.189	0.00	R1
000874	HARRY ARNOLD	C-6 300 OCEAN MILE	6.191	0.00	R1
.0875	FRED VROOM	F-1 300 OCEAN MILE	6.193	0.00	R1
.0876	E & G INVESTMENTS	F-2 300 OCEAN MILE	6.195	0.00	R1
000877	J.D. GREEN C/O ANCHOR REALTY	F-3 300 OCEAN MILE	6.197	25.00	R1
.0878	GULF COAST REALTY	F-4 300 OCEAN MILE	6.199	0.00	R1
0879	DEWEY STONE/GULF COAST REALTY	F-5 300 OCEAN MILE	6.201	0.00	R1
00880	JOHN J. HALAHAN	F-6 300 OCEAN MILE	6.203	25.00	R1
0881	NICK EPPS, JR.	A-1 300 OCEAN MILE	6.205	25.00	R1
0882	STUART WOLCOTT	A-2 300 OCEAN MILE	6.207	25.00	R1
00883	RONALD CUMMINGS	A-3 300 OCEAN MILE	6.209	0.00	R1
00884	PATRICIA M. POHL	A-4 300 OCEAN MILE	6.211	0.00	R1
0885	W. R. HORNE	A-5 300 OCEAN MILE	6.215	0.00	R1
.0886	DR. CHARLES BIANCO	A-6 300 OCEAN MILE	6.219	0.00	R1
00887	BRUCE PETTIBONE	E-1 300 OCEAN MILE	6.221	0.00	R1
0888	JAN HEVIER	E-2 300 OCEAN MILE	6.225	0.00	R1
0889	JAMES KIDD	E-3 300 OCEAN MILE	6.229	41.92	R1
00890	JUDY WILSON	E-4 300 OCEAN MILE	6.231	25.00	R1
0891	C. EVERETT BOYD	E-5 300 OCEAN MILE	6.233	0.00	R1
0892	ROBERT SCHNEIDER	E-6 300 OCEAN MILE	6.235	0.00	R1
00893	BRUCE A. MINNICK	D-1 300 OCEAN MILE	6.237	25.00	R1
00894	LAWRENCE V. SAGER	D-2 300 OCEAN MILE	6.239	0.00	R1
0895	WILLIAM R. STANTON, JR.	D-3 300 OCEAN MILE	6.241	0.00	R1
.0896	**NEW-ACCOUNT (4.11)**	D-4 300 OCEAN MILE	6.243	0.00	R1
00897	PAUL ELLIOTT	D-5 300 OCEAN MILE	6.245	25.00	R1
00898	ORRIN SKOLNICK	D-6 300 OCEAN MILE	6.247	0.00	R1
00899	DONALD A. RHETT	G-6 300 OCEAN MILE	6.249	0.00	R1
00900	ANTHONY J TARANTO	G-5 300 OCEAN MILE	6.251	0.00	R1

RIDENT OUNT MBER	NAME	SERVICE ADDRESS	BOOK /SEQ	FIELD #1 DEPOSIT	FIELD #1 RATE CODE
0901	STONE D ATT: MRS. JAMES	G-4 300 OCEAN MILE	6.255	0.00	R1
0902	MOLENA SAND COMPANY	G-3 300 OCEAN MILE	6.259	0.00	R1
000903	ORRIN SKOLNICK	G-2 300 OCEAN MILE	6.261	0.00	R1
*0904	GRACE DANSBY	G-1 300 OCEAN MILE	6.263	0.00	R1
0905	TOWNHOMES OF ST. GEORGE	300 OCEAN MILE POOL	6.265	0.00	R1
000906	PAUL BARRINGER	H-1 PHASE II 300 OCEAN	7.002	25.00	R1
000907	MIKE PISCITELLI	H-2 PHASE II 300 OCEAN	7.003	40.00	R1
0908	RONALD W. ROE	H-3 PHASE II 300 OCEAN	7.005	40.00	R1
0909	MILTON BURNETT	H-4 PHASE II 300 OCEAN	7.010	25.00	R1
000910	JOANNE SOBERAY	H-5 PHASE II 300 OCEAN	7.015	0.00	R1
0911	MACK ROOKS	H-6 PHASE II 300 OCEAN	7.017	25.00	R1
0912	JEAN COLLIS	H-7 PHASE II 300 OCEAN	7.019	25.00	R1
000913	JANE R COOPER C/O ANCHOR REALT	H-8 PHASE II 300 OCEAN	7.021	40.00	R1
*0914	MYRTLE KOZICH	H-9 PHASE II 300 OCEAN	7.025	25.00	R1
0915	TOWNHOMES OF ST. GEORGE	PHASE II POOL METER	7.027	0.00	R1
0916	KEN GORDON	I-1 PHASE II 300 OCEAN	7.029	76.34	R1
00917	RONALD MITCHELL	I-2 PHASE II 300 OCEAN	7.031	25.00	R1
0918	JIM BACHRACH (ANCHOR REALTY)	I-3 PHASE II 300 OCEAN	7.033	40.00	R1
0919	FRANK MIRABELLA	I-4 PHASE II 300 OCEAN	7.035	25.00	R1
00920	WILLIAM F. KRUEGER	I-5 PHASE II 300 OCEAN	7.039	40.00	R1
0921	WILLIAM WILLIFORD	I-6 PHASE II 300 OCEAN	7.041	25.00	R1
0922	JACKIE WILKES	I-7 PHASE II 300 OCEAN	7.043	25.00	R1
00923	JERRY GLEATON	I-8 PHASE II 300 OCEAN	7.045	25.00	R1
*0924	CHARLES SLOMKA	I-9 PHASE II 300 OCEAN	7.047	25.00	R1
0925	LENWOOD HARRELL	J-13 PHASE II 300 OCEAN	7.049	0.00	R1
0926	LENWOOD HARRELL	J-12 PHASE II 300 OCEAN	7.051	0.00	R1
00927	STEVEN HORVATH	J-11 PHASE II 300 OCEAN	7.055	40.00	R1
*0928	R. WHELAND C/O ALICE COLLINS R	J-10 PHASE II 300 OCEAN	7.059	25.00	R1
0929	FRANK A. MIRABELLA	J-9 PHASE II 300 OCEAN	7.061	0.00	R1
00930	ROBERT G. MCPHERSON, SR.	J-8 PHASE II 300 OCEAN	7.063	25.00	R1
0931	ROBERT W. CROZIER	J-7 PHASE II 300 OCEAN	7.065	0.00	R1
0932	LOULA M. FULLER	J-6 PHASE II 300 OCEAN	7.067	0.00	R1
00933	ANNA J. MATTSON	J-5 PHASE II 300 OCEAN	7.069	0.00	R1
*0934	KEENER LYNN	J-4 PHASE II 300 OCEAN	7.073	25.00	R1
0935	DAVID VOLK	J-3 PHASE II 300 OCEAN	7.075	41.60	R1
0936	JEROME A. COOK	J-2 PHASE II 300 OCEAN	7.077	25.00	R1
00937	TERRENCE STINSON	J-1 PHASE II 300 OCEAN	7.079	0.00	R1
0938	RAY B. MUNROE	K-1 PHASE II 300 OCEAN	7.081	0.00	R1
0939	RICHARD L. PUCKETT	K-2 PHASE II 300 OCEAN	7.085	0.00	R1
00940	WILLIAM E. WILLIFORD	K-3 PHASE II 300 OCEAN	7.089	0.00	R1
0941	KEVIN BELL	K-4 PHASE II 300 OCEAN	7.091	25.00	R1
0942	JEREMY GLEATON, JR.	K-5 PHASE II 300 OCEAN	7.093	25.00	R1
00943	DOUGLAS BALLARD	K-6 PHASE II 300 OCEAN	7.095	0.00	R1
*0944	NANCY KRALOWETZ	K-7 PHASE II 300 OCEAN	7.097	25.00	R1
0945	JERRY GLEATON	K-8 PHASE II 300 OCEAN	7.099	0.00	R1
00946	FRED GLEATON	K-9 PHASE II 300 OCEAN	7.103	0.00	R1
00947	SAMUEL & WILDA MATHEWS	K-10 PHASE II 300 OCEAN	7.105	25.00	R1
0948	SUSAN LEE	K-11 PHASE II 300 OCEAN	7.107	25.00	R1
0949	TOWNHOMES OF ST. GEORGE	K-12 PHASE II 300 OCEAN	7.109	25.00	R1
0950	TOWNHOMES OF ST. GEORGE	K-13 PHASE II 300 OCEAN	7.111	25.00	R1

RESIDENT ACCOUNT NUMBER	NAME	SERVICE ADDRESS	BOOK /SEQ	FIELD #1 DEPOSIT	FIELD #1 RATE CODE
0000951	WAYNE KOZICK	L-1 PHASE II 300 OCEAN	7.115	25.00	R1
0952	DEAN DANIELS	L-2 PHASE II 300 OCEAN	7.120	25.00	R1
0953	KENNETH K. KENT	L-3 PHASE II 300 OCEAN	7.125	25.00	R1
0000954	GUY MOORE	L-4 PHASE II 300 OCEAN	7.127	0.00	R1
0955	CALVIN MELTON	L-5 PHASE II 300 OCEAN	7.129	0.00	R1
0956	LARRY SCHUEREN	L-6 PHASE II 300 OCEAN	7.131	25.00	R1
0000957	TOM CHRISTENSON	L-7 PHASE II 300 OCEAN	7.135	36.58	R1
0000958	GLENN L. BLOCKER	L-8 PHASE II 300 OCEAN	7.137	0.00	R1
0959	D. WEINER C/O ANCHOR REALTY	L-9 300 OCEAN MILE	7.139	0.00	R1
0960	DAVID PARKER	L-10 PHASE II 300 OCEAN	7.141	0.00	R1
0000961	LAURENCE L. BENSON	L-11 PHASE II 300 OCEAN	7.145	0.00	R1
0962	SCOTT MCGILL	L-12 PHASE II 300 OCEAN	7.149	0.00	R1
0963	JUDY MITCHELL	L-13 PHASE II 300 OCEAN	7.153	40.00	R1
0000965	KARIN J. WYATT	13779/5	2.116	40.00	R1
0000966	HARRY ARNOLD	10/16/1W	4.248	40.00	R1
0967	JUDY SULLIVAN	31 TREASURE BEACH VILLAGE	1.303	40.00	R1
0968	JAMES SIBLEY C/O ANCHOR REALTY	18 DOLPHIN BEACH	1.450	25.00	R1
0000969	HARRY FALK, JR.	9/J/2	5.124	25.00	R1
0970	ROY HOFFMAN, JR.	•12 SEA PINE VILLAGE	1.055	40.00	R1 X
0971	JAMES E. EDENFIELD	7/M/2	5.072	40.00	R1X
000972	KAREN HARTMANN C/O ANCHOR REAL	•2/TRACT 25	6.138	40.00	R1X
0973	R. PAUL MCBEE	•19/86/5	2.028	40.00	R1X
0974	WALTER ARMISTEAD	•7/10/1E	5.370	0.00	R1X
000975	BRADLEY D. SUBER	•8 SEA PALM VILLAGE	1.082	40.00	R1X
000976	RICHARD W. KNIGHT	•1/TRACT 37E	6.012	40.00	R1X
0977	DAVID & MARTHA FULMER	•16/16/1E	3.066	40.00	R1X
0978	DALE HERNDON	•2/22/1E	3.072	40.00	R1X
0979	WILLIE GUS CHANCY	10/61/95	2.274	40.00	
0980	E.N. REEDER C/O ANCHOR REALTY	•LOT 6 NICK'S HOLE	1.124	40.00	R1X
0981	JOHN C. BROADDUS	•33 PLANTATION BEACH VILLA	1.236	40.00	R1X
000982	LEE NOEL	2/TRACT 5	6.008	25.00	R1
0983	O. A. FAIRCLOTH	•25 SEA PALM VILLAGE	1.084	40.00	R1X
0984	LEIGH N. CHAPMAN	•1/10/1E	5.355	40.00	R1X
000985	MARTIN J. WILLIAMS	•6/TRACT 48	6.078	40.00	R1X
000986	BEACH BUILDERS	•9 DOLPHIN BEACH VILLAGE	1.424	40.00	R1X
0987	MICHAEL & LORI RODRIGUE	11 SEA PALM VILLAGE	1.050	40.00	R1
0988	ROBERT D. HENKER	5/TRACT 42E	6.046	40.00	R1
000989	ANDY JOHNSON	4/TRACT 23	6.131	40.00	R1
0990	HAROLD E. FREDERICK	•1/17/1E	5.314	40.00	R1X
0991	KEITH & LINDA LOOMIS	•30 TREASURE BEACH VILLAGE	1.301	40.00	R1X
000992	DAVID FINDLEY	•7 TREASURE BEACH VILLAGE	1.314	40.00	R1X
0993	DANIEL E. MYERS	•3/TRACT 11E	6.074	40.00	R1X
0994	AL SPARKS	7/65/5	2.214	40.00	R1
000995	WALTER ARMISTEAD	•3/10/1E	5.364	0.00	R1X
000996	ANCHOR REALTY (SUSAN GIN)	•4/10/1E	5.366	40.00	R1X
0997	WALTER ARMISTEAD	•5/10/1E	5.368	0.00	R1X
0998	WALTER ARMISTEAD	•6/10/1E	5.369	0.00	R1X
000999	J. RITTENOUR C/O WM. BRACKIN	4/24/1W	4.236	40.00	R1
1000	KAREN MYERS	31 SEA PINE VILLAGE	1.058	40.00	R1
1001	DENNIS BARNELL	17/86/5	2.026	40.00	R1

RESIDENT ACCOUNT NUMBER	NAME	SERVICE ADDRESS	BOOK /SEQ	FIELD #1 DEPOSIT	FIELD #1 RATE CODE
001002	LEE KNOWLES	2 TREASURE BEACH	1.308	40.00	R1
1003	DOUGLAS P. SHERMAN	28 SEA PALM VILLAGE	1.088	40.00	R1
1004	JOHN & BONNIE KELLER	8 PELICAN BEACH VILLAGE	1.366	40.00	R1
001005	NELSON KRAEFT	3/TRACT 23	6.129	40.00	R1
001006	HENRY L. KOZLOWSKY	15 BAY COVE VILLAGE	1.376	40.00	R1
1007	WILLIAM H. & DOROTHY C. WILSON	3/18/1E	5.326	0.00	R1
001008	WILLIAM H. & DOROTHY C. WILSON	10/C/3	4.106	0.00	R1
001009	WILLIAM H. & DOROTHY C. WILSON	1/11/1E	5.330	0.00	R1
1010	WILLIAM H. & DOROTHY C. WILSON	5/14/1W	2.396	0.00	R1
1011	WILLIAM H. & DOROTHY C. WILSON	7/14/1W	2.397	0.00	R1
001012	WILLIAM H. & DOROTHY C. WILSON	8/14/1W	2.398	0.00	R1
1013	WILLIAM H. & DOROTHY C. WILSON	26/6/1E	3.062	0.00	R1
1014	WILLIAM H. & DOROTHY C. WILSON	29/6/1E	3.063	0.00	R1
001015	WILLIAM H. & DOROTHY C. WILSON	1/4/1E	3.047	0.00	R1
001016	WILLIAM H. & DOROTHY C. WILSON	6/7/1W	3.020	0.00	R1
1017	WILLIAM H. & DOROTHY C. WILSON	7/7/1W	3.021	0.00	R1
001018	PHOENIX-HARBOUR	21 PEBBLE BEACH	1.140	0.00	R1
001019	PHOENIX-HARBOUR	22 PEBBLE BEACH	1.141	0.00	R1
1020	WALTER ARMISTEAD	2/10/1E	5.356	0.00	R1
1021	WALTER ARMISTEAD	8/10/1E	5.357	0.00	R1
001022	WALTER ARMISTEAD	9/10/1E	5.358	0.00	R1
1023	WALTER ARMISTEAD	10/10/1E	5.359	0.00	R1
1024	WALTER ARMISTEAD	11/10/1E	5.360	0.00	R1
001025	WALTER ARMISTEAD	12/10/1E	5.361	0.00	R1
001026	WALTER ARMISTEAD	13/10/1E	5.362	0.00	R1
1027	WALTER ARMISTEAD	14/10/1E	5.363	0.00	R1

