ORIGINAL

STATE OF FLORIDA
OFFICE OF THE PUBLIC COUNSEL

c/o The Florida Legislature
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JACK SHREVE
PUBLIC COUNSEL

May 14, 2001

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

Re: Docket No. 991437-WU

Dear Ms. Bayo:

Enclosed for filing in the above-referenced docket are the original and 15 copies of the Direct Testimonies of Ted L. Biddy and Hugh Larkin, Jr. being filed on behalf of the Citizens of the State of Florida.

Please indicate the time and date of receipt on the enclosed duplicate of this letter and return it to our office.

APP ____
CAF ____
CMP ____
COM Stg
CTR ____
ECR ____
LEG 1
OPC ____
PAI ____
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SEC 1
SER ____
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CJB:bsr

Sincerely,

Charles J. Beck,
Deputy Public Counsel

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Application for increase in water rates in Orange County by Wedgefield Utilities, Inc.	)))	Docket No. 991437-WU Filed: May 14, 2001

DIRECT TESTIMONY

OF

TED L. BIDDY

On Behalf of the Citizens of the State of Florida

Jack Shreve
Public Counsel

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c/o The Florida Legislature
111 West Madison Street
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Attorney for the Citizens
of the State of Florida

DIRECT TESTIMONY

OF

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

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

ON BEHALF OF THE

CITIZENS OF THE STATE OF FLORIDA

DOCKET NO. 991437-WU

Q. WHAT IS YOUR NAME AND BUSINESS ADDRESS?

A. My name is Ted L. Biddy. My business address is 2308 Clara Kee Boulevard, Tallahassee, Florida 32303.

Q. BY WHOM ARE YOU EMPLOYED AND WHAT IS YOUR POSITION?

A. I am currently self-employed as a professional engineer and land surveyor.

Q. WHAT IS YOUR EDUCATIONAL BACKGROUND AND WORK EXPERIENCE?

A. I graduated from the Georgia Institute of Technology with a B.S. degree in Civil Engineering in 1963. I am a registered professional engineer and land surveyor in Florida, Georgia, Mississippi and several other states. I was the vice-president of Baskerville-Donovan, Inc. (BDI) and the regional manager of their Tallahassee Office from April 1991 until February 1998. I left the employment of BDI on September 30, 1998. Before joining BDI in 1991, I had operated my own civil engineering firm for 21 years. My areas of expertise include civil engineering, structural engineering, sanitary engineering, soils and foundation engineering and precise surveying. During my career, I have designed and

supervised the master planning, design and construction of thousands of residential, commercial and industrial properties. My work has included: water and wastewater facility design; roadway design; parking lot design; stormwater facilities design; structural design; land surveys; and environmental permitting. I have served as the principal and chief designer for numerous utility projects. Among my major water and wastewater facilities designs have been a 2,000 acre development in Lake County, FL; a 1,200 acre development in Ocean Springs, MS; a 4-mile water distribution system for Talquin Electric Cooperative, Inc. and a 320-lot subdivision in Leon County, FL. As senior project manager while employed by Baskerville-Donovan, my projects included the complete refurbishment of the water supply and distribution system for the City of Apalachicola; the complete refurbishment of wastewater collection system and treatment plant for the City of Apalachicola; water and wastewater system improvements at Carrabelle; water supply and several distribution systems for developments on St. George Island; water and wastewater systems at correctional facilities for the Florida Department of Corrections; and numerous smaller water and wastewater projects.

Q. WHAT ARE YOUR PROFESSIONAL AFFILIATIONS?

A. I am a member of the Florida Engineering Society, National Society of Professional Engineers, Florida Institute of Consulting Engineers, American Consulting Engineers Council, American College of Forensic Examiners and the Florida Society of Professional Land Surveyors.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE A STATE OR FEDERAL COURT AS AN ENGINEERING EXPERT WITNESS?

A. Yes, I have had numerous court appearances as an expert witness for cases

involving roadways, utilities, drainage, stormwater, water and wastewater facilities designs.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION (PSC OR COMMISSION) FOR USED AND USEFUL ANALYSIS AND OTHER ENGINEERING ISSUES?

A. Yes, I have testified before the PSC for Docket Nos. 940109-WU, 950495-WS, 950387-SU, 951056-WS, 950387-SU, 960329-WS, 960545-WS, 971065-SU and 991643-SU on various engineering issues and used and useful analyses.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to provide engineering testimony on the negative acquisition issue in this case and also on the used and useful issues.

Q. IN CONNECTION WITH THE NEGATIVE ACQUISITION ISSUE, HAVE YOU PERFORMED AN ORIGINAL COST STUDY FOR THE ENTIRE WEDGEFIELD UTILITIES, INC. (WEDGEFIELD) WATER PLANT IN SERVICE AS OF THE DATE OF ACQUISITION ON JANUARY 6, 1996?

A. Yes, I have.

Q. WHAT WAS YOUR APPROACH TO PREPARING AN ORIGINAL COST STUDY FOR THE TOTAL WATER PLANT IN SERVICE ON JANUARY 6, 1996?

A. My approach was strictly from an engineering standpoint as to what was the original cost of all facilities actually in the ground, existing and in service as of the date of acquisition by Wedgefield based upon the amounts shown in the permits for the facilities. I did not consider any accounting matters such as depreciation or contributions in aid of construction (CIACs) or other accounting

issues. The original cost study I performed simply determined the estimated original costs of all water plant facilities that existed at the time that Wedgefield acquired the water plant assets from Econ. I certainly understand that depreciation, CIAC and other accounting factors must be applied to obtain the total water plant rate base. My study simply determined the approximate original cost of total water plant in service, which is the top line to which the accountants should apply their factors. By providing an engineering cost analysis of plant actually in service, the Commission should be in a better position to determine whether to make an accounting adjustment for a negative acquisition adjustment.

Q. DID YOU PERFORM THE ORIGINAL COST STUDY BASED ON ORIGINAL RECORDS AND HOW DID YOU OBTAIN SUCH RECORDS?

A. Yes, I did. I first went to the Florida Department of Environmental Protection (FDEP) District Office in Orlando and copied all the original permits and permit applications from the FDEP files for all improvements that were made to the total water plant by Econ Utilities Corporation (Econ) from the beginning of the water system up to the date of sale of the system to Wedgefield. I also copied relevant correspondence back and forth between Econ and FDEP and its predecessor agencies at my first visit and a subsequent visit to their office.

The permits start with the initial approval by the Florida State Board of Health on January 16, 1963 of the first well and distribution system and include several later approvals from the Department of Health and the Department of Health and Rehabilitative Services. The permits then include several permit approvals of improvements from the Florida Department of Environmental Regulation up to

the final improvements by Econ of Well No. 3 and appurtenances. One permit was found as issued to Wedgefield Utilities, Inc. by the FDEP for Corrosion Control Facilities but these facilities were installed and cleared for use on January 12, 1998 which is after the date of acquisition. I include these permits as Exhibit TLB-1.1 through 1.10 hereto and I have made a summary tabulation of these permits and attach it hereto as Exhibit TLB-1. I include as Exhibit TLB-2 the correspondence back and forth between Econ and FDEP as related to permitting, approvals, Sanitary Surveys and the like.

Q. DO THESE PERMITS COVER ALL THE IMPROVEMENTS THAT WERE MADE BY ECON FROM THE BEGINNING OF THE WATER SYSTEM UP TO THE TIME OF ACQUISITION?

A. I asked that exact same question of Mr. Roberto C. Ansag, Supervisor , Drinking Water Compliance/Enforcement in FDEP's office in Orlando, when I was there. In my interview with him, Mr. Ansag stated that his files contained all permits for improvements made for this water system except for items not requiring permits such as transportation equipment, communications equipment, tools, office furniture and the like. Mr. Ansag has been in the FDEP Orlando office for many years and stated that he was very familiar with the water system. He further stated that any other facilities installed without permit would be illegal and that would also include distribution system piping and fire hydrants. I asked Mr. Ansag his opinion of whether the additional distributions system and fire hydrants shown by Econ in its annual reports to the Public Service Commission (PSC) had actually been installed. He said that I should ask Econ or Wedgefield to produce the permits and engineering plans for such work if they exist. The Office of Public Counsel did exactly that in Request for Production of

Documents Nos. 14 & 15 to Wedgefield.

Q. WHAT CAN YOU DETERMINE FROM THE PERMITS IN RELATION TO THE ORIGINAL COST STUDY YOU WERE PREPARING?

A. On each permit application, a utility is required to give their estimated cost of all of the proposed improvements covered by the permit. Econ furnished their estimated cost on each and every permit application and, absent complete plans and quantities that would be necessary to prepare a new estimate, Econ's original cost estimate is a reasonable way to determine of the cost of these facilities. Furthermore, Econ's original cost estimates were prepared by Consulting Professional Engineers who also signed and sealed each permit application. These Engineers would have had no axe to grind concerning the cost estimates and the full weight of their professional license is behind the estimates.

Q WHY DID YOU ATTACH THE CORRESPONDENCE BETWEEN FDEP AND ECON AND WHAT DOES THIS CORRESPONDENCE SHOW?

A. The correspondence starts with a Sanitary Survey inspection performed on 9/15/87 by FDER and ends with FDEP's Sanitary Survey inspection of 2/25/97 which is one year after Wedgefield acquired the water system from Econ. The Sanitary Surveys are informative in that they show what water plant facilities existed in 1987 and then in 1997 and what was the condition of these facilities. With this information, one can tell what treatment plant components and other water plant facilities were added or retired in this ten year period. The general correspondence between Econ or their Consulting Engineer and FDER or FDEP is informative in that the correspondence discusses when plant improvements were completed and accepted for service and when certain older equipment was

taken out of service. The correspondence also shows just how much of the permitted facilities were actually installed. For instance, the FDEP letters of 7/19/88 through 12/13/90 to Econ and Econ's Consulting Engineer's (Donald W. McIntosh Associates, Inc) reply letters of 12/19/89 through 12/17/90 discuss the fact that the 350,000 gallon ground storage tank has been put in service and the existing steel storage tanks were removed. From this correspondence, one would expect the cost of the 350,000 gallon tank to be added to plant in service in Econ's next annual report and original costs of the steel storage tanks subtracted from plant in service. An examination of Econ's plant in service in their next annual report (1990) indeed shows the cost of the 350,000 gallon tank but no deductions are shown for the removed steel tanks.

These same letters discuss the fact that the first of three proposed and permitted water softening units have been installed and put in service along with the first of three high service pumps and that the existing softening system has been removed. Again, one would expect to see the cost of the single water softening unit and high service pump added to plant in service in Econ's next annual report to the PSC and the original cost of the old softening system subtracted from the plant in service amount. However, what one sees when the 1990 annual report is examined is that Econ has taken full credit for the cost all three water softening units and all three high service pumps even though only one such softening unit and pump were installed and in fact, to this day, one of the three softening units has never been installed and two of the three high service pumps have likewise never been installed. Furthermore, no deduction for the retired old softening system is made to the costs of plant in service in this or subsequent reports.

The correspondence also openly discusses the fact that the installation of the remaining softening units and high service pumps will await the water system's need for such units.

Just as disturbing is the total absence in the FDEP files of any permitting or correspondence concerning the transmission and distribution system, hydrants and main service connections since the major expansion of 1978 even though Econ shows large increases in the cost of such items in their plant in service in their 1990 annual report and substantial increases of the costs of such items in most other years.

In summary, I prepared this Exhibit TLB-2 with this file correspondence to demonstrate the inconsistencies between these records and Econ's annual reports.

Q. WHAT OTHER ORIGINAL RECORDS DID YOU OBTAIN AND STUDY OR UTILIZE IN MAKING YOUR ORIGINAL COST STUDY?

A. The Office of Public Counsel (OPC) first sent Interrogatories Nos. 11 through 26 to Wedgefield asking questions concerning the amounts shown in MFR Schedule

A-5 as to what was the original cost of each item; when said item was installed; whether any previous plant in service item was replaced by each item; under what FDEP or other agency permit was each item installed; when and how much of the distribution system and other water plant items were replaced; etc. Wedgefield objected to the interrogatories and said that the answering of these questions would be laborious and would cost an additional $20,000 in rate case expense. The OPC then withdrew these interrogatories and requests for production of documents and asked me to try to obtain the information needed

by other document research.

Q. WHAT DID THIS DOCUMENT RESEARCH CONSIST OF?

A. I copied and studied all annual reports submitted by Econ to the PSC that were available from the Commission's files, both by coping hard copy reports and microfilm records. The available annual reports were for years ending 1981, 1985, 1986, 1988, 1989, 1990, 1991, 1992, 1993, 1994, and 1995. I also copied from the Commission's microfilm records the file data from two prior Econ rate cases, Dockets Nos. 840368-WS and 871208-WS. I also obtained copies of the 1996 & 1998 annual reports as filed by Wedgefield and of course I had a copy of the MFRs for the current 1999 Wedgefield rate case.

Q. ARE ALL OF THESE DOCUMENTS THAT WERE SUBMITTED TO THE PSC CERTIFIED AND SIGNED BY UTILITY OFFICIALS?

A. Yes, typically the annual reports and MFR submittals contain a certification and signature page for the Utility's chief executive officer and chief financial officer to sign whereby these officers certify to the PSC that the data submitted is true, correct and complete for the period represented.

Q. DID YOU OBTAIN SUFFICIENT DOCUMENTS IN ORDER TO DETERMINE THE AMOUNT OF WATER PLANT IN SERVICE BEING CLAIMED BY ECON FOR EACH YEAR UP TO THE TIME OF ACQUISITION BY WEDGEFIELD?

A. I did have sufficient documents from 1985 through the end of 1995. The years prior to 1985 are somewhat of a puzzle since Econ claimed a total of $1,470,749 of Water Plant in Service at the end of 1981 but reduced the total amount to $966,019 at the end of 1985 after the PSC audit in connection with the 1984 rate case. (Docket No. 840368-WS). Since Econ received its first certifications from

the PSC (Certificates Nos. 404-W and 341-S) on July 4, 1983 by order No. 12315, any data prior to that date would not be relevant in any case.

Q. WHAT TABULATIONS HAVE YOU PREPARED FROM YOUR STUDY OF THE AMOUNTS OF WATER PLANT IN SERVICE CLAIMED BY ECON FOR THE PERIOD 1985 THROUGH 1995 WITH THE CHANGES IN THE VARIOUS ITEMS FROM YEAR TO YEAR?

A. I have prepared tabulations consisting of three sheets which follow this time period, showing the exact amounts claimed by Econ for each Plant in Service item and the change in each item from year to year. These tabulations that are entitled "Comparison of Annual Reports for Water Plant in Service" are attached hereto as Exhibit TLB-3. The actual sheets from the annual reports: Sheet W-1-D from 12/31/81 report; Sheet W-1 from 12/31/85, 12/31/86, 12/31/88, 12/31/89, 12/31/90 and 12/31/91 reports; Sheets W-1 (a) and W-1(b) from 12/31/92 and 12/31/93 reports; Sheet W-1(b) from 12/31/94 report; and Sheets W-1(a) and W-1(b) from 12/31/95 report are included as Exhibit TLB-3.1 as backup to the tabulations I prepared. For ease in identification, I have also included the annual report cover sheets for each year for these sheets.

Q. WOULD YOU PLEASE EXPLAIN THE ANALYSES AND COMPARISONS YOU HAVE PERFORMED OF THESE TABULATIONS OF PLANT IN SERVICE AMOUNTS CLAIMED BY ECON ON THEIR ANNUAL REPORTS AND SUBSEQUENTLY BY WEDGEFIELD IN THIS CURRENT RATE CASE?

A. I first compared the Econ claimed improvements and additions to Water Plant in Service each year to the FDEP permit file data for permits to perform the various improvements over the years. I found serious inconsistencies between permitted

facilities and claimed improvements, as well as claimed improvements without any evidence of permit. These problems run throughout the eleven year period from 1985 through 1995.