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1026

SIDENT MUNT MBER	OWNER ACCOUNT NUMBER	NAME	SERVICE ADDRESS	BOOK /SEQ	CURRENT USAGE
^^0006	NO METER	MFG. VENTURES	4 OSPREY	1.011	0
0007	NO METER	MFG. VENTURES	5 OSPREY	1.013	0
000011	NO METER	MFG. VENTURES	20 OSPREY	1.021	0
0^0013	NO METER	JACK BUFORD	11B SEA DUNE VILLAGE	1.025	0
0036	NO METER	WILLIAM SOLBURG	10 BAY PALM VILLAGE	1.071	0
..0043	NO METER	T. A. FIELD	44 SEA PALM VILLAGE	1.097	0
000055	NO METER	BILL DEYO, JR.	60 SEA PALM VILLAGE	1.109	0
0065	NO METER	WILLIAM POLORONIS	5 PEBBLE BEACH VILLAGE	1.129	0
0070	NO METER	PHILLIP M. PAYNE III	21 SANDPIPER VILLAGE	1.142	0
000071	NO METER	R. FUNK 1202 KILDONAN DR.	24 SANDPIPER VILLAGE	1.143	0
^^0072	NO METER	TOM TIFFIN	28 SANDPIPER VILLAGE	1.145	0
0076	NO METER	DOROTHY SLAGHT	51 PEBBLE BEACH VILLAGE	1.153	0
000077	NO METER	TERRA INC.	52 PEBBLE BEACH VILLAGE	1.155	0
000082	NO METER	GEORGE KLEINE	6 WINDJAMMER VILLAGE	1.165	0
0086	NO METER	MATTHEW MORGAN	67 PEBBLE BEACH VILLAGE	1.173	0
..0089	NO METER	MATTHEW MORGAN	5 TURTLE BEACH VILLAGE	1.179	0
000099	NO METER	JERRY HOLMES	37 TURTLE BEACH VILLAGE	1.199	0
0102	NO METER	GARY ULRICH	40 WINDJAMMER VILLAGE	1.205	0
0104	NO METER	DELAND/NOELL	36 TURTLE BEACH VILLAGE	1.209	0
000110	NO METER	JACK BUFORD (JULIUS)	49 TURTLE BEACH VILLAGE	1.221	0
^^0111	NO METER	J. J. GLEATON	50 TURTLE BEACH VILLAGE	1.223	0
0116	NO METER	MFG. VENTURES	65 PLANTATION BEACH VILL.	1.233	0
000121	NO METER	MIKE & GEENA FIRST	2 PLANTATION BEACH VILL.	1.243	0
000123	NO METER	JAMES TUNNELL	6 PLANTATION BEACH VILL.	1.247	0
0130	NO METER	MFG. VENTURES	58 PLANTATION BEACH VILL.	1.261	0
..0135	NO METER	HARRY L. TUCKER	15 PLANTATION BEACH VILL.	1.271	0
000140	NO METER	ROBERT WILKINSON	47 PLANTATION BEACH VILL.	1.281	0
0141	NO METER	MFG. VENTURES	52 PLANTATION BEACH VILL.	1.283	0
0142	NO METER	MICHAEL A. BELL	54 PLANTATION BEACH VILL.	1.285	0
000143	NO METER	JOSEPH A. D'AIELLO	55 PLANTATION BEACH VILL.	1.287	0
^^0149	NO METER	JAMES TUNNELL	4 INDIAN BAY VILLAGE	1.299	0
0157	NO METER	ANDREW RALPH HARWOOD	8 TREASURE BEACH VILLAGE	1.315	0
000158	NO METER	WILLIAM KESSLER	17 INDIAN BAY VILLAGE	1.317	0
000161	NO METER	RAY STANYARD	46 TREASURE BEACH VILLAGE	1.323	0
0162	NO METER	MFG. VENTURES	48 TREASURE BEACH VILLAGE	1.325	0
..0172	NO METER	JEROME W. KOWALSKI	23 INDIAN BAY VILLAGE	1.345	0
000173	NO METER	JOHN STRICKLAND	24 INDIAN BAY VILLAGE	1.347	0
0175	NO METER	JAMES H. GREEN	58 PELICAN BEACH VILLAGE	1.351	0
0177	NO METER	MICHAEL R. BRITTON	55 PELICAN BEACH VILLAGE	1.355	0
000178	NO METER	DONALD PFAENDER	1 PELICAN BEACH VILLAGE	1.357	0
^^0179	NO METER	ROBERT WILKINSON	37 PELICAN BEACH VILLAGE	1.359	0
0184	NO METER	RUTH O'DONNELL	10/J/2	5.126	0
000185	NO METER	MFG. VENTURES	3 BAY COVE VILLAGE	1.371	0
000186	NO METER	JAMES KENT, JR.	4 BAY COVE VILLAGE	1.373	0
0188	NO METER	BRUCE KRUEGER	31 BAY COVE VILLAGE	1.377	0
..0190	NO METER	JOSEPH B. BURGESS	48 PELICAN BEACH VILLAGE	1.381	0
000191	NO METER	ISHMAEL H. JOHNSON, JR.	50 PELICAN BEACH VILLAGE	1.383	0
0192	NO METER	ROBERT WILKINSON	43 PELICAN BEACH VILLAGE	1.385	0
0193	NO METER	GENE BELANGER	23 PELICAN BEACH VILLAGE	1.387	0
000194	NO METER	RODERICK & KATHERINE DAVIS,III	13 PELICAN BEACH VILLAGE	1.389	0

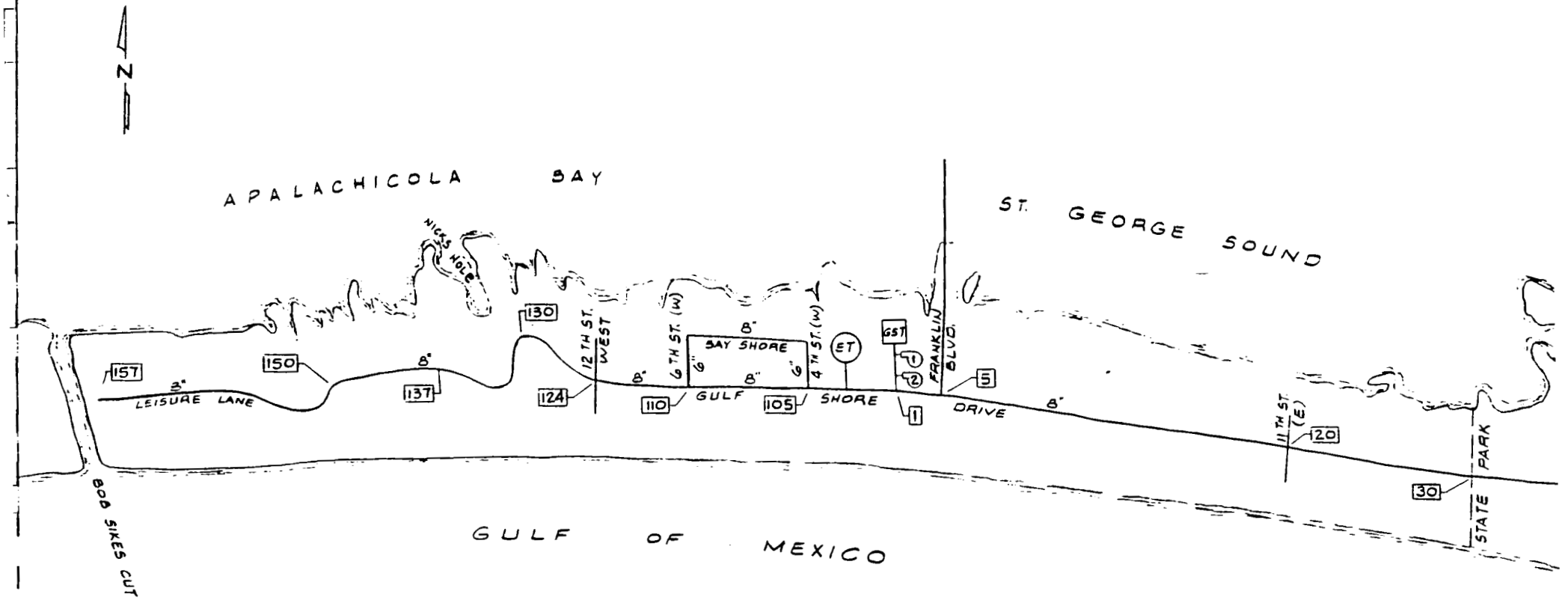
EXHIBIT 5

TDENT JUNT UMBER	OWNER ACCOUNT NUMBER	NAME	SERVICE ADDRESS	BOOK /SEQ	CURRENT USAGE
0195	NO METER	RICHARD BURMAN	14 PELICAN BEACH VILLAGE	1.391	0
0196	NO METER	WILLIAM G. THAMES	15 PELICAN BEACH VILLAGE	1.393	0
000197	NO METER	TERRELL C. TEMPLIN	16 PELICAN BEACH VILLAGE	1.395	0
0200	NO METER	THOMAS L. OUTLAW	26 BAY COVE VILLAGE	1.401	0
0201	NO METER	LARRY C. STRONGOSKI	19 BAY COVE VILLAGE	1.403	0
000202	NO METER	GENE BELANGER	28 DOLPHIN BEACH VILLAGE	1.405	0
000203	NO METER	CARMEN FIGUEROA	41 DOLPHIN BEACH VILLAGE	1.407	0
0204	NO METER	HERMAN W. LAYFIELD	40 DOLPHIN BEACH VILLAGE	1.409	0
0205	NO METER	WILLIAM E. SWAB	39 DOLPHIN BEACH VILLAGE	1.411	0
000207	NO METER	ROBERT W. MCMILLAN	29 DOLPHIN BEACH VILLAGE	1.415	0
0211	NO METER	PHILLIP R. LUBBERS	8 DOLPHIN BEACH VILLAGE	1.423	0
0212	NO METER	JAMES MOORE	25 DOLPHIN BEACH VILLAGE	1.425	0
000213	NO METER	DANIEL Y. SUMNER	26 DOLPHIN BEACH VILLAGE	1.427	0
0214	NO METER	GLEN WOODSUM	27 DOLPHIN BEACH VILLAGE	1.429	0
0216	NO METER	ROGER BERNOT	13 DOLPHIN BEACH VILLAGE	1.433	0
000218	NO METER	JERRY OSTERYOUNG	20 DOLPHIN BEACH VILLAGE	1.437	0
000222	NO METER	FRANK SANCHEZ	19 DOLPHIN BEACH VILLAGE	1.445	0
0227	NO METER	JOSEPHINE MOORE	74 SEA PALM VILLAGE	1.455	0
0229	NO METER	ELDEN W. BUTZBAUGH, JR.	11 DOLPHIN BEACH VILLAGE	1.434	0
000272	NO METER	NELLE LANDRUM	13/76/5	2.085	0
0361	NO METER	HAROLD RUDD	15/61/5	2.263	0
0397	NO METER	HUBERT KADEL	5/57/5	2.335	0
000417	NO METER		3/51/5	2.375	0
000428	NO METER	HELEN SPOHRER--PHEONIX HARBOUR	OLD MARINA/TRACT A	2.399	0
0431	NO METER	ROBERT W. CLARK	10/14/1W	2.403	0
000436		MIKE BURTON	18/15/1W	2.413	0
000447	NO METER	JOANN WINGLER	1/24/1W	2.435	0
0461	NO METER	DANNY BROWN	9/82/5	2.463	0
0481	NO METER	ROSEHILL LAND COMPANY	REALTY SALES OFFICE	3.033	0
000485	NO METER	BUBBA'S BEACH CLUB	4-5/8/1E	3.041	0
0490	NO METER	JAMES HOLZHAUSEN	21/5/1E	3.051	0
0523	NO METER	WENDELL LACY	10/45/4	3.117	0
000535	NO METER	SGI BEAUTIFICATION COMM.	MEDIAN LANSCAPING	7.001	0
000567	NO METER	W.D. BELL	2/A/3	4.061	0
0618	NO METER	CHARLES W. MOBLEY JR	3/0/3	4.165	0
000621	NO METER	JOANNA DOLLOFF	10/N/3	4.171	0
000648	NO METER	DONALD E. WATERS SR.	7/K/3	4.225	0
0651	NO METER	WILLIAM H. HICKS	3/L/3	4.231	0
0678	NO METER	GRADY UNDERWOOD	9/21/1E	5.025	0
000713	NO METER	KELLY	6/15/1W	2.386	0
0735	NO METER	ROBERT PILCHER	1/TRACT 3	6.001	0
0796	NO METER	ROBERT S. LEGG	2/TRACT 3	6.003	0
000797	NO METER	DENNIS SMITH	3/TRACT 3	6.005	0
000798	NO METER	DENNIS SMITH	4/TRACT 3	6.007	0
0812	NO METER	RON J. BROWN	3/TRACT 42E	6.045	0
000834	NO METER	ROYCE HODGE	3/TRACT 17E	6.101	0
000837	NO METER	JOHN MEAGH	6/TRACT 50E	6.109	0
0965	NO METER	KARIN J. WYATT	13/79/5	2.116	0
0979	NO METER	WILLIE GUS CHANCY	10/61/9	2.274	0
000987	NO METER	MICHAEL & LORI RODRIGUE	11 SEA PALM VILLAGE	1.080	0

RESIDENT ACCOUNT NUMBER	OWNER ACCOUNT NUMBER	NAME	SERVICE ADDRESS	BOOK /SEQ	CURRENT USAGE
000988	NO METER	ROBERT D. HENKER	5/TRACT 42E	6.046	0
0989	NO METER	ANDY JOHNSON	4/TRACT 23	6.131	0
0999	NO METER	J. RITTENOUR C/O WM. BRACKIN	4/24/1W	4.236	0
001000	NO METER	KAREN MYERS	31 SEA PINE VILLAGE	1.058	0
1002	NO METER	LEE KNOWLES	2 TREASURE BEACH	1.308	0
1003	NO METER	DOUGLAS P. SHERMAN	28 SEA PALM VILLAGE	1.088	0
001004	NO METER	JOHN & BONNIE KELLER	8 PELICAN BEACH VILLAGE	1.366	0
1005	NO METER	NELSON KRAEFT	3/TRACT 23	6.129	0
1006	NO METER	HENRY L. KOZLOWSKY	15 BAY COVE VILLAGE	1.376	0
1007	NO METER	WILLIAM H. & DOROTHY C. WILSON	3/18/1E	5.326	0
001008	NO METER	WILLIAM H. & DOROTHY C. WILSON	10/C/3	4.106	0
1009	NO METER	WILLIAM H. & DOROTHY C. WILSON	1/11/1E	5.330	0
1010	NO METER	WILLIAM H. & DOROTHY C. WILSON	6/14/1W	2.396	0
001011	NO METER	WILLIAM H. & DOROTHY C. WILSON	7/14/1W	2.397	0
1012	NO METER	WILLIAM H. & DOROTHY C. WILSON	8/14/1W	2.398	0
1013	NO METER	WILLIAM H. & DOROTHY C. WILSON	26/6/1E	3.062	0
001014	NO METER	WILLIAM H. & DOROTHY C. WILSON	29/6/1E	3.063	0
001015	NO METER	WILLIAM H. & DOROTHY C. WILSON	1/4/1E	3.047	0
1016	NO METER	WILLIAM H. & DOROTHY C. WILSON	6/7/1W	3.020	0
1017	NO METER	WILLIAM H. & DOROTHY C. WILSON	7/7/1W	3.021	0
001018	NO METER	PHOENIX-HARBOUR	21 PEBBLE BEACH	1.140	0
1019	NO METER	PHOENIX-HARBOUR	22 PEBBLE BEACH	1.141	0
1020	NO METER	WALTER ARMISTEAD	2/10/1E	5.356	0
001021	NO METER	WALTER ARMISTEAD	8/10/1E	5.357	0
1022	NO METER	WALTER ARMISTEAD	9/10/1E	5.358	0
1023	NO METER	WALTER ARMISTEAD	10/10/1E	5.359	0
001024	NO METER	WALTER ARMISTEAD	11/10/1E	5.360	0
001025	NO METER	WALTER ARMISTEAD	12/10/1E	5.361	0
1026	NO METER	WALTER ARMISTEAD	13/10/1E	5.362	0
1027	NO METER	WALTER ARMISTEAD	14/10/1E	5.363	0

0

er of accounts printed is 130



LEGEND

105	NODE NUMBER
GST	EXIST. 300,000 GAL. GROUND STORAGE TANK
ET	EXIST. 150,000 GAL. ELEVATED TANK
1	EXIST. PUMP

EXHIBIT 6A

DISTRIBUTION SYSTEM KEY MAP

ST. GEORGE ISLAND WATER SYSTEM
FRANKLIN COUNTY, FLORIDA

EXHIBIT 7

ERU DEMAND CALCULATIONS
SELECTED MONTHS - 1991

MONTH	ADF (MGD)	MDF (MGD)	ADF/CONN gpd	MDF/CONN gpd
JANUARY	.155	.335	180	390
JULY	.289	.424	336	493
SEPTEMBER	.207	.361	240	419
NOVEMBER	.160	.239	187	277
AVERAGE	.203	.340	235	350

SOURCE: Flows FDER Monthly Operating Reports

Approximate Number of Connections = 860 (See EXHIBIT 3).

ERU Demand Average (ADF + MDF) = 235 + 350/2 = 292 gpd.
ERU Demand shall be 300 gpd to account for variable seasonal flows.

1090-91 Copy John Pope & File

DRINKING WATER TREATMENT PLANT DAILY OPERATION SUMMARY

PWS ID No. 1190181 Name of Drinking Water System Saint George Island Utilities

Location: City or S/D St George Island, Florida County FRANKLIN

Owned by St. George Island Utilities Company, Ltd. Reporting Month September 1991

Plant Effluent pH 7.5 (Avg) No. of Services at End of Month 929

Design Flow 750gpm Remarks (Use reverse side) Phone No.: 6278884

I certify this report is correct Wayne Coon [signature] B 2713

(Lead Operator's Signature) (Cert. Level) (Cert. No.)

Days of Month	Total Water Treated in Thousands of Gallons	GAS Chlorine gals. or (lbs) Used	GAS Chlorine mg/l	lbs Used	mg/l	lbs Used	mg/l	Residual Chlorine mg/l Plant Effluent	Residual Chlorine mg/l Remote Tap	Number of Samples Taken	Bacteriological MCL Violations
Monthly Total	6219.0	219.0	114.1					71.8	12.9	4	NONE
Average	207.3	7.3	3.8					2.4	0.4		
Maximum	361.0	13.0	4.6					3.0	0.5		
Minimum	130.0	5.0	3.9					2.0	0.3		
1	307.0	11.0	4.29					2.3	0.5		
2	361.0	13.0	4.31					2.4	0.5		
3	285.0	10.0	4.20					2.9	0.5		
4	151.0	5.0	3.97					2.0	0.4		
5	165.0	6.0	4.36					2.5	0.5		
6	162.0	6.0	4.44					2.3	0.5		
7	211.0	7.0	3.98					2.3	0.5		
8	182.0	6.0	3.85					2.4	0.5		
9	130.0	5.0	4.61					3.0	0.4		
10	178.0	6.0	4.04					2.4	0.4		
11	309.0	11.0	4.27					2.4	0.5		
12	188.0	7.0	4.46					2.3	0.4		
13	175.0	6.0	4.11					2.3	0.4		
14	251.0	9.0	4.30					2.5	0.5		
15	227.0	8.0	4.22					2.3	0.5		
16	201.0	7.0	4.17					2.4	0.4		
17	188.0	7.0	4.46					2.4	0.4		
18	173.0	6.0	4.15					2.3	0.4		
19	175.0	6.0	4.11					2.5	0.4		
20	176.0	6.0	4.08					2.4	0.4		
21	219.0	8.0	4.38					2.3	0.4		
22	239.0	8.0	4.01					2.4	0.5		
23	236.0	8.0	4.06					2.3	0.4		
24	173.0	6.0	4.15					2.5	0.4		
25	174.0	6.0	4.13					2.3	0.4		
26	175.0	6.0	4.17					2.4	0.3		
27	161.0	6.0	4.46					2.3	0.3		
28	196.0	7.0	4.28					2.3	0.4		
29	251.0	9.0	4.30					2.4	0.4		
30	200.0	7.0	4.19					2.3	0.4		
31											

This form must be completed in full and submitted to the appropriate DER or County Health Department office within 15 days after the month of record. Note: Fold top flap down, fold this flap up over it, then staple or tape.

DER Form 17-1.208(5)
Effective November 30, 1982

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Received
OCT 21 1991
DER, Tallahassee
Branch Office

DRINKING WATER TREATMENT PLANT DAILY OPERATION SUMMARY

PWS ID No. 1190181 Name of Drinking Water System Saint George Island Utilities

Location: City or S/D St George Island, Florida County FRANKLIN

Owned by St. George Island Utilities Company, Ltd Reporting Month JANUARY 19 91

Plant Effluent pH 7.3 (Avg) No. of Services at End of Month 929

Design Flow 750gpm Remarks (Use reverse side) Phone No.: 6278884

I certify this report is correct Wayne Conrad B 2
(Lead Operator's Signature) (Cert. Level) (Cert. No.)

Days of Month	Total Water Treated in Thousands of Gallons	Gas Chlorine gals. or (lbs) Used	Gas Chlorine mg/l					Residual Chlorine mg/l		Number of Samples Taken	Bacteriological MCL Violations
				lbs Used	mg/l	lbs Used	mg/l	Plant Effluent	Remote Tap		
Monthly Total	4793.0	93.0	10.8					106.9	15.6	4	none
Average	154.6	3.0	2.5					3.4	0.5		
Maximum	335.0	3.0	3.8					3.5	0.1		
Minimum	98.0	3.0	1.1					3.1	0.2		
1	98.0	3.0	3.8					3.5	0.5		
2	98.0	3.0	3.8					3.5	0.5		
3	98.0	3.0	3.8					3.5	0.5		
4	163.0	3.0	2.1					3.5	0.5		
5	158.0	3.0	2.3					3.5	0.5		
6	160.0	3.0	2.3					3.5	0.5		
7	146.0	3.0	2.5					3.5	0.5		
8	148.0	3.0	2.5					3.5	0.5		
9	153.0	3.0	2.3					3.5	0.2		
10	153.0	3.0	2.3					3.5	0.3		
11	151.0	3.0	2.3					3.1	0.3		
12	151.0	3.0	2.3					3.1	0.3		
13	151.0	3.0	2.3					3.1	0.3		
14	156.0	3.0	2.3					3.1	0.3		
15	156.0	3.0	2.3					3.5	0.5		
16	277.0	3.0	1.2					3.5	0.5		
17	100.0	3.0	3.8					3.5	0.6		
18	109.0	3.0	3.3					3.5	0.7		
19	177.0	3.0	2.0					3.5	0.7		
20	116.0	3.0	3.0					3.5	0.7		
21	167.0	3.0	2.1					3.5	0.6		
22	144.0	3.0	2.1					3.5	0.6		
23	211.0	3.0	1.7					3.5	0.6		
24	335.0	3.0	1.1					3.5	0.5		
25	156.0	3.0	2.3					3.5	0.4		
26	159.0	3.0	2.3					3.5	0.7		
27	124.0	3.0	3.0					3.5	0.7		
28	121.0	3.0	3.0					3.5	0.6		
29	133.0	3.0	2.7					3.5	0.5		
30	142.0	3.0	2.5					3.5	0.5		
31	142.0	3.0	2.5					3.5	0.5		

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Effective November 30, 1982

DRINKING WATER TREATMENT PLANT DAILY OPERATION SUMMARY

PWS ID No. 1190181 Name of Drinking Water System Saint George Island Utilities

Location: City or S/D St George Island, Florida County FRANKLIN

Owned by St. George Island Utilities Company, Ltd Reporting Month July 1991

Plant Effluent pH 7.4 (Avg) No. of Services at End of Month 929

Design Flow 750gpm Remarks (Use reverse side) Phone No.: 6278884

I certify this report is correct Wayne Conrad B 2713
(Lead Operator's Signature) (Cert. Level) (Cert. No.)

Days of Month	Total Water Treated in Thousands of Gallons	GAS Chlorine gals. or (lbs) Used	GAS Chlorine mg/l	Time	mg/l	Time	mg/l	Residual Chlorine mg/l Plant Effluent	Residual Chlorine mg/l Remote Tap	Number of Samples Taken	Bacteriological MCL Violations
Monthly Total	8961.0	323.0	129.7					77.7	18.0	4	none
Average	274.1	10.4	4.2					2.5	0.3		
Maximum	424.0	15.0	4.4					3.5	0.5		
Minimum	178.0	6.0	4.0					2.0	0.2		
1	288.0	10.0	4.16					3.5	0.2		
2	311.0	11.0	4.24					3.5	0.2		
3	344.0	12.0	4.18					3.0	0.2		
4	264.0	9.0	4.08					2.5	0.3		
5	424.0	15.0	4.24					2.5	0.3		
6	411.0	14.0	4.06					3.5	0.2		
7	411.0	14.0	4.06					3.0	0.4		
8	271.0	10.0	4.42					3.5	0.4		
9	287.0	10.0	4.17					2.0	0.3		
10	265.0	9.0	4.07					2.5	0.4		
11	256.0	9.0	4.21					2.5	0.4		
12	282.0	10.0	4.25					2.5	0.3		
13	309.0	11.0	4.26					2.7	0.4		
14	320.0	11.0	4.12					2.7	0.3		
15	279.0	10.0	4.29					2.7	0.3		
16	233.0	8.0	4.11					2.4	0.3		
17	335.0	12.0	4.29					2.9	0.3		
18	179.0	6.0	4.01					2.9	0.3		
19	293.0	10.0	4.09					2.5	0.3		
20	289.0	10.0	4.14					2.4	0.3		
21	378.0	13.0	4.12					2.5	0.3		
22	232.0	8.0	4.13					2.6	0.2		
23	279.0	10.0	4.29					2.5	0.3		
24	271.0	10.0	4.42					2.5	0.3		
25	291.0	10.0	4.12					2.4	0.3		
26	265.0	9.0	4.07					2.0	0.3		
27	295.0	10.0	4.06					2.3	0.5		
28	347.0	12.0	4.14					2.1	0.4		
29	250.0	9.0	4.15					2.0	0.4		
30	281.0	10.0	4.26					2.0	0.5		
31	308.0	11.0	4.28					2.1	0.6		

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Effective November 30, 1982

JAN 7 - [illegible]

DRINKING WATER TREATMENT PLANT DAILY OPERATION SUMMARY

PWS ID No. 1190181 Name of Drinking Water System Saint George Island Utilities

Location: City or S/D St George Island, Florida County FRANKLIN

Owned by St. George Island Utilities Company, Ltd Reporting Month November 1991

Plant Effluent pH 7.3 (Avg) No. of Services at End of Month 929

Design Flow 750gpm Remarks (Use reverse side) Phone No.: 6278884

I certify this report is correct Greg Yancey (Lead Operator's Signature) C 5955 (Cert. Level) (Cert. No.)

Days of Month	Total Water Treated in Thousands of Gallons	GAS Chlorine gals. or (lbs) Used	GAS Chlorine mg/l	lbs Used	mg/l	lbs Used	mg/l	Residual Chlorine mg/l Plant Effluent	Residual Chlorine mg/l Remote Tap	Number of Samples Taken	Bacteriological MCL Violations
Monthly Total	4,798.0	167.0	125.0					72.50	9.30	4	none
Average	160.0	5.60	4.20					2.42	0.31		
Maximum	239.0	8.0	4.60					2.60	0.40		
Minimum	119.0	4.0	3.9					2.30	0.30		
1	169.0	6.0	4.3					2.4	0.3		
2	180.0	6.0	4.0					2.3	0.3		
3	200.0	7.0	4.2					2.4	0.3		
4	200.0	7.0	4.2					2.4	0.3		
5	170.0	6.0	4.2					2.4	0.3		
6	180.0	6.0	4.0					2.3	0.3		
7	129.0	5.0	4.6					2.4	0.3		
8	150.0	5.0	4.0					2.4	0.3		
9	187.0	7.0	4.5					2.5	0.3		
10	170.0	6.0	4.2					2.4	0.3		
11	170.0	6.0	4.2					2.4	0.3		
12	122.0	4.0	3.9					2.3	0.3		
13	143.0	5.0	4.2					2.4	0.3		
14	143.0	5.0	4.2					2.4	0.3		
15	165.0	6.0	4.4					2.4	0.3		
16	157.0	6.0	4.6					2.5	0.3		
17	175.0	6.0	4.1					2.5	0.3		
18	122.0	4.0	3.9					2.6	0.4		
19	124.0	4.0	3.9					2.5	0.3		
20	124.0	4.0	3.9					2.5	0.3		
21	124.0	4.0	3.9					2.5	0.3		
22	123.0	4.0	3.9					2.4	0.3		
23	119.0	4.0	4.0					2.4	0.3		
24	133.0	5.0	4.5					2.5	0.3		
25	139.0	5.0	4.3					2.4	0.3		
26	155.0	6.0	4.6					2.3	0.3		
27	154.0	5.0	3.9					2.4	0.3		
28	209.0	7.0	4.0					2.4	0.3		
29	223.0	8.0	4.3					2.4	0.4		
30	239.0	8.0	4.0					2.4	0.3		
31											

This form must be completed in full and submitted to the appropriate DER or County Health Department office within 15 days after the month of record. Note: Fold top flap down; fold this flap up over it, then staple or tape.

DER Form 17-1.208(5)
Effective November 30, 1982

Received
DEC 31 1991
DER, Tallahassee
Branch Office

EXHIBIT F

COMMERCIAL ACCOUNT ERU CALCULATIONS

CUSTOMER: VILLA OF ST. CROIX

MONTH	TOTAL MONTHLY FLOWS (THOUS. GAL.) 1988	1991
APR	258.7	183.9
MAY	324.1	114.3
JUN	401.0	272.2
JUL	323.4	247.0
AUG	382.3	302.8
SEP	119.7	157.4
OCT	204.9	78.0
AVERAGE	280.6	207.1

ERU'S = ((AVERAGE)/30 DAYS)/300 GAL PER ERU PER DAY

NO. OF EQUIVALENT RESIDENTIAL UNITS (ERU'S) = 27

EXHIBIT 4

COMMERCIAL ACCOUNT ERU CALCULATIONS

CUSTOMER: JULIAN G. BRUCE STATE PARK

MONTH	TOTAL MONTHLY FLOWS (THOUS. GAL.) 1988	1989	1991
APR	79.2	439.9	182
MAY	697.2	841.4	242.1
JUN	826.4	939.2	295.7
JUL	54.8	553.3	206.3
AUG	54.8	606.8	360.0
SEP	368.8	461.8	200.0
OCT		588.6	60.0
AVERAGE	346.9	633.3	221.0

ERU'S = ((AVERAGE)/30 DAYS)/300 GAL PER ERU PER DAY

NO. OF EQUIVALENT RESIDENTIAL UNITS (ERU'S) = 45.0

EXHIBIT 8

COMMERCIAL ACCOUNT ERU CALCULATIONS

CUSTOMER: [illegible] [NP 1]

MONTH	TOTAL [illegible] FLOWS (THOUS. GAL.) 1988	1991
APR	60.2	67.9
MAY	72.3	70.3
JUN	111.7	139.6
JUL	70.4	113.5
AUG	80.4	11.3
SEP	7.7	50.7
OCT	22.0	37.7
AVERAGE	57.2	70.2

ERU'S = ((AVERAGE)/30 DAYS)/300 GAL PER ERU PER DAY

NO. OF EQUIVALENT RESIDENTIAL UNITS (ERU'S) = 7

ASSUME ERU'S FOR BUCCANEER 1 = 7 ALSO, TOTAL = 14

EXHIBIT 8

COMMERCIAL ACCOUNT ERU CALCULATIONS

CUSTOMER: [illegible] STORE

MONTH	TOTAL MONTHLY FLOWS (THOUS. GAL.) 1991
APR	18.11
MAY	24.95
JUN	39.93
JUL	62.75
AUG	47.9
SPT	68.0
OCT	53.3
AVERAGE	45.0

ERU'S = ((AVERAGE/30 DAYS))/300 GAL PER ERU PER DAY

NO. OF EQUIVALENT RESIDENTIAL UNITS (ERU'S) = 5

USE 5 ERU'S FOR ALL CONVENIENCE STORES

EXHIBIT 8

COMMERCIAL ACCOUNT ERU CALCULATIONS

CUSTOMER: [illegible]

	TOTAL MONTHLY FLOW (1000S. GAL.)	
MONTH	1988	1991
APR	34.6	46.0
MAY	45.9	49.5
JUN	45.5	55.6
JUL	28.9	52.2
AUG	52.4	49.8
SEP	19.9	50.7
OCT	28.2	34.7
AVERAGE	38.1	48.1

(ERU'S) = (AVERAGE / 30 DAYS)/300 GAL PER ERU PER DAY

NO. OF EQUIVALENT RESIDENTIAL UNITS (ERU'S) = 5.0

EXHIBIT 7

COMMERCIAL ACCOUNT ERU CALCULATIONS

CUSTOMER: TOWNHOMES OF ST. GEORGE (WWTP)