The most serious example of these problems that I found occurred in the Econ 1990 annual report in which this utility claimed to have added $1,332,824 to Water Plant in Service. I will discuss each item separately.

First, the utility claimed to have added $352,616 worth of water transmission and distribution mains, supply mains, fire hydrants and services from mains to their water plant in service during the 12 month period ending December 31, 1990. No permit was issued for such work by the FDEP or predecessor agencies and in fact, the last permit issued for this type work was for a major distribution system expansion in 1978 (See Exhibit TLB-1). Econ had taken full credit for the cost of the facilities constructed under the 1978 permit by the 1985 annual report. Furthermore, the Econ inventory of water mains in service in their annual reports remained the same from 1981 through 1995 and Wedgefield's inventory of water mains in service in their first annual report of December 31, 1996 shows the identical inventory as Econ had shown for many years. Furthermore, the Acquisition Feasibility Analysis of Econ Utilities Corporation prepared by Orange County Public Utilities Division in June, 1995 at Table 2-1 shows an inventory of Econ's water main pipe which is identical to that reported by Econ and later by Wedgefield in 1996. The water transmission and distribution system inventory from Econ's 1981 annual report is attached as Exhibit TLB-4; the inventory from Econ's 1995 annual report is attached as Exhibit TLB-4.1; the inventory from Wedgefield's 1996 annual report is attached as Exhibit TLB-4.2; and Table 2-1 from the Orange County Acquisition

Feasibility Analysis is attached as Exhibit TLB-4.3.

Q. WHAT DID YOU CONCLUDE FROM YOUR ANALYSIS OF THESE TRANSMISSION AND DISTRIBUTION SYSTEM FACILITIES CLAIMED TO HAVE BEEN INSTALLED BY ECON IN 1990.

A. I find no evidence that these transmission and distribution system facilities were actually installed.

Q. PLEASE PROCEED WITH YOUR EXPLANATION OF YOUR ANALYSES AND COMPARISONS.

A. The next items that I examined from the Econ 1990 annual report were the claimed improvements during 1990 of $794,579 for Structures and Improvements and $45,394 for Water Treatment Equipment. At that time, Econ was completing improvements under the 9/28/87 permit from FDER for a 350,000 gallon ground storage tank with 2,000 GPM roof mounted aerator and the 7/15/88 permit from FDER for treatment plant expansion consisting of 3 new ion exchange softener units at 400 GPM each, 3 new high service pumps rated at 2,000, 1,350 & 1,350 GPM respectively, and appurtenances. The estimated costs shown on the permit application for the ground storage tank and roof mounted aerator was $160,000 and the estimate shown in the permit application for the 3 softener units, pumps, etc. was $762,850.

Econ claimed a total credit of $839,973 for supposed improvements completed under the two FDER permits. However, the correspondence between FDER and Econ contained in Exhibit TLB-2 makes it clear that Econ only installed one out of the three water softener units and one out of the three high service pumps. A second 400 GPM Softener was installed in 1994 and credit for the cost of this unit taken in the plant in service amount in the 12/31/94 annual report.

A recent onsite inspection that I made on 4/25/01 confirmed the fact that only two softener units had been installed and only one new 2,000 GPM high service pump was in place. The third softener unit along with the permitted and proposed two 1,350 GPM high service pumps were simply not there. Pictures that I made of the plant facilities at this inspection are included herein as Exhibit TLB-7.

Q. WHAT DO YOU CONCLUDE FROM YOUR ANALYSES AND COMPARISONS OF THESE ITEMS?

A. I conclude that the most that one can justify from the records that should have been added to the water plant in service for these improvements in the 1990 annual report is the cost of the ground storage tank and aerator plus approximately one-third of the cost of the permitted treatment plant expansion. This would amount to about $160,000 for the ground tank and aerator plus one-third of $762,850 for the treatment plant facilities. Based on the original estimates provided to FDEP, the total amount would therefore be $160,000 plus $254,282 or $414,282.

This amount is less than half of the claimed additions of $839,973 and is another example of where the claimed plant in service far exceeds the estimates for plant that was actually in place.

The total overstatement of water plant in service for the two analyses performed for the 1990 Econ Annual Report would therefore be ($839,973 - $414,282) plus $352,616, or $778,307.

Q. DO YOU HAVE ANY OTHER CONCERNS IN CONNECTION WITH ECON'S CLAIMS FOR WATER PLANT IN SERVICE AS SHOWN ON THEIR ANNUAL REPORTS AND IF SO, PLEASE EXPLAIN?

A. Yes, I have further concerns as to when and if Econ deducted the costs of replaced items of their treatment plant or distribution system. I see obvious replacements in the history of FDEP permitting but I can find only a few instances where Econ made deductions to plant in service for these replacements.

I also have concerns of whether the amounts of plant in service items reported by Econ for facilities not requiring permits were accurate. These concerns naturally follow my investigation in which I found so many items of plant in service greatly overstated.

Q. AFTER YOU HAD DISCOVERED THE AREAS OF INCONSISTENCIES WITH PERMITS, DID YOU ATTEMPT TO CONFRONT WEDGEFIELD WITH THIS INFORMATION AND OBTAIN EXPLANATIONS?

A. Yes, I prepared a series of interrogatories and document requests (Interrogatories No. 27 through 31 and Document Requests No. 14 & 15 and Interrogatories No. 32 through 36) dealing with these matters and the OPC office submitted these questions to Wedgefield. Rather than answer the interrogatories and produce the documents, Wedgefield again objected to these questions as not relevant and requiring a laborious effort by the Utility. Therefore, I have had no cooperation from this utility in furnishing information on the history of the water system although they should have had all the information readily at hand.

Q. HOW DID YOU GO ABOUT PREPARING AN ORIGINAL COST STUDY FOR THE ENTIRE ECON WATER PLANT AT THE TIME OF ACQUISITION BY WEDGEFIELD?

A. I believe that the best available evidence that exists for the original costs of water plant improvements for improvements that required Department of Health,

Department of Health & Rehabilitative Services or Department of Environmental Regulation permits is the estimated amounts shown on the permit applications themselves. These estimates were prepared, signed and sealed by Professional Consulting Engineers at the time of proposed construction. Therefore, I have utilized these estimates to prepare the original cost estimate of plant in service items for those items requiring permits.

Exhibit TLB-5 attached hereto is a tabulated original cost estimate for plant in service items existing at the date of acquisition by Wedgefield with appropriate adjustments made for permitted facilities not constructed and deductions made for original costs of replaced items. The tabulation is related to the date of permit and permitted items as shown in columns 1 & 2 of the tabulation. Column 3 simply shows the total claimed water plant in service by Wedgefield in Schedule A-4 of the MFRs of this case. This column is shown for comparison only.

Column 4 shows the original cost estimates of all permitted facilities as contained in the original permit applications (See Exhibit TLB-1). Column 5 modifies the amounts in column 4 to be the estimated cost amounts of permitted facilities actually installed. The modifications were made to only two items, namely a reduction in the estimated amount for the permit of 7/15/88 for 3 new ion exchange softener units and 3 high service pumps to reflect the fact that only one-third of these facilities were actually installed and a full deduction for the estimated cost of the 12" well which was started but never put in service. I then added the cost of the addition of the second softener unit in 1994 at the cost shown by Econ of $58,952. The modifications in column 5 reduced the total for amounts actually installed from the column 4 total of $1,836,650 to an amount

of $1,377,234.

Column 6 further modifies the amounts in Column 5 to deduct original costs of replaced items. The deductions in column 6 were for the replaced old ion exchange unit permitted on 11/19/84; the replaced well No.1, original storage tanks, clear well and chlorinator; and the replaced $20,000 worth of distribution system. (See Exhibit TLB-6 for details of the replaced distribution system). The total of deductions in column 6 amounts to $65,000.

Column 7 contains the estimated original net costs of facilities remaining after replacements and the total of column 7 is $1,312,234. This amount is the net amount of water plant in service items as of January 6, 1996 for all facilities requiring permits. I believe the $1,312,234 amount to be a good original cost estimate for these facilities.