	TOTAL MONTHLY FLOWS (THOUS. GAL.)	
MONTH	1990	1991
APR	76.7	97.4
MAY	79.1	172.5
JUN	59.2	168.6
JUL	24.7	141.2
AUG	24.2	205.6
SEP	0.0	245.6
OCT	0.0	199.0
AVERAGE	52.7	174.1

ERU'S = ((AVERAGE/30 DAYS))/300 GAL PER ERU PER DAY

NO. OF EQUIVALENT RESIDENTIAL UNITS (ERU'S) = 13

EXHIBIT F

COMMERCIAL ACCOUNT ERU CALCULATIONS

CUSTOMER: ST. GEORGE INN

MONTH	TOTAL MONTHLY FLOWS (THOUS. GAL.) 1988	1991
APR	54.9	26.9
MAY	90.9	45.6
JUN	81.2	66.6
JUL	58.2	39.2
AUG	59.4	49.1
SEP	20.6	63.8
OCT	58.8	44.7
AVERAGE	62.0	48.4

ERU'S = ((AVERAGE/30 DAYS))/300 GAL PER ERU PER DAY

NO. OF EQUIVALENT RESIDENTIAL UNITS (ERU'S) = 6

EXHIBIT 8

COMMERCIAL ACCOUNT ERU CALCULATIONS

CUSTOMER: HAPPY PELICAN

	TOTAL MONTHLY FLOWS (THOUS. GAL.)	
MONTH	1988	1991
APR	37.8	23.4
MAY	34.1	18.1
JUN	46.9	23.0
JUL	20.4	15.9
AUG	53.0	15.8
SEP	27.8	16.6
OCT	11.2	12.6
AVERAGE	33.0	17.9

ERU'S = ((AVERAGE/30 DAYS))/300 GAL PER ERU PER DAY

NO. OF EQUIVALENT RESIDENTIAL UNITS (ERU'S) = 3

EXHIBIT 9
COVINCTON PROPERTIES DEVELOPMENT

ERU CALCULATION

1ST YEAR

A. Dry Storage Building -

2 @ 400 gpd = 800 gpd

B. 14 Resident Units -

14 @ 300 gpd = 4,200 gpd

2ND YEAR

A. 12 Unit Resident (Herron Property) -

12 @ 300 gpd = 3,600 gpd

B. 36 Units on Beach (Condos.) -

36 @ 300 gpd = 10,800 gpd

3RD YEAR

A. Marina: 75 Slips @ 40 gpd = 3,000 gpd

B. 60 Resident Units: 60 @ 300 gpd = 18,000 gpd

4TH/5TH YEAR

A. Shops, Rest., Oyster Bar -

22,000 S.F. @ 0.5 gal/day/S.F. = 11,000 gpd

B. 36 Boatel Units -

36 @ 150 gal/rm/day = 5,400 gpd

5TH/6TH YEAR

A. 100 Resid. Units (Condos.) -

100 @ 300 = 30,000 gpd

86,800 gpd

Divided By: 300

Total No. of ERU's = 289 ERU

EXHIBIT 10A

ST. GEORGE ISLAND WATER DISTRIBUTION SYSTEM
EXISTING FLOWS
BOTH PUMPS OFF
AVERAGE DAILY FLOW WITH EXISTING ELEVATED TANK ON LINE

DEMAND 0.21 gpm/ERU

PIPE TABLE

Seq#	Pipe	UpNode	DnNode	Input: Length ft	Input: Diameter in	Input: Roughness	Output: Flow US gpm	Output: Velocity ft/sec	Output: HeadLoss ft	Input: Status
1	1	101	1	140.00	12.00	120.00	265.44	0.75	0.04	Open
2	2	1	2	500.00	8.00	120.00	121.82	0.78	0.22	
3	3	2	3	330.00	4.00	120.00	5.46	0.14	0.01	
4	4	3	4	185.00	4.00	120.00	3.36	0.09	0.00	
5	5	2	5	180.00	8.00	120.00	114.89	0.73	0.07	
6	6	5	6	200.00	8.00	120.00	92.61	0.59	0.05	
7	7	6	7	500.00	8.00	120.00	90.93	0.58	0.13	
8	8	7	8	450.00	8.00	120.00	89.88	0.57	0.11	
9	9	8	9	440.00	8.00	120.00	87.78	0.56	0.10	
10	10	9	10	595.00	8.00	120.00	85.89	0.55	0.14	
11	11	10	11	1180.00	8.00	120.00	84.42	0.54	0.26	
12	12	11	12	1070.00	8.00	120.00	76.55	0.49	0.20	
13	13	12	13	1185.00	8.00	120.00	72.14	0.46	0.20	
14	14	13	14	1200.00	8.00	120.00	68.99	0.44	0.18	
15	15	14	15	1220.00	8.00	120.00	60.35	0.39	0.14	
16	16	15	16	330.00	6.00	120.00	9.02	0.10	0.00	
17	17	16	17	430.00	4.00	120.00	9.02	0.23	0.04	
18	18	17	18	770.00	4.00	120.00	7.97	0.20	0.05	
19	19	18	19	330.00	6.00	120.00	2.26	0.03	0.00	
20	20	19	20	1210.00	8.00	120.00	49.81	0.32	0.10	
21	21	20	21	550.00	2.00	120.00	-3.39	-0.35	0.07	
22	22	20	22	2000.00	6.00	120.00	49.35	0.56	0.66	
23	23	22	23	1400.00	6.00	120.00	46.20	0.52	0.41	
24	24	23	24	850.00	6.00	120.00	44.73	0.51	0.24	
25	25	24	25	1150.00	6.00	120.00	42.63	0.48	0.29	
26	26	25	26	1150.00	6.00	120.00	39.27	0.45	0.25	
27	27	26	27	2000.00	6.00	120.00	38.22	0.43	0.41	
28	28	27	28	1300.00	6.00	120.00	36.33	0.41	0.25	
29	29	28	29	500.00	6.00	120.00	34.23	0.39	0.08	
30	30	29	30	2600.00	6.00	120.00	9.87	0.11	0.04	
31	31	5	31	500.00	6.00	120.00	3.36	0.04	0.00	
32	32	31	32	450.00	6.00	120.00	3.36	0.04	0.00	
33	33	32	33	440.00	6.00	120.00	3.15	0.04	0.00	
34	34	11	34	400.00	6.00	120.00	3.67	0.04	0.00	
35	35	34	35	1070.00	2.00	120.00	3.67	0.38	0.61	
36	36	35	36	1185.00	2.00	120.00	1.15	0.12	0.08	
37	37	36	37	1200.00	2.00	120.00	-1.37	-0.14	0.11	
38	38	37	38	1220.00	2.00	120.00	2.65	0.27	0.38	
39	39	38	39	1210.00	2.00	120.00	0.76	0.08	0.04	
40	40	39	40	1210.00	2.00	120.00	-1.13	-0.12	0.08	
41	41	5	41	150.00	6.00	120.00	18.92	0.21	0.01	
42	101	0	101	10.00	12.00	120.00	0.00	0.00	0.00	
43	102	101	102	300.00	8.00	120.00	-265.44	-1.69	0.55	
44	103	1	103	600.00	8.00	120.00	143.62	0.92	0.36	
45	104	103	104	400.00	6.00	120.00	-9.47	-0.11	0.01	
46	105	103	105	510.00	8.00	120.00	152.46	0.97	0.34	

NODE TABLE

Node	Input: Elevation ft	Output: Demand US gpm	Output: Pressure psi	Output: HGL ft
0	6.00	0.00	45.65	111.45
1	6.00	0.00	45.63	111.41
2	6.00	1.47	45.54	111.19
3	6.00	2.10	45.53	111.18
4	6.00	3.36	45.53	111.18
5	6.00	0.00	45.51	111.12
6	6.00	1.68	45.48	111.07
7	6.00	1.05	45.43	110.94
8	6.00	2.10	45.38	110.83
9	6.00	1.89	45.34	110.73
10	6.00	1.47	45.28	110.59
11	6.00	4.20	45.16	110.33
12	6.00	4.41	45.08	110.13
13	6.00	3.15	44.99	109.94
14	6.00	1.68	44.91	109.75
15	6.00	1.89	44.85	109.61
16	6.00	0.00	44.85	109.60
17	6.00	1.05	44.83	109.56
18	6.00	1.05	44.81	109.51
19	6.00	1.89	44.81	109.51
20	6.00	2.73	44.77	109.41
21	6.00	1.26	44.80	109.48
22	6.00	3.15	44.48	108.74
23	6.00	1.47	44.30	108.33
24	6.00	2.10	44.20	108.10
25	6.00	3.36	44.07	107.80
26	6.00	1.05	43.96	107.55
27	6.00	1.89	43.78	107.14
28	6.00	2.10	43.68	106.89
29	6.00	24.36	43.64	106.81
30	6.00	9.87	43.62	106.77
31	6.00	0.00	45.51	111.12
32	6.00	0.21	45.51	111.12
33	6.00	3.15	45.51	111.12
34	6.00	0.00	45.16	110.33
35	6.00	2.52	44.90	109.72
36	6.00	2.52	44.87	109.64
37	6.00	2.94	44.91	109.75
38	6.00	1.89	44.75	109.37
39	6.00	1.89	44.73	109.33
40	6.00	0.00	44.77	109.41
41	6.00	0.42	45.50	111.11
101	6.00	0.00	45.65	111.45
102	7.00	0.00	45.45	112.00
103	6.00	0.63	45.48	111.06
104	6.00	9.03	45.48	111.06

ST. GEORGE ISLAND WATER DISTRIBUTION SYSTEM
EXISTING FLOWS
BOTH PUMPS OFF
AVERAGE DAILY FLOW WITH EXISTING ELEVATED TANK ON LINE

DEMAND 0.21 gpm/ERU

PIPE TABLE

Seq#	Pipe	UpNode	DnNode	Length	Diameter	Roughness	Flow	Velocity	HeadLoss	Status
				ft	in		US gpm	ft/sec	ft	Open
47	106	105	106	900.00	6.00	120.00	51.19	0.58	0.32	
48	107	106	107	630.00	8.00	120.00	50.98	0.33	0.05	
49	108	107	108	570.00	2.00	120.00	4.41	0.45	0.46	
50	109	105	109	1174.00	8.00	120.00	94.97	0.61	0.32	
51	110	109	110	1174.00	8.00	120.00	90.98	0.58	0.30	
52	111	110	111	900.00	6.00	120.00	-30.61	-0.35	0.12	
53	112	111	112	360.00	8.00	120.00	-43.21	-0.28	0.02	
54	113	111	113	860.00	8.00	120.00	6.51	0.04	0.00	
55	114	110	114	983.00	8.00	120.00	116.97	0.75	0.40	
56	115	114	115	1154.00	8.00	120.00	112.77	0.72	0.44	
57	116	115	116	790.00	6.00	120.00	4.62	0.05	0.00	
58	117	116	117	350.00	6.00	120.00	4.62	0.05	0.00	
59	118	115	118	1177.00	8.00	120.00	102.27	0.65	0.37	
60	119	118	119	1222.00	8.00	120.00	96.81	0.62	0.35	
61	120	119	120	800.00	6.00	120.00	5.88	0.07	0.01	
62	121	120	121	840.00	6.00	120.00	3.78	0.04	0.00	
63	122	121	122	600.00	6.00	120.00	3.15	0.04	0.00	
64	123	119	123	1250.00	8.00	120.00	86.73	0.55	0.29	
65	124	123	124	1170.00	8.00	120.00	75.81	0.48	0.21	
66	125	124	125	1150.00	8.00	120.00	72.03	0.46	0.19	
67	126	125	126	920.00	8.00	120.00	68.67	0.44	0.14	
68	127	126	127	978.00	8.00	120.00	66.15	0.42	0.14	
69	128	127	128	1323.00	8.00	120.00	63.84	0.41	0.17	
70	129	128	129	1150.00	8.00	120.00	58.59	0.37	0.13	
71	130	129	130	805.00	8.00	120.00	56.49	0.36	0.08	
72	131	130	131	3450.00	8.00	120.00	56.07	0.36	0.36	
73	132	131	132	1035.00	8.00	120.00	51.87	0.33	0.09	
74	133	132	133	1150.00	8.00	120.00	49.77	0.32	0.10	
75	134	133	134	690.00	8.00	120.00	47.67	0.30	0.05	
76	135	134	135	690.00	8.00	120.00	47.25	0.30	0.05	
77	136	135	136	1322.00	8.00	120.00	44.73	0.29	0.09	
78	137	136	137	1265.00	8.00	120.00	41.79	0.27	0.08	
79	138	137	138	863.00	8.00	120.00	38.43	0.25	0.04	
80	139	138	139	920.00	8.00	120.00	34.23	0.22	0.04	
81	140	139	140	1150.00	8.00	120.00	29.82	0.19	0.04	
82	141	140	141	690.00	8.00	120.00	26.67	0.17	0.02	
83	142	141	142	690.00	8.00	120.00	23.31	0.15	0.01	
84	143	142	143	402.00	8.00	120.00	22.89	0.15	0.01	
85	144	143	144	460.00	8.00	120.00	22.47	0.14	0.01	
86	145	144	145	460.00	8.00	120.00	15.96	0.10	0.00	
87	146	145	146	633.00	8.00	120.00	15.54	0.10	0.01	
88	147	146	147	288.00	8.00	120.00	15.12	0.10	0.00	
89	148	147	148	460.00	8.00	120.00	11.13	0.07	0.00	
90	149	148	149	633.00	8.00	120.00	10.71	0.07	0.00	
91	150	149	150	1150.00	8.00	120.00	7.77	0.05	0.00	
92	151	150	151	748.00	8.00	120.00	7.35	0.05	0.00	

NODE TABLE

Node	Elevation	Demand	Pressure	HGL
	ft	US gpm	psi	ft
105	6.00	6.30	45.33	110.72
106	6.00	0.21	45.19	110.40
107	6.00	0.00	45.17	110.34
108	6.00	4.41	44.97	109.89
109	6.00	3.99	45.19	110.40
110	6.00	4.62	45.06	110.10
111	6.00	6.09	45.12	110.22
112	6.00	3.36	45.13	110.24
113	6.00	6.51	45.12	110.22
114	6.00	4.20	44.89	109.70
115	6.00	5.88	44.70	109.26
116	6.00	0.00	44.70	109.26
117	6.00	4.62	44.70	109.26
118	6.00	5.46	44.54	108.89
119	6.00	4.20	44.39	108.54
120	6.00	2.10	44.39	108.54
121	6.00	0.63	44.39	108.54
122	6.00	3.15	44.39	108.53
123	6.00	6.09	44.26	108.25
124	6.00	3.78	44.17	108.04
125	6.00	3.36	44.09	107.85
126	6.00	2.52	44.03	107.71
127	6.00	2.31	43.97	107.57
128	6.00	5.25	43.90	107.40
129	6.00	2.10	43.84	107.27
130	6.00	0.42	43.80	107.19
131	6.00	4.20	43.65	106.83
132	6.00	2.10	43.61	106.73
133	6.00	2.10	43.57	106.64
134	6.00	0.42	43.54	106.59
135	6.00	2.52	43.52	106.53
136	6.00	2.94	43.48	106.44
137	6.00	3.36	43.45	106.37
138	6.00	4.20	43.43	106.32
139	6.00	4.41	43.41	106.28
140	6.00	3.15	43.40	106.25
141	6.00	3.36	43.39	106.23
142	6.00	0.42	43.38	106.22
143	6.00	0.42	43.38	106.21
144	6.00	6.51	43.38	106.20
145	6.00	0.42	43.37	106.19
146	6.00	0.42	43.37	106.19
147	6.00	3.99	43.37	106.19
148	6.00	0.42	43.37	106.18
149	6.00	2.94	43.37	106.18
150	6.00	0.42	43.37	106.18

ST. GEORGE ISLAND WATER DISTRIBUTION SYSTEM
EXISTING FLOWS
BOTH PUMPS OFF
AVERAGE DAILY FLOW WITH EXISTING ELEVATED TANK ON LINE

DEMAND 0.21 gpm/ERU

PIPE TABLE

Seq#	Pipe	UpNode	DnNode	Input: Length ft	Input: Diameter in	Input: Roughness	Output: Flow US gpm	Output: Velocity ft/sec	Output: HeadLoss ft	Input: Status Open
93	152	151	152	288.00	8.00	120.00	6.72	0.04	0.00	
94	153	152	153	690.00	8.00	120.00	6.30	0.04	0.00	
95	154	153	154	403.00	8.00	120.00	6.09	0.04	0.00	
96	155	154	155	403.00	8.00	120.00	5.88	0.04	0.00	
97	156	155	156	690.00	8.00	120.00	5.46	0.03	0.00	
98	157	156	157	460.00	8.00	120.00	5.25	0.03	0.00	
99	158	123	158	320.00	6.00	120.00	4.83	0.05	0.00	
100	159	158	159	1220.00	6.00	120.00	1.47	0.02	0.00	
101	401	15	19	1210.00	8.00	120.00	49.44	0.32	0.10	
102	402	18	21	990.00	4.00	120.00	4.65	0.12	0.03	
103	403	14	37	400.00	6.00	120.00	6.96	0.08	0.00	
104	404	20	40	400.00	6.00	120.00	1.13	0.01	0.00	
105	405	41	104	960.00	6.00	120.00	18.50	0.21	0.05	
106	406	107	112	1358.00	8.00	120.00	46.57	0.30	0.10	
107	500	500	0	2.00	12.00	120.00	0.00	0.00	0.00	
108	501	501	0	2.00	12.00	120.00	0.00	0.00	0.00	

NODE TABLE

Node	Input: Elevation ft	Input: Demand US gpm	Output: Pressure psi	Output: HGL ft
151	6.00	0.63	43.37	106.18
152	6.00	0.42	43.37	106.17
153	6.00	0.21	43.37	106.17
154	6.00	0.21	43.36	106.17
155	6.00	0.42	43.36	106.17
156	6.00	0.21	43.36	106.17
157	6.00	5.25	43.36	106.17
158	6.00	3.36	44.26	108.25
159	6.00	1.47	44.26	108.25
500	6.00		45.65	111.45
501	6.00		45.65	111.45
		265.44	43.36	

EXHIBIT 10C

ST. GEORGE ISLAND WATER DISTRIBUTION SYSTEM
EXISTING FLOWS
BOTH PUMPS ON
PEAK HOURLY FLOW WITH EXISTING ELEVATED TANK ON LINE

DEMAND 0.7 gpm/ERU

PIPE TABLE

Seq#	Pipe	UpNode	DnNode	Input: Length ft	Input: Diameter in	Input: Roughness	Output: Flow US gpm	Output: Velocity ft/sec	Output: HeadLoss ft	Input: Status Open
1	1	101	1	140.00	12.00	120.00	884.80	2.51	0.33	
2	2	1	2	500.00	8.00	120.00	406.05	2.59	2.03	
3	3	2	3	330.00	4.00	120.00	18.20	0.46	0.12	
4	4	3	4	185.00	4.00	120.00	11.20	0.29	0.03	
5	5	2	5	180.00	8.00	120.00	382.95	2.44	0.65	
6	6	5	6	200.00	8.00	120.00	308.70	1.97	0.49	
7	7	6	7	500.00	8.00	120.00	303.10	1.93	1.18	
8	8	7	8	450.00	8.00	120.00	299.60	1.91	1.04	
9	9	8	9	440.00	8.00	120.00	292.60	1.87	0.97	
10	10	9	10	595.00	8.00	120.00	286.30	1.83	1.26	
11	11	10	11	1180.00	8.00	120.00	281.40	1.80	2.43	
12	12	11	12	1070.00	8.00	120.00	255.16	1.63	1.84	
13	13	12	13	1185.00	8.00	120.00	240.46	1.54	1.82	
14	14	13	14	1200.00	8.00	120.00	229.96	1.47	1.70	
15	15	14	15	1220.00	8.00	120.00	201.10	1.28	1.35	
16	16	15	16	330.00	6.00	120.00	28.47	0.32	0.04	
17	17	16	17	430.00	4.00	120.00	28.47	0.73	0.37	
18	18	17	18	770.00	4.00	120.00	24.97	0.64	0.52	
19	19	18	19	330.00	6.00	120.00	10.93	0.12	0.01	
20	20	19	20	1210.00	8.00	120.00	170.97	1.09	0.99	
21	21	20	21	550.00	2.00	120.00	-6.33	-0.65	0.86	
22	22	20	22	2000.00	6.00	120.00	164.50	1.87	6.18	
23	23	22	23	1400.00	6.00	120.00	154.00	1.75	3.83	
24	24	23	24	850.00	6.00	120.00	149.10	1.69	2.19	
25	25	24	25	1150.00	6.00	120.00	142.10	1.61	2.71	
26	26	25	26	1150.00	6.00	120.00	130.90	1.49	2.33	
27	27	26	27	2000.00	6.00	120.00	127.40	1.45	3.85	
28	28	27	28	1300.00	6.00	120.00	121.10	1.37	2.28	
29	29	28	29	500.00	6.00	120.00	114.10	1.29	0.78	
30	30	29	30	2600.00	6.00	120.00	32.90	0.37	0.41	
31	31	5	31	500.00	6.00	120.00	11.20	0.13	0.01	
32	32	31	32	450.00	6.00	120.00	11.20	0.13	0.01	
33	33	32	33	440.00	6.00	120.00	10.50	0.12	0.01	
34	34	11	34	400.00	6.00	120.00	12.24	0.14	0.01	
35	35	34	35	1070.00	2.00	120.00	12.24	1.25	5.67	
36	36	35	36	1185.00	2.00	120.00	3.84	0.39	0.73	
37	37	36	37	1200.00	2.00	120.00	-4.56	-0.47	1.02	
38	38	37	38	1220.00	2.00	120.00	8.90	0.91	3.58	
39	39	38	39	1210.00	2.00	120.00	2.60	0.27	0.36	
40	40	39	40	1210.00	2.00	120.00	-3.70	-0.38	0.70	
41	41	5	41	150.00	6.00	120.00	63.05	0.72	0.08	
42	101	0	101	10.00	12.00	120.00	1192.49	3.38	0.04	
43	102	101	102	300.00	8.00	120.00	307.69	1.96	0.73	
44	103	1	103	600.00	8.00	120.00	478.75	3.06	3.30	
45	104	103	104	400.00	6.00	120.00	-31.55	-0.36	0.06	
46	105	103	105	510.00	8.00	120.00	508.20	3.24	3.13	

NODE TABLE

Node	Input: Elevation ft	Input: Demand US gpm	Output: Pressure psi	Output: HGL ft
0	6.00	0.00	46.22	112.77
1	6.00	0.00	46.06	112.39
2	6.00	4.90	45.18	110.37
3	6.00	7.00	45.13	110.24
4	6.00	11.20	45.11	110.21
5	6.00	0.00	44.90	109.71
6	6.00	5.60	44.69	109.22
7	6.00	3.50	44.17	108.04
8	6.00	7.00	43.72	107.00
9	6.00	6.30	43.30	106.03
10	6.00	4.90	42.76	104.77
11	6.00	14.00	41.71	102.34
12	6.00	14.70	40.91	100.51
13	6.00	10.50	40.12	98.68
14	6.00	5.60	39.39	96.99
15	6.00	6.30	38.80	95.64
16	6.00	0.00	38.79	95.60
17	6.00	3.50	38.63	95.23
18	6.00	3.50	38.40	94.71
19	6.00	6.30	38.40	94.70
20	6.00	9.10	37.97	93.71
21	6.00	4.20	38.34	94.57
22	6.00	10.50	35.30	87.53
23	6.00	4.90	33.64	83.70
24	6.00	7.00	32.69	81.52
25	6.00	11.20	31.52	78.81
26	6.00	3.50	30.51	76.48
27	6.00	6.30	28.84	72.63
28	6.00	7.00	27.86	70.35
29	6.00	81.20	27.52	69.57
30	6.00	32.90	27.34	69.16
31	6.00	0.00	44.89	109.70
32	6.00	0.70	44.89	109.69
33	6.00	10.50	44.88	109.68
34	6.00	0.00	41.70	102.33
35	6.00	8.40	39.25	96.66
36	6.00	8.40	38.93	95.93
37	6.00	9.80	39.37	96.95
38	6.00	6.30	37.82	93.37
39	6.00	6.30	37.67	93.01
40	6.00	0.00	37.97	93.71
41	6.00	1.40	44.86	109.63
101	6.00	0.00	46.20	112.73
102	7.00	0.00	45.45	112.00
103	6.00	2.10	44.63	109.09
104	6.00	30.10	44.65	109.15

ST. GEORGE ISLAND WATER DISTRIBUTION SYSTEM
EXISTING FLOWS
BOTH PUMPS ON
PEAK HOURLY FLOW WITH EXISTING ELEVATED TANK ON LINE

DEMAND 0.7 gpm/ERU

PIPE TABLE

	Input						Output			
Seq#	Pipe	UpNode	DnNode	Length ft	Diameter in	Roughness	Flow US gpm	Velocity ft/sec	HeadLoss ft	Status Open
93	152	151	152	288.00	8.00	120.00	22.40	0.14	0.01	
94	153	152	153	690.00	8.00	120.00	21.00	0.13	0.01	
95	154	153	154	403.00	8.00	120.00	20.30	0.13	0.01	
96	155	154	155	403.00	8.00	120.00	19.60	0.13	0.01	
97	156	155	156	690.00	8.00	120.00	18.20	0.12	0.01	
98	157	156	157	460.00	8.00	120.00	17.50	0.11	0.01	
99	158	123	158	320.00	6.00	120.00	16.10	0.18	0.01	
100	159	158	159	1220.00	6.00	120.00	4.90	0.06	0.01	
101	401	15	19	1210.00	8.00	120.00	166.34	1.06	0.94	
102	402	18	21	990.00	4.00	120.00	10.53	0.27	0.14	
103	403	14	37	400.00	6.00	120.00	23.26	0.26	0.03	
104	404	20	40	400.00	6.00	120.00	3.70	0.04	0.00	
105	405	41	104	960.00	6.00	120.00	61.65	0.70	0.48	
106	406	107	112	1358.00	8.00	120.00	155.24	0.99	0.93	
107	500	500	0	2.00	12.00	120.00	341.17	0.97	0.00	
108	501	501	0	2.00	12.00	120.00	851.32	2.42	0.00	

NODE TABLE

	Input		Output		
Node	Elevation ft	Demand US gpm	Pressure psi	HGL ft
151	6.00	2.10	24.99	63.73
152	6.00	1.40	24.99	63.72
153	6.00	0.70	24.98	63.71
154	6.00	0.70	24.98	63.71
155	6.00	1.40	24.98	63.70
156	6.00	0.70	24.97	63.69
157	6.00	17.50	24.97	63.69
158	6.00	11.20	33.34	83.02
159	6.00	4.90	33.34	83.02
500	6.00		46.22	112.77
501	6.00		46.22	112.77
		884.80	24.97	

ST. GEORGE ISLAND WATER DISTRIBUTION SYSTEM
EXISTING FLOWS
BOTH PUMPS ON
PEAK HOURLY FLOW WITH EXISTING ELEVATED TANK OFF LINE

DEMAND 0.7 gpm/ERU

PIPE TABLE

Seq#	Pipe	UpNode	DnNode	Length ft (Input)	Diameter in (Input)	Roughness (Input)	Flow US gpm (Output)	Velocity ft/sec (Output)	HeadLoss ft (Output)	Status (Input)
1	1	101	1	140.00	12.00	120.00	884.80	2.51	0.33	Open
2	2	1	2	500.00	8.00	120.00	406.05	2.59	2.03	
3	3	2	3	330.00	4.00	120.00	18.20	0.46	0.12	
4	4	3	4	185.00	4.00	120.00	11.20	0.29	0.03	
5	5	2	5	180.00	8.00	120.00	382.95	2.44	0.65	
6	6	5	6	200.00	8.00	120.00	308.70	1.97	0.49	
7	7	6	7	500.00	8.00	120.00	303.10	1.93	1.18	
8	8	7	8	450.00	8.00	120.00	299.60	1.91	1.04	
9	9	8	9	440.00	8.00	120.00	292.60	1.87	0.97	
10	10	9	10	595.00	8.00	120.00	286.30	1.83	1.26	
11	11	10	11	1130.00	8.00	120.00	281.40	1.80	2.43	
12	12	11	12	1070.00	8.00	120.00	255.16	1.63	1.84	
13	13	12	13	1185.00	8.00	120.00	240.46	1.54	1.82	
14	14	13	14	1290.00	8.00	120.00	229.96	1.47	1.70	
15	15	14	15	1220.00	8.00	120.00	201.16	1.28	1.35	
16	16	15	16	330.00	6.00	120.00	30.06	0.34	0.04	
17	17	16	17	430.00	4.00	120.00	30.06	0.77	0.41	
18	18	17	18	770.00	4.00	120.00	26.56	0.68	0.47	
19	19	16	19	330.00	6.00	120.00	7.54	0.09	0.00	
20	20	19	20	1210.00	8.00	120.00	166.04	1.06	0.94	
21	21	20	21	550.00	2.00	120.00	-11.32	-1.16	0.66	
22	22	20	22	[illegible]	6.00	120.00	164.50	1.87	6.16	
23	23	22	23	1400.00	6.00	120.00	154.00	1.75	3.83	
24	24	23	24	650.00	6.00	120.00	149.10	1.69	2.19	
25	25	24	25	1150.00	6.00	120.00	[illegible]	1.61	[illegible]	
26	26	25	26	1150.00	6.00	120.00	130.90	1.49	2.33	
27	27	26	27	2000.00	6.00	120.00	127.40	1.45	3.55	
28	28	27	28	1300.00	6.00	120.00	121.10	1.37	2.26	
29	29	26	29	500.00	6.00	120.00	114.10	1.29	0.76	
30	30	29	30	2600.00	6.00	120.00	32.90	0.37	[illegible]	
31	31	5	31	500.00	6.00	120.00	[illegible]	0.13	[illegible]	
32	32	31	32	450.00	6.00	120.00	[illegible]	[illegible]	0.01	
33	33	32	33	440.00	6.00	120.00	[illegible]	[illegible]	0.01	
34	34	11	34	400.00	6.00	120.00	12.24	0.14	0.01	
35	35	34	35	1070.00	2.00	120.00	[illegible]	1.25	5.67	
36	36	35	36	1185.00	2.00	120.00	3.64	[illegible]	[illegible]	
37	37	36	37	[illegible]	2.00	120.00	[illegible]	-0.47	[illegible]	
38	38	37	38	1220.00	2.00	120.00	[illegible]	[illegible]	[illegible]	
39	39	38	39	[illegible]	2.00	120.00	[illegible]	[illegible]	0.35	
40	40	39	40	[illegible]	2.00	120.00	[illegible]	-0.38	[illegible]	
41	41	5	41	[illegible]	6.00	[illegible]	[illegible]	0.72	0.08	
42	101	[illegible]	101	10.00	[illegible]	120.00	[illegible]	[illegible]	[illegible]	
43	102	101	102	[illegible]	6.00	[illegible]	[illegible]	[illegible]	[illegible]	
44	103	1	103	500.00	[illegible]	120.00	[illegible]	[illegible]	[illegible]	
45	[illegible]	[illegible]	[illegible]	400.00	[illegible]	[illegible]	[illegible]	[illegible]	0.06	
46	[illegible]	[illegible]	[illegible]	210.00	8.00	120.00	[illegible]	[illegible]	[illegible]	

NODE TABLE

Node (Input)	Elevation ft (Input)	Demand US gpm (Input)	Pressure psi (Output)	HGL ft (Output)
0	6.00	0.00	73.75	176.35
1	6.00	0.00	73.59	176.00
2	6.00	4.90	72.71	173.97
3	6.00	7.00	72.66	173.84
4	6.00	11.20	72.65	173.82
5	6.00	0.00	72.43	173.31
6	6.00	5.60	72.22	172.82
7	6.00	3.50	71.71	171.65
8	6.00	7.00	71.26	170.61
9	6.00	6.30	70.84	169.63
10	6.00	4.90	70.29	168.37
11	6.00	14.00	69.24	165.94
12	6.00	14.70	68.44	164.11
13	6.00	10.50	67.66	162.29
14	6.00	5.60	66.92	160.59
15	6.00	[illegible]	66.34	159.24
16	6.00	0.00	66.32	159.20
17	6.00	3.50	66.14	158.79
18	6.00	3.50	65.94	158.32
19	6.00	6.30	65.94	158.32
20	6.00	9.10	65.53	157.38
21	6.00	4.20	65.62	158.04
22	6.00	10.50	62.66	151.20
23	6.00	4.90	61.20	147.37
24	6.00	7.00	60.25	145.18
25	6.00	11.20	59.08	142.48
26	6.00	3.50	58.07	140.15
27	6.00	6.30	56.41	136.30
28	6.00	7.00	55.42	134.02
29	6.00	[illegible]	[illegible]	[illegible]
30	6.00	[illegible]	[illegible]	[illegible]
31	6.00	[illegible]	72.43	173.30
32	6.00	0.70	[illegible]	[illegible]
33	6.00	10.50	72.42	173.28
34	6.00	[illegible]	[illegible]	[illegible]
35	6.00	[illegible]	[illegible]	160.27
36	6.00	[illegible]	66.46	[illegible]
37	6.00	[illegible]	[illegible]	[illegible]
38	6.00	[illegible]	65.37	157.01
39	6.00	[illegible]	[illegible]	[illegible]
40	6.00	[illegible]	[illegible]	[illegible]
41	6.00	1.40	[illegible]	[illegible]
101	6.00	0.00	[illegible]	[illegible]
102	7.00	0.00	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
104	6.00	[illegible]	[illegible]	[illegible]