I was then faced with the problem of adding the original costs of plant in service items for all items not requiring permits. The only source I had for the costs of these facilities was the listing of these costs in the 1995 Econ annual report. Since I did not have another choice, I reluctantly accepted the Econ report for the costs of these items. On Exhibit TLB-5.1, I listed all the other items of plant in service as shown by Econ in their 1995 annual report to the PSC and added these amounts to the previous estimate of $1,312,234 for permitted items remaining in service. The total original cost estimate for the total water plant in service as of the date of acquisition by Wedgefield was then determined to be $1,624,079.

The original cost study of $1,624,079 for all facilities remaining in service at the time of acquisition by Wedgefield is about $1,000,000 less than the $2,602,973 amount of plant in service shown by Wedgefield in Schedule A-4 of the MFRs

in this case. The $1,624,079 original cost estimate is a far more accurate estimate than the acquisition amount shown by Wedgefield and, if in error at all, would be on the high side.

Based on all of the above discussed studies, analyses and evaluations, I recommend to the Commission that an appropriate negative acquisition adjustment be made to the total water plant in service.

Q. WILL YOU NOW ADDRESS THE USED AND USEFUL ISSUES?

A. Yes I will.

Q. WHAT IS THE PROPER METHOD FOR DETERMINING THE USED AND USEFUL PERCENTAGE FOR SOURCE OF SUPPLY AND PUMPING?

A. The proper method is to evaluate the source of supply and pumping in accordance with the FDEP rule for design of these facilities. This rule is a FDEP design guideline under Chapter 62-500, FAC which sets forth Section 3.2.1.1 of *Ten States Standards* as the governing rule which is as follows:

> Section 3.2.1.1 of *Ten States Standards* states: "The total developed groundwater source capacity shall equal or exceed the design maximum day demand **and** equal or exceed the design average day demand with the largest producing well out of service." (Firm Reliable Capacity)

From this rule, it is clear that two comparisons are required, namely Total Maximum Day Demand to Total Capacity and the Average Day Demand to the Firm Reliable Capacity. It is obvious that the largest percentage of the two comparisons must be used to satisfy the Ten States Rule.

When computing the maximum capacity and firm reliable capacity, the well pumping rate should be taken for the full 24 hour period since we are dealing

with extreme cases and well pumps can operate at full flow for these periods. Normally, of course, the wells run off and on as the system pressure demands for lower flow days.

The demand in these calculations must be modified by three factors. First, by Florida law, a five year growth factor must be added to the demand. Secondly, the appropriate fire flow must also be added to the demand. Finally, the demand flow should be reduced by any excessive unaccounted for water.

Q. WHAT USED AND USEFUL PERCENTAGE DO YOU OBTAIN FOR THE SOURCE OF SUPPLY WELLS WHEN YOU USE THE TEN STATES STANDARDS RULE AND HOW DOES THIS COMPARE WITH THE UTILITY'S REQUEST?

A. All of my calculations of used and useful percentages are shown in detail in Exhibit TLB-8. I computed the various flows that are necessary to evaluate the two comparisons required by Section 3.2.1.1 of *Ten States Standards* as follows:

Total Well Capacity = 1,000 GPM = 1,440,000 GPD

Firm Reliable Capacity = 400 GPM = 576,000 GPD

Maximum Day Flow: Use average of 5 max. days of max. month to avoid unusual flows. MDF = 507,000 GPD

Average Day Flow (from MFRs) = 286,731 GPD

Req'd Fire Flow (from ISO Manual) = 750 GPM for 2 hours = 90,000GPD

Five Year Growth (regression analysis) = 165 ERCs

Test Year Average ERCs (from MFRs) = 860

MDF per ERC = 589.5 GPD

ADF per ERC = 333.4 GPD

5 year increase in MDF = 97,272 GPD

5 year increase in ADF = 55,011 GPD

Unaccounted for Water = 77,704 GPD

Excessive Unaccounted for Water = 49,031 GPM

Using these parameters, I computed the Maximum Day Flow to Total Capacity used and useful percentage as 44.78% and the Average Day Flow to Firm Reliable Capacity used and useful percentage as 66.44%. To meet the T*en States Criteria*, the larger percentage applies and the used and useful percentage for the wells should be 66.44%.

The utility's calculations ignores the FDEP governing standards and simply made up their own standard by comparing Maximum Day Demand to Firm Reliable Capacity for a requested U/U percentage of 125%. This calculation obviously does not meet the required standards and should be dismissed.

In the proposed agency action of 7/20/00, the PSC staff computed one used and useful percentage of 76% for the wells and treatment plant together. The calculation of U/U percentage is flawed because a higher than required fire flow was used and the only comparison attempted was maximum day flow to total capacity. When all the parameters are known, a separate U/U percentage should always be computed for the wells and treatment plant.

Q. WHAT IS THE PROPER METHOD FOR DETERMINING THE USED AND USEFUL PERCENTAGE FOR THE WATER TREATMENT PLANT?

A. The FDEP requires that Water Treatment Plants be designed for Maximum Day Flow plus whatever other demands are on the system. Therefore to calculate a proper Used and Useful percentage, the Maximum day demand modified by

other demands such as fire flow, growth, and excessive unaccounted for water should be compared to the design Maximum Capacity.

Q. WHAT USED AND USEFUL PERCENTAGE DID YOU OBTAIN FOR THE WATER TREATMENT PLANT WHEN YOU MADE THIS COMPARISON AND HOW DOES THIS U/U PERCENTAGE COMPARE WITH THE UTILITY'S REQUESTED PERCENTAGE?

A. The calculation is very straight forward. The maximum day demand modified to add fire flow, 5 years growth and to subtract excessive unaccounted for water is identical to the calculation considering maximum day flow for the wells as discussed above. The maximum day capacity of the plant is limited by the two 400 GPM water softening units which can only operate for 22 hours each day. These units need 2 hours each day for back-flushing and cleaning the treatment media. Therefore the Maximum Capacity is limited to 800 GPM for 22 hours or 1,056,000 GPD. Dividing the modified Maximum Day demand of 645,241 GPD by the Maximum Capacity of 1,056,000 GPD yields a Used and Useful percentage for the treatment plant of 61.1%. The detailed calculations of this U/U percentage is included in Exhibit TLB-8.

The 61.1% Used and Useful percentage should apply to all treatment plant facilities including the high service pumps since all facilities are limited in capacity to the capacity of the water softening units.

The Utility again ignored the governing FDEP rule for sizing a water treatment plant and calculated a U/U percentage of 144 % by comparing the modified Maximum Daily Demand to the Plant's Firm Reliability. This novel U/U calculation methodology gives the Utility the desired result of over 100 % but does not follow any recognized standards for sizing of treatment plants and as

such should be disregarded.

In the proposed agency action of 7/20/00, the PSC staff calculated the wells and plant and storage together and obtained a 76% U/U percentage. This percentage is considerable higher than the individual U/U percentage that I calculated for the Treatment Plant. Staff's calculation should have considered each component separately to match FDEP sizing criteria since all individual demands and capacities are known. The treatment plant should be considered 61.1 % Used and Useful.

Q. WHAT IS THE APPROPRIATE METHOD FOR DETERMING THE USED AND USEFUL PERCENTAGE FOR THE STORAGE FACILITIES FOR THE WEDGEFIELD SYSTEM?

A. The FDEP recognizes both American Water Works Association (AWWA) and Ten States Standards guidelines for storage facilities and these criteria should both be evaluated for the storage facilities.

AWWA M32 suggests that equalization storage is about 20 to 25 percent of the Average Day Flow(ADF). Fire storage is to be included if fire flow is provided. Emergency storage is an owner's option is not strictly required. Ten States Standards requires fire flow storage if fire flow is provided. Ten States sets up a minimum storage equal to ADF for systems not providing fire flow. This requirement may be reduced when the source of supply and treatment facilities have sufficient capacity with standby power to supplement peak demands of the system. Emergency storage is not mentioned in this reference.