[illegible] WATER DISTRIBUTION SYSTEM
EXISTING FLOWS
BOTH PUMPS ON
PEAK HOURLY FLOW WITH EXISTING ELEVATED TANK OFF LINE

DEMAND 0.7 gpm/ERU

PIPE TABLE

Seg#	Pipe	UpNode	DnNode	Length ft	Diameter in	Roughness	Flow US gpm	Velocity ft/sec	HeadLoss ft	Status open
47	106	105	106	900.00	6.00	120.00	172.65	1.94	2.36	
48	107	106	107	830.00	8.00	120.00	169.95	1.08	0.51	
49	108	107	108	570.00	2.00	120.00	14.70	1.56	4.24	
50	109	105	109	1174.00	8.00	120.00	316.55	2.02	3.00	
51	110	109	110	1174.00	8.00	120.00	303.25	1.94	2.77	
52	111	110	111	900.00	6.00	120.00	-102.05	-1.16	1.15	
53	112	111	112	360.00	8.00	120.00	-144.05	[illegible]	0.21	
54	113	111	113	660.00	8.00	120.00	21.70	0.14	0.02	
55	114	110	114	983.00	8.00	120.00	353.30	2.49	3.70	
56	115	114	115	1154.00	8.00	120.00	325.30	2.40	4.06	
57	116	115	116	790.00	6.00	120.00	15.40	0.17	0.04	
58	117	116	117	350.00	6.00	120.00	15.40	0.17	0.01	
59	118	115	118	1177.00	8.00	120.00	340.1	2.15	3.45	
60	119	118	119	1222.00	8.00	120.00	322.70	2.06	3.24	
61	120	119	120	800.00	6.00	120.00	18.60	0.22	0.05	
62	121	120	121	840.00	6.00	120.00	12.60	0.14	0.02	
63	122	121	122	600.00	6.00	120.00	7.56	0.12	0.01	
64	123	113	123	1.50.00	8.00	120.00	288.10	1.83	2.70	
65	124	123	124	1170.00	8.00	120.00	252.70	1.61	1.87	
66	125	124	125	1150.00	8.00	120.00	240.10	1.53	1.76	
67	126	125	126	920.00	8.00	120.00	228.30	1.46	1.29	
68	127	126	127	976.00	8.00	120.00	220.50	1.41	1.16	
69	128	127	128	1303.00	6.00	120.00	211.30	1.36	1.62	
70	129	128	129	1150.00	8.00	120.00	195.30	1.25	1.20	
71	130	129	130	805.00	8.00	120.00	186.30	1.19	0.79	
72	131	130	131	2450.00	8.00	120.00	196.30	1.19	2.34	
73	132	131	132	1935.00	8.00	120.00	177.30	1.10	1.66	
74	133	132	133	1150.00	8.00	120.00	165.30	1.06	0.85	
75	134	133	134	830.00	6.00	120.00	156.30	1.01	[illegible]	
76	135	134	135	690.00	8.00	120.00	151.50	1.01	0.51	
77	136	135	136	1322.00	8.00	120.00	143.10	0.95	0.94	
78	137	136	137	1165.00	8.00	120.00	139.50	0.93	0.71	
79	138	137	138	863.00	8.00	120.00	133.10	0.91	0.48	
80	139	138	139	1[illegible].00	6.00	120.00	114.10	0.73	[illegible].56	
81	140	139	140	1150.00	8.00	120.00	[illegible].[illegible]	0.63	0.54	
82	141	140	141	830.00	6.00	120.00	88.30	0.57	0.37	
83	142	141	142	630.00	8.00	120.00	77.30	0.50	[illegible].[illegible]	
84	143	142	143	[illegible].00	8.00	[illegible].00	56.50	0.43	[illegible].[illegible]	
85	144	141	144	460.00	8.00	[illegible].00	74.[illegible]	0.48	0.02	
86	145	144	145	480.00	8.00	120.00	[illegible].[illegible]	0.34	[illegible].04	
87	146	145	146	[illegible].[illegible]	8.00	[illegible].00	[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	
88	147	146	147	[illegible].[illegible]	8.00	[illegible].00	50.49	[illegible].[illegible]	0.42	
89	148	146	148	480.00	8.00	120.00	[illegible].[illegible]	[illegible].[illegible]	[illegible].[illegible]	
90	149	148	149	[illegible].[illegible]	8.00	[illegible].00	25.70	[illegible].[illegible]	[illegible].[illegible]	
91	150	149	150	[illegible].[illegible]	8.00	[illegible].00	15.[illegible]	[illegible].[illegible]	[illegible].[illegible]	
92	151	150	151	740.[illegible]	8.00	[illegible].00	14.[illegible]	0.10	[illegible].[illegible]	

NODE TABLE

Node	Elevation ft	Demand US gpm	Pressure psi	HGL ft
105	6.00	21.00	70.81	169.56
106	6.00	0.70	69.52	166.59
107	6.00	0.00	69.30	166.08
108	6.00	14.70	67.46	161.64
109	6.00	13.30	69.51	166.56
110	6.00	15.40	68.31	163.79
111	6.00	20.30	69.80	164.93
112	6.00	11.20	68.50	165.15
113	6.00	21.70	68.20	164.92
114	6.00	14.00	66.70	160.09
115	6.00	19.60	64.95	156.03
116	6.00	0.00	64.94	156.00
117	6.00	15.40	64.93	155.99
118	6.00	18.20	63.45	152.58
119	6.00	14.00	62.05	149.34
120	6.00	7.00	62.03	149.29
121	6.00	2.10	62.02	149.27
122	6.00	10.50	62.02	149.26
123	6.00	20.30	60.86	146.64
124	6.00	12.60	60.03	144.67
125	6.00	11.20	59.27	142.90
126	6.00	8.40	58.71	141.61
127	6.00	7.70	58.15	140.33
128	6.00	17.50	57.45	138.71
129	6.00	7.00	56.93	137.51
130	6.00	1.40	56.59	136.72
131	6.00	14.00	55.15	133.39
132	6.00	7.00	54.78	132.53
133	6.00	7.00	54.39	131.64
134	6.00	1.40	54.18	131.15
135	6.00	8.40	53.97	130.67
136	6.00	[illegible].80	53.60	129.83
137	6.00	[illegible].[illegible]	53.50	129.62
138	6.00	[illegible].00	53.12	128.71
139	6.00	14.70	52.37	126.90
140	6.00	10.50	[illegible].82	[illegible].01
141	6.00	11.20	52.73	[illegible].84
142	6.00	[illegible].40	[illegible].83	[illegible].71
143	6.00	[illegible].40	[illegible].66	[illegible].64
144	6.00	[illegible].[illegible]	[illegible].62	[illegible].55
145	6.00	[illegible].40	[illegible].59	127.51
146	6.00	[illegible].00	[illegible].[illegible]	[illegible].45
147	6.00	[illegible].00	[illegible].[illegible]	[illegible].43
148	6.00	[illegible].00	[illegible].[illegible]	127.40
149	6.00	[illegible].00	[illegible].[illegible]	[illegible].38
150	6.00	[illegible].00	[illegible].[illegible]	[illegible].[illegible]

ST. GEORGE ISLAND WATER DISTRIBUTION SYSTEM
EXISTING FLOWS
BOTH PUMPS ON
PEAK HOURLY FLOW WITH EXISTING ELEVATED TANK OFF LINE

DEMAND 0.7 gpm/ERU

PIPE TABLE

Seq#	Pipe	UpNode	DnNode	Input: Length ft	Input: Diameter in	Input: Roughness	Output: Flow US gpm	Output: Velocity ft/sec	Output: HeadLoss ft	Input: Status
93	152	151	152	288.00	8.00	120.00	22.40	0.14	0.01	Open
94	153	152	153	690.00	8.00	120.00	21.00	0.13	0.01	
95	154	153	154	403.00	8.00	120.00	20.30	0.13	0.01	
96	155	154	155	403.00	8.00	120.00	19.60	0.13	0.01	
97	156	155	156	690.00	8.00	120.00	18.20	0.12	0.01	
98	157	156	157	460.00	8.00	120.00	17.50	0.11	0.01	
99	158	123	158	320.00	6.00	120.00	16.10	0.18	0.01	
100	159	158	159	1220.00	6.00	120.00	4.90	0.06	0.01	
101	401	15	19	1210.00	8.00	120.00	164.80	1.05	0.92	
102	402	18	21	990.00	4.00	120.00	15.52	0.40	0.28	
103	403	14	37	400.00	6.00	120.00	23.20	0.26	0.03	
104	404	20	40	400.00	6.00	120.00	3.76	0.04	0.00	
105	405	41	104	960.00	6.00	120.00	61.65	0.70	0.48	
106	406	107	112	1358.00	8.00	120.00	155.25	0.99	0.93	
107	500	500	0	2.00	12.00	120.00	190.87	0.54	0.00	
108	501	501	0	2.00	12.00	120.00	693.93	1.97	0.00	

NODE TABLE

Node	Input: Elevation ft	Input: Demand US gpm	Output: Pressure psi	Output: HGL ft
151	6.00	2.10	52.52	127.33
152	6.00	1.40	52.52	127.33
153	6.00	0.70	52.52	127.31
154	6.00	0.70	52.51	127.31
155	6.00	1.40	52.51	127.30
156	6.00	0.70	52.51	127.29
157	6.00	17.50	52.51	127.29
158	6.00	11.20	60.88	146.62
159	6.00	4.90	60.87	146.62
500	6.00		73.75	176.35
501	6.00		73.75	176.36
		884.80	52.51	

ST. GEORGE ISLAND WATER DISTRIBUTION SYSTEM
EXISTING FLOWS + MAHR'S DEVELOPMENT + OTHER GENERAL DEVELOPMENT @ 5% OF ALL SYSTEM
YEAR 2
PEAK HOURLY FLOW WITH EXISTING ELEVATED TANK OFF LINE

98	157	156	157	460.00	8.00	120.00	28.98	0.18	0.01	156	6.00	1.38	31.72	79.26
99	158	123	158	320.00	6.00	120.00	17.25	0.20	0.02	157	6.00	26.98	31.71	79.25
100	159	158	159	1220.00	6.00	120.00	5.52	0.06	0.01	158	6.00	11.73	48.76	118.63
101	401	15	19	1210.00	8.00	120.00	167.38	1.07	0.15	159	6.00	5.52	48.75	118.62
102	402	18	21	590.00	4.00	120.00	15.75	0.40	0.19	500	6.00	0.00	67.06	160.91
103	403	14	37	400.00	6.00	120.00	23.62	0.27	0.03	501	6.00	0.00	67.06	160.91
104	404	20	40	400.00	6.00	120.00	4.64	0.05	0.00					
105	405	41	104	960.00	6.00	120.00	52.58	0.34	0.05			960.44	31.71	
106	406	107	112	1358.00	8.00	120.00	182.26	1.16	1.15					
107	500	500	0	2.00	12.00	120.00	240.22	0.68	0.00					
	501	501	0	2.00	12.00	120.00	740.27	2.10	0.00					

DEMAND 0.63 gpm/ERU

EXHIBIT 12

1 OF 3

ST. GEORGE ISLAND WATER DISTRIBUTION SYSTEM
EXISTING FLOWS + MAHR'S DEVELOPMENT + OTHER GENERAL DEVELOPMENT
YEAR 5 THROUGH THE END OF YEAR 6
PEAK HOURLY FLOW WITH EXISTING ELEVATED TANK OFF LINE AND BOTH PUMPS ON
GROUND STORAGE TANK AT NODE 155

DEMAND 0.66 gpm/ERU

PIPE TABLE

Seq#	Pipe	UpNode	DnNode	Length (Input) ft	Diameter (Input) in	Roughness (Input)	Flow (Output) US gpm	Velocity (Output) ft/sec	HeadLoss (Output) ft	Status (Input) Open
1	1	101	1	140.00	12.00	120.00	1047.42	2.97	0.46	
2	2	1	2	500.00	8.00	120.00	472.31	3.01	2.68	
3	3	2	3	330.00	4.00	120.00	20.46	0.52	0.15	
4	4	3	4	185.00	4.00	120.00	13.86	0.35	0.04	
5	5	2	5	180.00	8.00	120.00	445.83	2.83	0.86	
6	6	5	6	200.00	8.00	120.00	347.16	2.22	0.61	
7	7	6	7	500.00	8.00	120.00	336.58	2.16	1.45	
8	8	7	8	450.00	8.00	120.00	335.28	2.14	1.26	
9	9	8	9	440.00	8.00	120.00	325.58	2.08	1.18	
10	10	9	10	595.00	8.00	120.00	311.44	1.99	1.55	
11	11	10	11	1180.00	8.00	120.00	311.52	1.99	3.03	
12	12	11	12	1070.00	8.00	120.00	281.66	1.80	2.50	
13	13	12	13	1185.00	8.00	120.00	264.52	1.69	2.17	
14	14	13	14	1200.00	8.00	120.00	254.62	1.63	2.05	
15	15	14	15	1220.00	8.00	120.00	220.62	1.41	1.60	
16	16	15	16	330.00	6.00	120.00	35.63	0.40	0.06	
17	17	16	17	430.00	4.00	120.00	32.33	0.83	0.47	
18	18	17	18	770.00	4.00	120.00	29.03	0.74	0.54	
19	19	18	19	330.00	6.00	120.00	5.62	0.06	0.00	
20	20	19	20	1210.00	8.00	120.00	178.72	1.14	1.07	
21	21	20	21	550.00	2.00	120.00	-12.84	-1.31	0.75	
22	22	20	22	2000.00	6.00	120.00	171.60	1.95	6.63	
23	23	22	23	1400.00	6.00	120.00	138.40	1.80	4.03	
24	24	23	24	850.00	6.00	120.00	138.78	1.75	2.32	
25	25	24	25	1150.00	6.00	120.00	143.88	1.83	3.77	
26	26	25	26	1150.00	6.00	120.00	133.32	1.51	2.41	
27	27	26	27	2000.00	6.00	120.00	126.72	1.44	6.01	
28	28	27	28	1300.00	6.00	120.00	120.78	1.37	3.53	
29	29	28	29	500.00	6.00	120.00	110.88	1.26	0.74	
30	30	29	30	2800.00	6.00	120.00	34.32	0.39	0.44	
31	31	5	31	500.00	6.00	120.00	13.86	0.16	0.02	
32	32	31	32	450.00	6.00	120.00	13.86	0.16	0.01	
33	33	32	33	440.00	6.00	120.00	9.90	0.11	0.01	
34	34	11	34	400.00	6.00	120.00	16.64	0.19	0.02	
35	35	34	35	1070.00	2.00	120.00	13.64	1.56	6.63	
36	36	35	36	1135.00	2.00	120.00	5.42	0.55	1.39	
37	37	36	37	1200.00	2.00	120.00	-5.80	-0.59	1.53	
38	38	37	38	1220.00	2.00	120.00	19.58	1.96	4.86	
39	39	38	39	1210.00	2.00	120.00	1.14	0.12	0.08	
40	40	39	40	1210.00	2.00	120.00	-4.87	-0.47	1.12	
41	41	5	41	150.00	6.00	120.00	82.91	0.94	0.13	
42	101	0	101	10.00	12.00	120.00	1030.72	2.93	0.00	
43	102	101	102	200.00	6.00	120.00	0.00	0.00	0.00	
44	103	1	103	300.00	8.00	120.00	575.11	3.67	4.64	
45	104	103	104	400.00	6.00	120.00	-53.11	-0.60	0.15	
46	105	103	105	510.00	8.00	120.00	623.04	3.98	4.57	