When the system is furnishing fire flow, a half day ADF of storage is used in the test formula developed below. That amount is more than adequate for peak hour demand storage compared to the 20 to 25 % ADF suggested in the AWWA

M32. The one day ADF storage criteria mentioned in Ten States Standards was reduced to one half day because MDF design flow was used for supply wells, treatment plant and high service pumps. Fire storage was used. No emergency storage was included but the full dead storage claimed by the utility was used. Considering all the guidelines, the following U/U formulas for storage facilities have been developed by OPC.

For systems without fire flow:

U/U = One Day ADF / Total System Capacity – Dead Storage

For systems with fire flow such as Wedgefield:

U/U = ½ ADF + F.F. / Total System Capacity – Dead Storage

With ADF adjusted for 5 years growth and for excessive unaccounted for water.

Q. WHAT USED AND USEFUL PERCENTAGE DID YOU COMPUTE FOR THE STORAGE FACILITIES USING THE METHOD YOU DESCRIBED AND HOW DOES THIS U/U PERCENTAGE COMPARE WITH THE UTILITY'S REQUESTED PERCENTAGE?

A. Using the system's ADF as adjusted for 5 years growth and excessive unaccounted for water, fire flow as previously discussed, total storage capacity of 350,000 Gallons and allowing for 10 % dead storage, I computed a used and useful percentage of 67.25 % which should be used for the storage facilities. The detailed calculation is included in Exhibit TLB-8.

The Utility again invented a new formula which included a demand of one half maximum day emergency storage; one quarter maximum day equalization storage; 5 years growth; and fire flow and divided this demand by the storage capacity less dead storage. It is little wonder that the Utility's calculation equaled 149% but this calculation fits no guideline criteria and should be

disregarded.

Q. IN YOUR USED AND USEFUL CALCULATIONS, DID YOU USE MAXIMUM DAY FLOW OR AVERAGE 5 DAYS OF MAXIMUM MONTH FLOW FOR THE SYSTEM'S MAXIMUM FLOW AND WHY DID YOU USE THIS FACTOR.

A. It is always better and more representative of the true maximum day flow to use the average of the five maximum days of the maximum month and that is what I used for the maximum flow. Using the average of the five maximum days of the maximum month rather than the single maximum day of the year lets one avoid such anomalies as fire flow, broken mains or other large leaks. As a matter of fact in this case, the single maximum flow day was on a day with a fire.

Q. WHAT IS THE APPROPRIATE ALLOWANCE FOR UNACCOUNTED FOR WATER FOR THIS WATER SYSTEM AND WHAT DID YOU USE IN YOUR CALCULATIONS?

A. A maximum allowance of 10 percent of ADF is reasonable for unaccounted for water for any reasonably maintained water system. In this case, the Utility reported unaccounted for water during the test year of 27.1 % or 77,704 GPD. This amount is very excessive. Allowing 10 % of ADF or 28,673 GPD leaves an excessive unaccounted for flow of 49,031 GPD . I applied this excessive unaccounted for water to all calculations of system demand.

Q. WHAT IS THE APPROPRIATE METHOD FOR DETERMINING THE USED AND USEFUL PERCENTAGE FOR THE WEDGEFIELD WATER DISTRIBUTION SYSTEM?

A. The appropriate method to calculate a fair U/U percentage is to compare Total Connected Equivalent Residential Connections (ERCs) to Total Available ERCs

along the distribution system. This method is particularly level handed in the Wedgefield system which has mostly all residential lots with each lot being an equivalent residential connection (ERC). The few commercial connections were converted to ERCs.

Q. HOW DID YOU DETERMINE THE TOTAL CONNECTED ERCs AND THE TOTAL AVAILABLE ERCs IN THE WEDGEFIELD SYSTEM AND WHAT USED AND USEFUL PERCENTAGE DID YOU COMPUTE FOR THE DISTRIBUTION SYSTEM?

A. I visited with the Orange County Property Appraiser's office in Orlando and obtained maps of the Wedgefield System area. These appraisal maps show each and every lot in the system. I then purchased from the Appraiser's office an ownership report of the total area of Wedgefield. The ownership report identifies each lot, the lot owner, value of the lot and value of the home on each lot, if built upon. I also made an on the ground inspection of the area for several hours in October, 2000 and again in April, 2001.

With the maps and ownership report, it then became a simple matter to count all available lots in the Wedgefield area as well as identify the number of lots with residences constructed thereon with a water connection. I accepted Wedgefield's calculation of an additional 32.5 ERCs for the clubhouse and the few commercial connections.

I calculated a total of 1,535.5 available ERCs in the system and a total of 854.5 connected ERCs. I then added the 5 years growth of 165 ERCs to the number of connected ERCs for a total of 1,019.5. The U/U percentage for the distribution was then computed as 1,019.5 / 1,535.5 which equals 66.4 %.

Q. HOW DOES YOUR CALCULATED U/U PERCENTAGE FOR THE

WATER DISTRIBUTION SYSTEM COMPARE WITH THAT CALCULATED BY THE UTILITY?

A. In Schedule F-7 of the MFRs, the Utility divided a total of 995 ERCs claimed to be served by total available ERCs of 1499.5 to obtain a U/U percentage of 66%. Although the Utility's count of connected and available ERCs is slightly different from my counts, the same Used and Useful percentage was obtained. In the proposed agency action, PSC staff calculated a U/U percentage of 77 %. This calculation by staff is simply in error since they used only 1,323 available ERC connections in the system.

Q. DOES THIS COMPLETE YOUR DIRECT TESTIMONY

A. Yes, it does.

DOCKET NO. 991437-WU
CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a copy of the foregoing has been furnished by U.S. Mail or hand-delivery to the following parties on this 14th day of May, 2001.

Charles J. Beck

Patricia Cristensen
Division of Legal Services
Fla. Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

Ben Girtman, Esq.
1020 E. Lafayette St., #207
Tallahassee, FL 32301-4552

991437.cos

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FOR EXHIBITS TO THE

DIRECT TESTIMONY OF TED L. BIDDY

DOCKET NO. 991437-WU

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Exhibit TLB-1
Docket No. 991437-WU

SUMMARY TABULATION OF ECON PERMITS FOR WATER PLANT

EXHIBIT TLB-1

SUMMARY TABULATION OF ECON UTILITIES, INC. PERMITS FOR WATER PLANT

ATE	AGENCY ISSUING PERMIT	PERMITTED FACILITIES	ECON'S COST ESTIMATE
16/63	Fl. State Board of Health	6" Well, 250 gpm 5,000 gal. Ground Storage Tank Aerator – 250 gpm Degasifier Hypo-Chlorinator 10.000 gal. Clear Well High Lift Pump, 250 gpm Emergency Drive Gasoline Engine	$15,000
16/63	Fl. State Board of Health	Distribution System 10,000 L.F. - 4" A.C. Pipe 11,000 L.F. – 6" A.C. Pipe 700 L.F. – 8" A.C. Pipe 600 L.F. – 10" A.C. Pipe 2 – Dead Ends w/Blow-offs 46 – Valves 13 – Hydrants 3,915 L.F. – Copper Service Pipe Fittings, Meter Boxes, Etc.	$60,000
27/64	Fl. State Board of Health	Distribution System Expansion 4,170 L.F. – 8" 1,760 L.F. – 6"	$32,000
7/75	Fl. Department of Health and Rehabilitative Services	New 12" Well (Later Abandoned)	$9,800
24/77	Fl. Department of Health and Rehabilitative Services	12,000 gal. Ground Storage Tank Chlorination System 600 gpm High Service Pump 600 L.F. – 6" PVC Pipe 1200 L.F. – 4" w/blow-off	$30,000
18/78	Fl. Department of Environmental Regulation	Distribution System Expansion 5,500 L.F. – 14" Ductile Iron 4,580 L.F. – 12" PVC 14,850 L.F. – 10" PVC 19,040 L.F. – 8" PVC 12,820 L.F. – 6" PVC	$660,000
4/80	Fl. Department of Environmental Regulation	Well No. 2 8", 250 gpm	$25,000

EXHIBIT TLB-1

ATE	AGENCY ISSUING PERMIT	PERMITTED FACILITIES	ECON'S COST ESTIMATE
/19/84	Fl. Department of Environmental Regulation	Ion Exchange Softener and Lime Addition	$30,000
8/87	Fl. Department of Environmental regulation	350,000 gal. Ground Storage Tank 2,000 gpm Roof Mounted Aerator	$160,000
5/88	Fl. Department of Environmental Regulation	Treatment Plant Expansion 3 New Ion Exchange Softeners At 400 gpm each 3 New High Service Pumps Rated at 2000, 1350 & 1350 gpm respectively Associated Chemical Feed Equipment, Piping and Appurtenances	$762,850
2/90	Fl. Department of Environmental Regulation	Well No. 3 10", 600 gpm	$52,000

Exhibit TLB-1.1
Docket No. 991437-WU

ECON PERMIT OF 1/16/63 FOR WATER PLANT

M 18—36
5)

This Space For Use By Approving Agency

Bureau of Sanitary Engineering
Division of Water Supply
RECEIVED
DEC 3 1 1962
Division Director ..... Ref To
☐ MW (Plans) ..... ☐ MW (Plans) .....
☐ MW (Oper.) ..... ☐ MW (Oper.) .....
☐ MW (Prpts.) ..... ☐ MW .....
☐ ..... ☐ Other .....

Docket No. 991437-WU
Exhibit TLB-1.1
Page 1

EXHIBIT
TLB-1.1

FLORIDA STATE BOARD OF HEALTH

JACKSONVILLE 1, FLORIDA

PERMANENT FILE

APPLICATION FOR APPROVAL OF PLANS & SPECIFICATIONS FOR PUBLIC WATER SUPPLY SYSTEM

This Space For Use By Approving Agency

Approval Date JAN 16 1963

Serial No. 6108

To the Florida State Board of Health:

The Econ Utilities Corporation
(Insert title of body making application, i.e., municipality, corporation or individual)

whose address is 506 First National Bank Bldg., Orlando, Florida
(Street and Number) (City)

authorized by law to act for the said Corporation
(Insert city, town or corporation)

and to expend its funds for water supply and treatment works, herewith submit for the consideration of the State Board of Health, plans, specifications and other necessary data (including Form EWI-36) prepared by

Rader and Associates
(Engineer or firm)

of 100 Biscayne Boulevard South, Miami 32, Florida
(Address)

who is hereby authorized to represent the applicant in the engineering features of this project for the installation

of a new water system
(Clearly describe: new system, new plant, modification, extension)

to serve Rocket City Garden Estates (Subdivision, plant, school, other) located at Sec. 1, Township 23 So., Range 32, East, (Approximate location)

in/near the city of Orlando in the county of Orange, state of Florida, as required by the regulations of the State Board of Health and herewith make application to the State Board of Health for the approval of this project.

These plans, specifications and related documents will be approved and accepted by the Board of Directors
(Board, Council, Directors, Etc.)
when they have received the approval of the State Board of Health.

Upon construction, these facilities will be owned by Econ Utilities Corporation and will be

operated and maintained by Econ Utilities Corp. whose address is 506 First National Bank Bldg.,
(City forces, name of utility co., or owner)

Orlando, Florida
(Street and Number) (City or town)

This application is made under and in full accord with the provisions of Chapter 381, Sections 381.251–381.291, inclusive, and Section 381.391, Florida Statutes, and such other statutes as related to public water supply, treatment and distribution. THE APPLICANTS AGREE THAT NO CHANGES IN OR DEVIATION FROM THE PLANS AND SPECIFICATIONS APPROVED BY THE STATE BOARD OF HEALTH WILL BE MADE EXCEPT WITH THE CONSENT AND APPROVAL OF THE STATE BOARD OF HEALTH.

REMARKS:

Preparation of engineering documents certified by:

C. Otis Grannis
Signature: Engineer registered under Florida Statutes

C. Otis Grannis, #3250
Typed Name and Fla. Registration No.

(SEAL)

x S. H. Painter
Signature: Mayor, Chairman or President

Vice President
Typed Name and Title of above

x Irving J. Pedly
Signature: City Clerk, Board Secretary, Etc.

Assistant Secretary
Typed Name and Title of above

Co-Signature: Agent for Operation and Maintenance if different

Typed Name and Title: Agent for Operation and Maintenance

These plans for the proposed improvements cited in the foregoing application are hereby approved under authority of Chapter 381, Sections 381.251—381.291, inclusive, and Section 381.391, Florida Statutes, with the following provisos:-

1. Construction on this project must be commenced within one year from the date of this application; otherwise plans and specifications must be re-submitted for approval by this department.

2. This approval is given with the understanding that upon the installation of such works, its operation shall be placed under the care of a competent person, whose qualifications are approved by the State Board of Health, and the operation shall be carried out according to best accepted practice and in accordance with the recommendations of the State Board of Health.

3. **A valved drain and a screened vent shall be provided on the 10,000 gallon ground storage tank. (The drain or blow off is stipulated in the specifications but was omitted on the drawing).**

4. **The chlorinator and the chemical feeders shall be installed in an enclosure of some type with a locked door or gate. A fence or a ventilated masonry wall will be acceptable in that it would aid in preventing vandalism and further, the installation of a usual ventilating fan would not be necessary.**

5. **Down opening sampling taps shall be provided on the well pump discharge and on the 5,000 gallon pressure tank effluent line.**

6. **The load on this temporary water systems shall not exceed 227 single family or equivalent connections.**

The official copies of plans and specifications accompanying this application have been sealed and stamped with the serial number of this application, 6108
Only such plans and specifications are included in this approval and any erasures, additions or alterations affecting the efficiency of operation or public health protective value of the proposed improvements will make such approval null and void.

JOHN L. MILLER REGISTERED ENGINEER STATE OF FLORIDA

For The Director, Bureau of Sanitary Engineering

William T. Scudder, M.D.
State Health Officer

FLORIDA STATE BOARD OF HEALTH

BUREAU OF SANITARY ENGINEERING

Information Regarding Proposed Water Works

Submit comprehensive engineer's report with all plans and in addition fill out such portions of the following as relate to the proposed works. Use supplementary sheets, if necessary, and if data is shown on plans insert "see plans".

Locality Rocket City, Orange County, Florida (Name of municipality, institution, etc.) Date December 21, 1962

Owner's mail Address 506 The First National Bank Building, Orlando, Florida

Information furnished by Rader & Associates, Miami, Florida (Name and Address) Engineer designing works.

Estimated total cost of project $ 75,000.00

Water Treatment $ 15,000

Distribution $ 60,000.00

A - GENERAL

1. Present Population (municipality, institution, etc.) None
2. Design Population (served by proposed system) 700
3. Estimated population to be connected, 5 years 4,000 10 years ____ 20 years ____
4. Present per capita consumption None Per capita estimate future 100 gcd
5. Give any industrial users or abnormal demands None
6. Give characteristics present water (analysis attached if available) (Hard) soft, colored, turbid, etc.) Analyses attached
7. Characteristics proposed water (analysis attached) Analyses attached
8. Give source proposed water One deep well (Deep well, shallow well, spring, stream, lake)
9. Give sources pollution None
10. Sewage Disposal by Econ Utilities Inc., 506 The First National Bank Bldg., Orlando, Fla. (Name & Address of Sewer Utility)
11. List treatment (softening, filtration, chlorination) Aeration, sedimentation, chlorination.
12. Purified water storage: Capacity present elevated None Ground None
    Capacity proposed elevated None Ground 50,000 gallons
    Static head relation pumping plant ____

B - WELL SUPPLY

1. None

Existing Wells

Numbers												
Sizes												
Depths												
Pump (Type)												
Capacity												

2. Proposed Wells

Numbers	1											
Sizes	6"											
Depths	365'											
Pump (Type)	turbin											
Capacity	250 gpm											

Type construction Drilled well Casing Black iron

Give all geological data, including log of test wells or wells in vicinity (attach sheet)

3. Describe possible sources of contamination: None

C - SURFACE SUPPLIES

1. Name of stream, lake, or pond --

2. Show by map watershed, towns or communities above intake, industrial plants, and in immediate vicinity, farm house, picnic grounds, abattoirs and other sources pollution, with distance from intake. Locate intake on map.