NODE TABLE

Node	Elevation (Input) ft	Demand (Output) US gpm	Pressure psi	HGL ft
0	6.00	3.30	61.04	146.99
1	6.00	0.00	60.82	146.51
2	6.00	7.92	59.66	143.82
3	6.00	6.60	59.60	143.67
4	6.00	13.86	59.58	143.63
5	6.00	0.00	59.29	142.96
6	6.00	6.58	59.03	142.35
7	6.00	3.30	58.40	140.91
8	6.00	9.90	57.85	139.63
9	6.00	5.94	57.33	138.44
10	6.00	7.92	56.66	136.89
11	6.00	13.20	55.40	133.97
12	6.00	17.16	54.44	131.76
13	6.00	9.90	53.50	129.59
14	6.00	6.58	52.61	127.54
15	6.00	5.94	51.32	125.94
16	6.00	3.30	51.90	125.88
17	6.00	3.30	51.69	125.41
18	6.00	6.60	51.46	124.86
19	6.00	5.94	51.45	124.86
20	6.00	11.88	50.99	123.79
21	6.00	3.96	51.32	124.54
22	6.00	13.20	48.10	117.11
23	6.00	4.62	46.35	113.07
24	6.00	9.90	45.35	110.76
25	6.00	10.56	44.15	107.98
26	6.00	6.60	43.11	105.58
27	6.00	5.94	41.46	101.76
28	6.00	9.90	40.48	99.50
29	6.00	76.56	40.15	98.75
30	6.00	34.32	39.96	98.31
31	6.00	9.09	59.26	144.95
32	6.00	3.96	59.18	142.93
33	6.00	9.90	59.17	142.92
34	6.00	0.00	55.03	133.95
35	6.00	7.92	52.51	127.30
36	6.00	11.22	51.91	125.91
37	6.00	9.24	52.80	127.50
38	6.00	9.24	50.53	122.73
39	6.00	5.94	50.50	122.65
40	6.00	0.00	50.59	122.78
41	6.00	1.32	53.28	129.83
101	6.00	0.00	61.02	146.36
102	7.00	0.00	60.55	146.36
103	6.00	5.28	59.02	141.87
104	6.00	28.38	58.66	142.02

ST. GEORGE ISLAND WATER DISTRIBUTION SYSTEM
EXISTING FLOWS + MARK'S DEVELOPMENT + OTHER GENERAL DEVELOPMENT
YEAR 3 THROUGH THE END OF YEAR 6
PEAK HOURLY FLOW WITH EXISTING ELEVATED TANK OFF LINE AND BOTH PUMPS ON
GROUND STORAGE TANK AT NODE 155

DEMAND 0.66 gpm/ERU

PIPE TABLE / NODE TABLE

Seq#	Pipe (Input)	UpNode (Input)	DnNode (Input)	Length ft (Input)	Diameter in (Input)	Roughness (Input)	Flow US gpm (Output)	Velocity ft/sec (Output)	Headloss ft (Output)	Status Open (Input)	Node (Input)	Elevation ft (Input)	Demand US gpm (Input)	Pressure psi (Output)	HGL ft (Output)
47	106	105	106	900.00	6.00	120.00	208.01	2.36	4.29		105	6.00	[illegible]	56.64	137.30
48	107	106	107	630.00	8.00	120.00	207.35	1.32	0.74		106	6.00	0.66	54.38	133.01
49	108	107	108	570.00	2.00	120.00	13.66	1.42	3.60		107	6.00	3.30	54.66	132.27
50	109	105	109	1174.00	8.00	120.00	391.93	2.50	4.46		108	6.00	13.66	53.02	128.47
51	110	109	110	1174.00	8.00	120.00	376.09	2.40	4.[illegible]		109	6.00	15.84	54.91	132.84
52	111	110	111	900.00	6.00	120.00	-133.43	-1.51	1.59		110	6.00	14.52	53.12	128.71
53	112	111	112	360.00	6.00	120.00	-179.63	-1.15	0.32		111	6.00	22.44	53.94	130.60
54	113	111	113	860.00	8.00	120.00	23.76	0.15	0.02		112	6.00	10.56	54.08	130.92
55	114	110	114	983.00	8.00	120.00	495.00	3.16	5.75		113	6.00	23.76	53.93	130.58
56	115	114	115	1154.00	8.00	120.00	481.80	3.06	6.42		114	6.00	13.20	50.63	122.96
57	116	115	116	790.00	6.00	120.00	17.82	0.20	0.04		115	6.00	21.78	47.65	116.53
58	117	116	117	350.00	6.00	120.00	17.82	0.20	0.02		116	6.00	0.00	47.63	116.49
59	118	115	118	1177.00	8.00	120.00	442.20	2.82	5.59		117	6.00	17.82	47.82	116.47
60	119	118	119	1222.00	8.00	120.00	425.04	2.71	5.39		118	6.00	17.16	45.43	110.94
61	120	119	120	800.00	6.00	120.00	21.78	0.25	0.06		119	6.00	16.50	43.09	105.55
62	121	120	121	840.00	6.00	120.00	15.16	0.17	0.[illegible]		120	6.00	6.60	43.07	105.49
63	122	121	122	600.00	6.00	120.00	9.90	0.11	0.01		121	6.00	5.28	43.06	105.46
64	123	119	123	1250.00	8.00	120.00	386.76	2.47	4.63		122	6.00	9.90	43.05	105.45
65	124	123	124	1170.00	8.00	120.00	342.54	2.19	3.46		123	6.00	22.44	41.09	100.92
66	125	124	125	1150.00	8.00	120.00	330.66	2.11	3.19		124	6.00	11.88	39.59	97.45
67	126	125	126	920.00	8.00	120.00	316.80	2.02	2.36		125	6.00	13.[illegible]	38.21	94.26
68	127	126	127	978.00	8.00	120.00	306.88	1.97	2.39		126	6.00	[illegible]	37.19	91.31
69	128	127	128	1323.00	8.00	120.00	298.32	1.90	2.93		127	6.00	10.56	36.16	89.52
70	129	128	129	1150.00	8.00	120.00	281.82	1.80	2.27		128	6.00	16.50	34.84	86.49
71	130	129	130	805.00	8.00	120.00	271.92	1.74	1.55		129	6.00	9.90	33.82	84.11
72	131	130	131	3450.00	8.00	120.00	270.60	1.73	6.60		130	6.00	1.32	33.14	82.56
73	132	131	132	1035.00	8.00	120.00	254.10	1.62	1.76		131	6.00	16.50	30.29	75.96
74	133	132	133	1150.00	8.00	120.00	247.50	1.58	1.66		132	6.00	6.60	29.52	74.20
75	134	133	134	690.00	8.00	120.00	237.60	1.52	1.04		133	6.00	9.90	28.72	72.34
76	135	134	135	690.00	8.00	120.00	236.28	1.51	1.03		134	6.00	1.32	28.27	71.30
77	136	135	136	[illegible]	8.00	120.00	[illegible]	1.44	[illegible]		[illegible]	6.00	11.22	27.62	70.[illegible]7
78	137	136	137	1265.00	8.00	120.00	215.82	1.38	[illegible]		136	6.00	9.24	27.04	68.47
79	138	137	138	685.00	8.00	120.00	201.96	1.29	[illegible]		137	6.00	13.86	26.[illegible]	66.68
80	139	138	139	920.00	8.00	120.00	188.76	1.20	[illegible]		138	6.00	13.20	25.94	65.92
81	140	139	140	1130.00	8.00	120.00	171.60	1.10	0.95		139	6.00	17.16	25.55	65.02
82	141	140	141	690.00	8.00	120.00	161.70	[illegible]	[illegible]		140	6.00	9.90	25.14	64.[illegible]7
83	142	141	142	690.00	8.00	120.00	147.84	0.94	0.43		141	6.00	13.86	24.[illegible]	63.56
84	143	142	143	402.00	[illegible]	120.00	146.52	0.94	0.25		142	6.00	1.32	24.73	63.[illegible]
85	144	143	144	460.00	[illegible]	120.00	141.90	0.91	0.27		143	6.00	4.62	24.63	62.69
86	145	144	145	460.00	[illegible]	120.00	[illegible]	[illegible]	0.20		144	6.00	20.46	24.5[illegible]	62.62
87	146	145	146	633.00	6.00	120.00	116.82	[illegible]	0.26		145	6.00	4.62	24.42	62.42
88	147	146	147	[illegible]	8.00	120.00	[illegible]	[illegible]	[illegible]		146	6.00	[illegible]	24.31	62.16
89	148	147	148	[illegible]	[illegible]	120.00	95.66	0.64	.14		[illegible]	[illegible]	13.94	[illegible]	62.0[illegible]
[illegible]	149	148	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
91	150	149	150	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	61.74
[illegible]	151	150	151	[illegible]	6.00	120.00	77.65	[illegible]	[illegible]		150	[illegible]	[illegible]	[illegible]	[illegible]

ST. GEORGE ISLAND WATER DISTRIBUTION SYSTEM
EXISTING FLOWS - MARK'S DEVELOPMENT + OTHER GENERAL DEVELOPMENT
YEAR 2 THROUGH THE END OF YEAR 6
YEAR HOURLY FLOW WITH EXISTING ELEVATED TANK OFF LINE AND BOTH PUMPS ON
GROUND STORAGE TANK AT NODE 155

DEMAND 0.66 gpm/ERU

PIPE TABLE

Link	Pipe	UpNode	DnNode	Length ft	Diameter in	Roughness	Flow US gpm	Velocity ft/sec	HeadLoss ft	Status
				Input			Output			Input
33	152	151	152	268.00	8.00	120.00	72.60	0.46	0.03	Open
34	153	152	153	690.00	8.00	120.00	36.66	0.24	0.03	
35	154	153	154	403.00	8.00	120.00	33.00	0.21	0.02	
36	155	154	155	403.00	8.00	120.00	4.62	0.03	0.00	
37	156	155	156	690.00	8.00	120.00	0.00	0.00	0.00	
38	157	156	157	460.00	8.00	120.00	207.24	1.32	0.54	
39	158	123	158	320.00	6.00	120.00	21.78	0.25	0.02	
40	159	158	159	1220.00	6.00	120.00	7.92	0.09	0.01	
101	401	15	19	1210.00	8.00	120.00	179.05	1.14	1.96	
102	402	18	21	990.00	4.00	120.00	16.50	0.42	0.32	
103	403	14	37	400.00	6.00	120.00	25.42	0.29	0.04	
104	404	20	40	400.00	6.00	120.00	8.10	0.09	0.00	
105	405	41	104	960.00	6.00	120.00	81.59	0.93	0.61	
106	406	107	112	1358.00	8.00	120.00	190.19	1.21	1.03	
107	500	500	0	1.00	12.00	120.00	272.01	0.77	0.00	
108	501	501	0	1.00	12.00	120.00	782.01	2.22	0.00	
109	603	155	603	10.00	8.00	120.00	0.00	0.00	0.00	C
110	600	603	600	90.00	8.00	120.00	0.00	0.00	0.00	C
111	601	600	601	48.00	8.00	120.00	211.20	1.35	1.03	
112	407	601	156	600.00	8.00	120.00	211.20	1.35	0.73	

NODE TABLE

Node	Elevation ft	Demand US gpm	Pressure psi	HGL ft
	Input	Output		
151	6.00	5.28	23.96	61.35
152	6.00	35.64	23.94	61.30
153	6.00	3.96	23.93	61.27
154	6.00	26.38	23.92	61.25
155	6.00	4.62	23.92	61.25
156	6.00	3.96	79.31	189.22
157	6.00	207.24	79.08	188.68
158	6.00	13.86	41.08	100.89
159	6.00	7.92	41.07	100.88
500	6.00	0.00	61.04	146.99
501	6.00	0.00	61.04	147.00
600	6.00		8.66	26.00
601	6.00		79.63	189.94
603	6.00		0.00	0.00
		1265.22	23.92	

EXHIBIT 13A

ST. GEORGE ISLAND WATER DISTRIBUTION SYSTEM
EXISTING FLOWS + MARK'S DEVELOPMENT + OTHER GENERAL DEVELOPMENT @ 5% OF EXISTING CUSTOMERS   DEMAND   0.21 gpm/ERU
YEAR 7 THROUGH THE END OF YEAR 10
AVERAGE DAILY FLOW WITH EXISTING ELEVATED TANK ON LINE AND BOTH PUMPS OFF
NEW ELEVATED TANK AT NODE 137 OFF LINE ---- GROUND STORAGE TANK AT NODE 155 OMITTED

FIPE TABLE

	Input						Output			Input
Seq#	Pipe	UpNode	DnNode	Length ft	Diameter in	Roughness	Flow US gpm	Velocity ft/sec	HeadLoss ft	Status Open
1	1	101	1	140.00	12.00	120.00	457.17	1.30	0.10	
2	2	1	2	500.00	8.00	120.00	192.71	1.23	0.51	
3	3	2	3	330.00	4.00	120.00	7.56	0.19	0.02	
4	4	3	4	185.00	4.00	120.00	5.46	0.14	0.01	
5	5	2	5	180.00	8.00	120.00	121.58	1.16	0.16	
6	6	5	6	200.00	8.00	120.00	128.31	0.82	0.10	
7	7	6	7	500.00	8.00	120.00	124.53	0.79	0.22	
8	8	7	8	450.00	8.00	120.00	123.48	0.79	0.20	
9	9	8	9	440.00	8.00	120.00	119.28	0.76	0.18	
10	10	9	10	535.00	8.00	120.00	117.39	0.75	0.24	
11	11	10	11	1180.00	8.00	120.00	113.62	0.73	0.45	
12	12	11	12	1070.00	8.00	120.00	102.71	0.66	0.34	
13	13	12	13	1165.00	8.00	120.00	96.29	0.61	0.33	
14	14	13	14	1200.00	8.00	120.00	93.05	0.59	0.32	
15	15	14	15	1220.00	8.00	120.00	80.09	0.51	0.24	
16	16	15	16	330.00	6.00	120.00	13.66	0.16	0.01	
17	17	16	17	430.00	4.00	120.00	11.56	0.30	0.07	
18	18	17	18	770.00	4.00	120.00	10.51	0.27	0.08	
19	19	18	19	330.00	6.00	120.00	1.30	0.01	0.00	
20	20	19	20	1210.00	8.00	120.00	63.96	0.41	0.12	
21	21	20	21	550.00	2.00	120.00	-4.79	-0.49	0.11	
22	22	20	22	2000.00	6.00	120.00	59.65	0.68	0.95	
23	23	22	23	1400.00	6.00	120.00	54.60	0.62	0.56	
24	24	23	24	850.00	6.00	120.00	[illegible]	0.60	0.32	
25	25	24	25	1150.00	6.00	120.00	48.93	0.56	0.38	
26	26	25	26	1150.00	6.00	120.00	45.57	0.52	0.33	
27	27	26	27	2000.00	6.00	120.00	42.42	0.48	0.50	
28	28	27	28	1300.00	6.00	120.00	40.53	0.46	0.30	
29	29	28	29	500.00	6.00	120.00	36.33	0.41	0.09	
30	30	29	30	2600.00	6.00	120.00	11.97	0.14	0.06	
31	31	5	31	500.00	6.00	120.00	5.46	0.06	0.00	
32	32	31	32	450.00	6.00	120.00	5.46	0.06	0.00	
33	33	32	33	440.00	6.00	120.00	3.15	0.04	0.00	
34	34	11	34	400.00	6.00	120.00	6.91	0.08	0.00	
35	35	34	35	1070.00	2.00	120.00	4.81	0.49	1.02	
36	36	35	36	1165.00	2.00	120.00	[illegible]	0.23	0.26	
37	37	36	37	1200.00	2.00	120.00	[illegible]	-0.24	0.29	
38	38	37	38	1220.00	2.00	120.00	[illegible]	[illegible]	0.78	
39	39	38	39	1220.00	2.00	120.00	-0.06	-0.01	0.00	
40	40	39	40	[illegible]	2.00	[illegible]	-1.27	[illegible]	0.22	
41	41	5	41	150.00	6.00	120.00	47.61	0.54	0.05	
42	101	0	101	[illegible]	[illegible]	[illegible]	-2.10	-0.01	0.00	
43	102	101	102	500.00	8.00	120.00	-461.37	[illegible]	1.54	
44	103	1	103	600.00	8.00	[illegible]	264.46	1.69	1.16	
45	104	103	104	[illegible]	6.00	[illegible]	[illegible]	-0.44	0.05	
46	105	[illegible]	[illegible]	[illegible]	8.00	120.00	[illegible]	1.52	1.16	