3. Size of watershed in square miles _____ Est. min. dry-weather flow at intake _____

4. Basis of min. dry-weather flow estimate _____

5.

	Existing Raw Water Pumps			Proposed Raw Water Pumps		
Type						
Capacity						
Suction Hd.						
Discharge Hd.						

D - TREATMENT PLANT

Docket No. 991437-WU
Exhibit TLB-1.1
Page 6

ulation of water to plant: -

a. Strainer and intake devices _____

b. Number and size intake lines _____

c. Difference elevation water level at intake and water level in coagulation basin or reservoir _____

d. Emergency intake _____ Bypass of raw water _____

e. Discharge lines to basin or reservoir _____

2. Aeration: Type Degasifier Max. des. rate 250 gpm Detention None

Orifices None Pans 10 + trays Loss of Head 6 feet +

3. Mixing Chamber: Type None

a. Dimensions _____ Capacity _____ Detention _____

Velocity (at maximum designed rate) _____

Allowable head: Total _____ Per baffle _____

Mechanical agitator: Size blade _____ Motor _____

Peripheral Speed _____ Bypass _____ Drainage _____

4. Coagulating basins: Type None

a. Capacity _____ Detention time maximum capacity plant _____

Velocity _____

Capacity each compartment _____

b. Distribution flow: Inlet devices _____

Outlet devices _____ Overflow _____

Elevations: maximum _____ minimum _____ average _____

c. Drainage _____ d. Bypass _____

5. Suspended solids contact units: None

Process	Capacity	Upflow rate	Detention Period	Overflow rate
Softening				
Clarification				

Remarks: _____

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Exhibit TLB-1.1
Page 7

h. Clear well: Location Adjacent to well

Capacity 10,000 gallons Dimensions 8' diam. x 28'

Location suction and arrangement At bottom of tank

i. Chlorination: Type Hypochlorinator Capacity -

Location Adjacent to the pump Point application High left pump suction

j. Measuring devices: Raw water: Type None

Capacity - Filtered water: Type Sparling rotary

Capacity 250 gpm

k. Laboratory - Room and bench space None

Scope of tests provided for -

l. Bypass to plant None

Emergency intake None

m. Is plant designed for 24-hour operation or what portion 24 hours

n. List types & capacities of emergency well & service pumping units Gasoline engine drive on well pump and one service pump

E - SERVICE PUMPING & DISTRIBUTION

	Existing Service Pumps - None			Proposed Service Pumps		
Type				Centrifugal		
Capacity				250 gpm		
Suction Hd.				25 ft. positive		
Discharge Hd.				160 feet		

Remarks:

DISTRIBUTION SYSTEM

Single or dual system Single Booster Pumps (give operating pressures and locations) None

Interconnection with other system None cross connections None

Min. size pipe 4" Residual pressure at peak load 25 psi

Is fire control provided in design? Yes

Describe dead-end conditions and necessity for flushing Two dead-ends provided with blow-offs

List lengths of new pipe lines 6" and larger. 6" - 11,000 lin. ft. 8" - 700 lin. 10" - 600 lin. ft.

SCHEDULE OF PRICES BID

SCHEDULE I - WATER DISTRIBUTION SYSTEM

(Note: Certain materials will be furnished to Contractor by Owner - See List on PP SC-3 and SC-4.)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Amount Bid
1.	Water Mains				
	a. 4" Transite pipe, Class 150	10,000	Lin. Ft.		
	b. 6" Transite pipe, Class 150	10,850	Lin. Ft.		
	c. 8" Transite pipe, Class 150	750	Lin. Ft.		
	d. 10" Transite pipe, Class 150	600	Lin. Ft.		
2.	Cast Iron Fitting	4.1	Tons		
3.	Copper Service Pipe				
	a. 3/4" diameter	1,050	Lin. Ft.		
	b. 1" diameter	2,750	Lin. Ft.		
	c. 2" diameter	115	Lin. Ft.		
4.	Gate Valves with boxes with connections to conform with pipe				
	a. 4" diameter	21	Units		
	b. 6" diameter	24	Units		
	c. 8" diameter	1	Unit		
5.	Hydrants	13	Units		
6.	Meter Boxes with 3/4" Curb Cocks	215	Units		
7.	Brass Corporation Cocks				
	3/4" diameter	19	Units		
	1" diameter	97	Units		
	2" diameter	1	Unit		
8.	Concrete for Thrust Blocks	50	Cu. Yds.		
TOTAL ESTIMATED PRICE SCHEDULE I					

SCHEDULE OF PRICES BID

SCHEDULE III - WATER SUPPLY

Item No.	Description	Estimated Quantity	Unit	Unit Price	Amount Bid
1.	Deep Well Pump, with electric motor and gasoline engine drives, installed	L. S.	_____	_____	_____
2.	Distribution Pump with electric motor and gasoline engine drives, installed	L. S.	_____	_____	_____
3.	Degasifier with steel tower, installed	L. S.	_____	_____	_____
4.	10,000 gallon cylindrical steel tank, installed	L. S.	_____	_____	_____
5.	5,000 gallon cylindrical steel pneumatic water tank, installed	L. S.	_____	_____	_____
6.	Chlorinator with accessories, installed	L. S.	_____	_____	_____
7.	Chemical feed pump with accessories, installed	L. S.	_____	_____	_____
8.	Controls for pumps and all equipment, installed	L. S.	_____	_____	_____
9.	All piping, valves, fittings and accessories, including water meter, installed	L. S.	_____	_____	_____
10.	Concrete work, complete, including slab, tank supports, tower footings, pump and engine foundations, roof over chlorinator and chain link fence	L. S.	_____	_____	_____

TOTAL ESTIMATED PRICE - SCHEDULE III

e. Materials List: The following materials will be furnished to the Contractor by the Owner:

I. (1) Transite Water Pipe, Class 150; with "Ring-Tite" joints:

(a)	4" diameter	10,500 L.F.
(b)	6" diameter	11,400 L.F.
(c)	8" diameter	800 L.F.
(d)	10" diameter	630 L.F.

(2) Couplings for transite water pipe:

		Units
(a)	4" diameter	
(b)	Plain	1030
(c)	Tapped 3/4"	11
(d)	Tapped 1"	58
(a)	6" diameter	
(b)	Plain	875
(c)	Tapped 3/4"	10
(d)	Tapped 1"	37
(a)	8" diameter	
(b)	Plain	70
(c)	Tapped 3/4"	0
(d)	Tapped 1"	0
(a)	10" diameter	
(b)	Plain	45
(c)	Tapped 3/4"	4
(d)	Tapped 1"	11

II. (1) Transite Sewer Pipe, Class 2400, with Ring-Tite" Joints

Standard, Unlined

8" diameter sewer	2,060 L.F.
4" diameter (House Connections)	3,200 L.F.

Epoxy-lined

8" diameter sewer	13,200 L.F.
10" diameter sewer	980 L.F.
8" x 4" Y-branches	95 units
8" x 6" Y-branches	75 units
6" diameter sewer	260 L.F.
6" x 4" Y-branches	145 units.
4" 30° bends	240 units
6" 30° bends	75 units

(2) Transite Water Main - Standard Unlined - For Force Main

4 " diameter	4,180 L. F.

(3) Prefabricated Sewage Treatment Plant Complete, delivered on truck at site.

Exhibit TLB-1.2
Docket No. 991437-WU

ECON PERMIT OF 2/27/64 FOR DISTRIBUTION SYSTEM EXPANSION

.M IE—36
5)

Rocket City, Orange County
(Second Stage)
Rader (Miami) Job No. 4990

This Space For Use By Approving Agency

EXHIBIT TLB-1.2

FLORIDA STATE BOARD OF HEALTH

JACKSONVILLE 1, FLORIDA

Docket No. 991437-WU
Exhibit TLB-1.2
Page 1

Bureau of Sanitary Engineering
Division of Water Supply
RECEIVED
FEB 17 1964
Division Director.....Ref. To:
☐ MW (Plans)..... ☐ SWP (Plans).....
☐ MW (Oper.)..... ☐ SWP (Oper.) .....
☐ MW (Repts.)..... ☐ WSW.....
☐ File..... ☐ Other.....