NODE TABLE

Input		Output		
Node	Elevation ft	Demand US gpm	Pressure psi	HGL ft
0	6.00	2.10	45.22	110.46
1	6.00	0.00	45.18	110.36
2	6.00	3.57	44.96	109.85
3	6.00	2.10	44.95	109.83
4	6.00	5.46	44.94	109.82
5	6.00	0.00	44.89	109.69
6	6.00	3.78	44.84	109.59
7	6.00	1.05	44.75	109.36
8	6.00	4.20	44.66	109.16
9	6.00	1.69	44.58	108.98
10	6.00	3.57	44.47	108.73
11	6.00	4.20	44.28	108.28
12	6.00	6.51	44.13	107.94
13	6.00	3.15	43.99	107.61
14	6.00	3.78	43.85	107.29
15	6.00	1.89	43.74	107.04
16	6.00	2.10	43.74	107.03
17	6.00	1.05	43.71	106.96
18	6.00	3.15	43.67	106.88
19	6.00	1.89	43.67	106.68
20	6.00	4.83	43.60	106.72
21	6.00	1.26	43.65	106.83
22	6.00	5.25	43.19	105.77
23	6.00	1.47	42.95	105.21
24	6.00	4.20	42.81	104.89
25	6.00	3.36	42.64	104.51
26	6.00	3.15	42.50	104.18
27	6.00	1.89	42.28	103.68
28	6.00	4.20	42.15	103.38
29	6.00	24.36	42.11	103.28
30	6.00	11.97	42.09	103.22
31	6.00	0.00	44.88	109.68
32	6.00	2.31	44.68	109.68
33	6.00	3.15	44.68	109.68
34	6.00	2.10	44.28	108.28
35	6.00	2.52	43.84	107.27
36	6.00	4.62	43.72	106.99
37	6.00	2.94	43.85	107.28
38	6.00	3.99	43.51	106.50
39	6.00	1.89	43.51	106.50
40	6.00	2.10	43.60	106.72
41	6.00	0.42	44.87	109.64
101	6.00	2.10	45.22	110.46
102	[illegible]	0.00	45.45	112.00
103	6.00	2.73	44.70	109.26
104	6.00	[illegible]	44.74	109.34

ST. GEORGE ISLAND WATER DISTRIBUTION SYSTEM
EXISTING FLOWS + MAHR'S DEVELOPMENT + OTHER GENERAL DEVELOPMENT @ 5% OF EXISTING CUSTOMERS DEMAND 0.21 gpm/ERU
YEAR 7 THROUGH THE END OF YEAR 10
AVERAGE DAILY FLOW WITH EXISTING ELEVATED TANK ON LINE AND BOTH PUMPS OFF
NEW ELEVATED TANK AT NODE 137 OFF LINE ---- GROUND STORAGE TANK AT NODE 155 OMITTED

PIPE TABLE

Seq#	Pipe	UpNode	DnNode	Length ft	Diameter in	Roughness	Flow US gpm	Velocity ft/sec	HeadLoss ft	Status Open
47	106	105	106	900.00	6.00	120.00	99.12	1.12	1.09	
48	107	106	107	630.00	8.00	120.00	98.91	0.63	0.19	
49	108	107	108	570.00	2.00	120.00	4.41	0.45	0.46	
50	109	105	109	1174.00	8.00	120.00	192.57	1.23	1.20	
51	110	109	110	1174.00	8.00	120.00	186.48	1.19	1.13	
52	111	110	111	900.00	6.00	120.00	-72.24	-0.82	0.61	
53	112	111	112	360.00	8.00	120.00	-89.04	-0.57	0.09	
54	113	111	113	860.00	8.00	120.00	8.61	0.05	0.00	
55	114	110	114	983.00	8.00	120.00	254.10	1.62	1.67	
56	115	114	115	1154.00	8.00	120.00	249.90	1.60	1.90	
57	116	115	116	790.00	6.00	120.00	6.72	0.08	0.01	
58	117	116	117	350.00	6.00	120.00	6.72	0.08	0.00	
59	118	115	118	1177.00	8.00	120.00	235.20	1.50	1.74	
60	119	118	119	1222.00	8.00	120.00	229.74	1.47	1.73	
61	120	119	120	800.00	6.00	120.00	7.98	0.09	0.01	
62	121	120	121	840.00	6.00	120.00	5.88	0.07	0.01	
63	122	121	122	600.00	6.00	120.00	3.15	0.04	0.00	
64	123	119	123	1250.00	8.00	120.00	215.46	1.38	1.57	
65	124	123	124	1170.00	8.00	120.00	198.24	1.27	1.26	
66	125	124	125	1150.00	8.00	120.00	194.46	1.24	1.19	
67	126	125	126	920.00	8.00	120.00	189.00	1.21	0.91	
68	127	126	127	978.00	8.00	120.00	186.48	1.19	0.94	
69	128	127	128	1323.00	8.00	120.00	182.07	1.16	1.21	
70	129	128	129	1150.00	8.00	120.00	176.82	1.13	1.00	
71	130	129	130	805.00	8.00	120.00	172.62	1.10	0.67	
72	131	130	131	3450.00	8.00	120.00	172.20	1.10	2.86	
73	132	131	132	1035.00	8.00	120.00	165.90	1.06	0.80	
74	133	132	133	1150.00	8.00	120.00	163.80	1.05	0.87	
75	134	133	134	690.00	8.00	120.00	159.60	1.02	0.50	
76	135	134	135	690.00	8.00	120.00	159.18	1.02	0.49	
77	136	135	136	1322.00	8.00	120.00	154.56	0.99	0.90	
78	137	136	137	1265.00	8.00	120.00	151.62	0.97	0.83	
79	138	137	138	663.00	8.00	120.00	146.16	0.93	0.53	
80	139	138	139	920.00	8.00	120.00	141.96	0.91	0.53	
81	140	139	140	1150.00	8.00	120.00	135.45	0.86	0.61	
82	141	140	141	690.00	8.00	120.00	132.30	0.84	0.35	
83	142	141	142	690.00	8.00	120.00	126.84	0.81	0.32	
84	143	142	143	402.00	8.00	120.00	126.42	0.81	0.19	
85	144	143	144	460.00	8.00	120.00	123.90	0.79	0.21	
86	145	144	145	460.00	8.00	120.00	117.39	0.75	0.19	
87	146	145	146	633.00	8.00	120.00	114.87	0.73	0.25	
88	147	146	147	288.00	8.00	120.00	114.45	0.73	0.11	
89	148	147	148	460.00	8.00	120.00	108.36	0.69	0.16	
90	149	148	149	633.00	8.00	120.00	105.84	0.68	0.21	
91	150	149	150	1150.00	8.00	120.00	100.80	0.64	0.35	
92	151	150	151	748.00	8.00	120.00	98.28	0.63	0.22	

NODE TABLE

Node	Elevation ft	Demand US gpm	Pressure psi	HGL ft
105	6.00	8.40	44.19	108.08
106	6.00	0.21	43.72	106.99
107	6.00	2.10	43.64	106.80
108	6.00	4.41	43.44	106.35
109	6.00	6.09	43.67	106.88
110	6.00	4.62	43.18	105.76
111	6.00	8.19	43.45	106.36
112	6.00	3.36	43.48	106.45
113	6.00	8.61	43.45	106.36
114	6.00	4.20	42.46	104.08
115	6.00	7.98	41.64	102.18
116	6.00	0.00	41.63	102.17
117	6.00	6.72	41.63	102.17
118	6.00	5.46	40.88	100.44
119	6.00	6.30	40.14	98.72
120	6.00	2.10	40.13	98.71
121	6.00	2.73	40.13	98.70
122	6.00	3.15	40.13	98.70
123	6.00	8.19	39.46	97.15
124	6.00	3.78	38.91	95.89
125	6.00	5.46	38.40	94.70
126	6.00	2.52	38.00	93.79
127	6.00	4.41	37.60	92.85
128	6.00	5.25	37.07	91.64
129	6.00	4.20	36.64	90.64
130	6.00	0.42	36.35	89.97
131	6.00	6.30	35.11	87.11
132	6.00	2.10	34.77	86.31
133	6.00	4.20	34.39	85.44
134	6.00	0.42	34.18	84.94
135	6.00	4.62	33.96	84.45
136	6.00	2.94	33.57	83.55
137	6.00	5.46	33.22	82.73
138	6.00	4.20	32.99	82.20
139	6.00	6.51	32.76	81.67
140	6.00	5.15	32.49	81.06
141	6.00	5.46	32.34	80.70
142	6.00	0.42	32.20	80.38
143	6.00	2.52	32.12	80.19
144	6.00	6.51	32.03	79.99
145	6.00	2.52	31.95	79.80
146	6.00	0.42	31.84	79.55
147	6.00	6.09	31.79	79.44
148	6.00	2.52	31.72	79.28
149	6.00	5.04	31.63	79.06
150	6.00	2.52	31.48	78.71

EXHIBIT 13B

ST. GEORGE ISLAND WATER DISTRIBUTION SYSTEM

EXISTING FLOWS + MAHR'S DEVELOPMENT + OTHER GENERAL DEVELOPMENT @ 25 OF EXISTING CUSTOMERS — DEMAND 0.65 gpm/ERU

YEAR 7 THROUGH THE END OF YEAR 10

PEAK HOURLY FLOW WITH EXISTING ELEVATED TANK OFF LINE AND BOTH PUMPS ON

NEW ELEVATED TANK AT NODE 137 ON LINE --- GROUND STORAGE TANK AT NODE 155 OMITTED

PIPE TABLE

Seq#	Pipe	UpNode	DnNode	Length ft	Diameter in	Roughness	Flow Input gpm	Velocity Output ft/sec	HeadLoss Output ft	Status Output
1	1	101	1	140.00	12.00	120.00	1017.18	2.89	0.43	
2	2	1	2	500.00	8.00	120.00	487.76	3.11	2.85	
3	3	2	3	330.00	4.00	120.00	23.40	0.89	0.29	
4	4	3	4	185.00	4.00	120.00	16.90	0.43	0.06	
5	5	2	5	180.00	8.00	120.00	463.51	2.83	0.90	
6	6	5	6	200.00	8.00	120.00	437.15	2.54	0.78	
7	7	6	7	500.00	8.00	120.00	385.45	2.46	1.84	
8	8	7	8	450.00	8.00	120.00	382.[illegible]	2.44	1.65	
9	9	8	9	440.00	8.00	120.00	363.[illegible]	2.[illegible]	1.50	
10	10	9	10	595.00	8.00	120.00	262.[illegible]	1.[illegible]	1.[illegible]	
11	11	10	11	1180.00	8.00	120.00	85[illegible]	2.[illegible]	2.[illegible]	
12	12	11	12	1070.00	8.00	120.00	317.[illegible]	2.[illegible]	2.[illegible]	
13	13	12	13	1185.00	8.00	120.00	2[illegible].75	2.[illegible]	2.[illegible]	
14	14	13	14	1200.00	8.00	120.00	2[illegible].00	1.84	2.[illegible]	
15	15	14	15	1220.00	8.00	120.00	247.84	1.58	1.[illegible]	
16	16	15	16	330.00	6.00	120.00	4[illegible].[illegible]	0.96	0.08	
17	17	16	17	430.00	4.00	120.00	[illegible].79	2.[illegible]	2.51	
18	18	17	18	770.00	4.00	120.00	[illegible].54	0.75	0.75	
19	19	18	19	330.00	6.00	120.00	7.76	0.09	0.00	
20	20	19	20	1210.00	8.00	120.00	2[illegible].61	2.[illegible]	2.[illegible]	
21	21	20	21	550.00	2.00	120.00	[illegible].[illegible]	-0.[illegible]	1.17	
22	22	20	22	2000.00	6.00	120.00	185.[illegible]	2.[illegible]	7.70	
23	23	22	23	1400.00	6.00	120.00	2[illegible].00	1.[illegible]	4.[illegible]	
24	24	23	24	850.00	6.00	120.00	164.45	2.87	2.62	
25	25	24	25	1150.00	6.00	120.00	151.45	1.72	3.05	
26	26	25	26	1150.00	6.00	120.00	2[illegible].05	2.60	2.67	
27	27	26	27	2[illegible].00	6.00	120.00	131.80	1.49	4.07	
28	28	27	28	1300.00	6.00	120.00	2[illegible].45	2.[illegible]	2.[illegible]	
29	29	28	29	500.00	6.00	120.00	112.45	1.28	0.76	
30	30	29	30	2[illegible].00	6.00	120.00	37.05	0.42	0.51	
31	31	8	31	500.00	6.00	120.00	16.[illegible]	0.[illegible]	0.[illegible]	
32	32	31	32	450.00	6.00	120.00	10.[illegible]	0.[illegible]	0.[illegible]	
33	33	32	33	440.00	6.00	120.00	[illegible].[illegible]	0.[illegible]	0.[illegible]	
34	34	11	34	400.00	6.00	120.00	[illegible].49	0.[illegible]	0.[illegible]	
35	35	34	35	2[illegible].00	6.00	120.00	14.[illegible]	1.[illegible]	0.[illegible]	
36	36	35	36	1[illegible].00	2.00	120.00	7.[illegible]	0.[illegible]	0.[illegible]	
37	37	36	37	1[illegible].00	2.00	120.00	[illegible].[illegible]	-0.[illegible]	0.[illegible]	
38	38	37	38	1[illegible].00	2.00	120.00	1[illegible].16	1.[illegible]	0.[illegible]	
39	39	38	39	1[illegible].00	2.00	120.00	-0.[illegible]	-0.[illegible]	0.00	
40	40	39	40	1[illegible].00	2.00	120.00	-0.[illegible]	-0.[illegible]	0.[illegible]	
41	41	9	41	1[illegible].00	8.00	120.00	3[illegible].[illegible]	0.[illegible]	0.[illegible]	
42	102	1	102	[illegible].00	8.00	120.00	[illegible].[illegible]	2.[illegible]	0.[illegible]	
43	103	1	103	[illegible].00	8.00	120.00	[illegible].[illegible]	2.[illegible]	2.[illegible]	
44	104	103	104	400.00	6.00	120.00	[illegible].[illegible]	-0.[illegible]	0.[illegible]	
45	105	103	105	310.00	6.00	120.00	331.06	2.63	2.40	

NODE TABLE

Seq#	Node	Elevation ft	Demand gpm	Pressure psi	HGL ft
1	0	6.00	6.50	62.98	151.48
2	1	6.00	0.00	62.78	151.02
3	2	6.00	11.05	61.55	148.17
4	3	6.00	6.50	61.46	147.96
5	4	6.00	16.90	61.43	147.91
6	5	6.00	0.00	61.16	147.28
7	6	6.00	11.70	60.82	146.50
8	7	6.00	3.25	60.03	144.66
9	8	6.00	13.00	59.32	143.03
10	9	6.00	5.85	58.67	141.53
11	10	6.00	11.05	57.82	139.57
12	11	6.00	16.00	56.23	135.85
13	12	6.00	20.15	55.03	133.13
14	13	6.00	9.75	53.86	130.42
15	14	6.00	11.70	52.75	127.85
16	15	6.00	5.85	51.83	125.86
17	16	6.00	6.50	51.66	125.79
18	17	6.00	3.25	51.64	125.28
19	18	6.00	9.75	51.31	124.53
20	19	6.00	5.85	51.31	124.52
21	20	6.00	14.95	50.72	123.16
22	21	6.00	3.90	51.22	124.32
23	22	6.00	16.25	47.38	115.46
24	23	6.00	4.55	45.42	110.91
25	24	6.00	13.00	44.28	108.29
26	25	6.00	10.40	42.96	105.24
27	26	6.00	3.75	41.80	102.56
28	27	6.00	5.85	40.04	98.49
29	28	6.00	13.00	38.99	96.06
30	29	6.00	25.40	38.66	95.30
31	30	6.00	27.05	38.44	94.79
32	31	6.00	6.50	61.15	147.26
33	32	6.00	7.15	61.14	147.24
34	33	6.00	3.25	61.14	147.23
35	34	6.00	6.50	58.[illegible]	139.86
36	35	6.00	7.80	52.69	127.71
37	36	6.00	14.30	51.79	125.42
38	37	6.00	3.25	52.73	127.80
39	38	6.00	12.35	49.36	121.41
40	39	6.00	5.85	49.36	121.42
41	40	6.00	6.50	50.71	123.14
42	41	6.00	[illegible].00	61.[illegible]	147.[illegible]
43	101	6.00	0.[illegible]	62.37	151.45
44	102	7.00	[illegible].00	62.53	151.45
45	103	6.00	9.45	61.08	147.04
46	104	6.00	27.55	61.[illegible]	147.[illegible]