APPLICATION FOR APPROVAL OF PLANS & SPECIFICATIONS FOR PUBLIC WATER SUPPLY SYSTEM

PERMANENT
FILE

This Space For Use By Approving Agency

Approval Date FEB 27 1964

Serial No. 6108 B

(Insert title of body making application, i.e., municipality, corporation or individual)

whose address is P. O. Box 1102 (Street and Number), Orlando, Florida (City)

authorized by law to act for the said corporation (Insert city, town or corporation)

and to expend its funds for water supply and treatment works, herewith submit for the consideration of the State Board of Health, plans, specifications and other necessary data (including Form EWI-36) prepared by

Rader and Associates (Engineer or firm)

of 900 First National Bank Building, Miami, Florida 33131 (Address)

who is hereby authorized to represent the applicant in the engineering features of this project for the installation

of extensions of an existing system (Clearly describe: new system, new plant, modification, extension)

to serve a subdivision (Subdivision, plant, school, other) located at Rocket City (Approximate location)

in/near the city of Bithlo in the county of Orange, state of Florida, as required by the regulations of the State Board of Health and herewith make application to the State Board of Health for the approval of this project.

These plans, specifications and related documents will be approved and accepted by directors (Board, Council, Directors, Etc.) when they have received the approval of the State Board of Health.

Upon construction, these facilities will be owned by Econ Utilities Corporation and will be

operated and maintained by (same) (City forces, name of utility co., or owner) whose address is (same as above)

(Street and Number) (City or town)

This application is made under and in full accord with the provisions of Chapter 381, Sections 381.251—381.291, inclusive, and Section 381.391, Florida Statutes, and such other statutes as related to public water supply, treatment and distribution. THE APPLICANTS AGREE THAT NO CHANGES IN OR DEVIATION FROM THE PLANS AND SPECIFICATIONS APPROVED BY THE STATE BOARD OF HEALTH WILL BE MADE EXCEPT WITH THE CONSENT AND APPROVAL OF THE STATE BOARD OF HEALTH.

REMARKS: See Approval No. 6108 Rev. dated February 14, 1963.

ECON UTILITIES CORPORATION

Preparation of engineering documents certified by:
RADER AND ASSOCIATES

BY: [signature]
Signature: Engineer registered under Florida Statutes

R. G. SHANKLIN, JR., No. 5110
Typed Name and Fla. Registration No.

(SEAL)

By: [signature]
Signature, Mayor, Chairman or President

JAMES A. POUNDS, Manager
Typed Name and Title of Above

Signature: City Clerk, Board Secretary, Etc.

Typed Name and Title of Above

Co-Signature, Agent for Operation and Maintenance if different

Typed Name and Title, Agent for Operation and Maintenance

FORM EWI-36
(Rev. - 54)

6108

FEB 27 1964

Docket No. 991437-WU
Exhibit TLB-1.2
Page 3

FLORIDA STATE BOARD OF HEALTH

BUREAU OF SANITARY ENGINEERING

Bureau of Sanitary Engineering
Division of Water Supply
RECEIVED
FEB 17 1964
Division Director
☐ MW (Plans) ☐ SWP (Plans) Ref. To:
☐ MW (Oper.) ☐ SWP (Oper.)
☐ MW (Repts.) ☐ WSW
☐ File ☐ Other

Information Regarding Proposed Water Works

Submit comprehensive engineer's report with all plans and in addition fill out such portions of the following as relate to the proposed works: (Use supplementary sheets, if necessary, and if data is shown on plans insert "see plans".)

Locality Econ Utilities Corp. for Rocket City, Florida (Name of municipality, institution, etc.) Date FEB 11 1964

Owner's mail Address P. O. Box 1102, Orlando, Florida

Information furnished by Rader and Associates, Miami (Name and Address) Engineer designing works.

Estimated total cost of project $ 32,000. Water Treatment $ —

Distribution $ 32,000.

A - GENERAL

1. Present Population (municipality, institution, etc.) none
2. Design Population (served by proposed system) 550 (equivalent)
3. Estimated population to be connected, 5 years 4000 10 years - 20 years -
4. Present per capita consumption none Per capita estimate future 100 gpd
5. Give any industrial users or abnormal demands none
6. Give characteristics present water (analysis attached if available) (hard, soft, colored, turbid, etc.) See Approval No. 6108
7. Characteristics proposed water (analysis attached)
8. Give source proposed water (Deep well, shallow well, springs, surface)
9. Give sources pollution none - sewage disposal system also by same owner
10. List treatment (softening, filtration, chlorination)
11. Purified water storage: Capacity present elevated Ground

Capacity proposed elevated Ground

Static head relation pumping plant

h. Clear well: Location _____

Capacity _____ Dimensions _____

Location suction and arrangement _____

i. Chlorination: Type _____ Capacity _____

Location _____ Point application _____

j. Measuring devices: Raw water: Type _____

Capacity _____ Filtered water: Type _____

Capacity _____

k. Laboratory - Room and bench space _____

Scope of tests provided for _____

_____

l. Bypass to plant _____

Emergency intake _____

m. Is plant designed for 24-hour operation or what portion _____

n. List types & capacities of emergency well & service pumping units _____

_____

E - SERVICE PUMPING & DISTRIBUTION

1.

	Existing Service Pumps			Proposed Service Pumps		
Type						
Capacity						
Suction Hd.						
Discharge Hd.						

Remarks: _____

2. DISTRIBUTION SYSTEM

Single or dual system **single** Booster Pumps (give operating pressures and locations) **None**

Interconnection with other system **none** cross connections **none**

Min. size pipe **4"** Residual pressure at peak load **25 psi**

Is fire control provided in design? **yes**

Describe dead-end conditions and necessity for flushing **none**

_____

List lengths of new pipe lines 6" and larger. 4170 L.F. of 8", 1,760 L.F. of 6"

Exhibit TLB-1.3
Docket No. 991437-WU

ECON PERMIT OF 3/7/75 FOR NEW 12" WELL

FILE

STATE OF FLORIDA
DEPARTMENT OF HEALTH AND REHABILITATIVE SERVICES
DIVISION OF HEALTH
Post Office Box 210
Jacksonville, Florida 32201

Docket No. 991437-WU
Exhibit TLB-1.3
Page 1

APPLICATION FOR PERMIT TO DRILL WATER WELL

TO: STATE OF FLORIDA
DIVISION OF HEALTH
Bureau of Sanitary Engineering
Water Supply Section
P. O. Box 210
Jacksonville, Florida 32201

PLACE Orlando, Florida

PERMANENT

DATE March 7, 1975

FILE

DEAR SIRS:

In compliance with Sanitary Code of Florida, Water Supplies, Sections 10D-4.10 to 10D-4.14, inclusive, Florida Administrative Code adopted pursuant to Section 381.031(1)(g)3 Florida Statutes, the

ph 293 7381

undersigned CENTRAL FLORIDA WELL DRILLERS (Name of Driller) of 3720 N. Orange Blossom Tr., Orlando, Fla. (Address)

respectfully applies for a permit and approval of the Division of Health for the installation of a water well in

Section 11 Township 23 S Range 32 E at or near Cape Orlando Estates (Street or Rural Route) (City) Orange (County)

The well will be Cable Drillod (Type of drilling or other construction) to the approximate depth of 480 feet and will be 12" inches in diameter. It will have approx. 240 feet of casing, constructed of Steel material and will have cement (Proposed type of casing seal). The proposed yield is 1500 G.P.M.

Distance from nearest possible source of pollution over 100' (See attached sketch) (Detail on sketch or plans)

This well to supply Cape Orlando Estates (Name of Subdivision, Trailer Park or other water system well is to serve)

If rotary drilled how will annular space be sealed ? (Cement grout or other) _____

If well is abandoned, how will it be plugged? Cement

Estimated Cost of Construction $9,800.00

Unit costs (1) per ft. cased depth $_____, (2) per ft. open hole $_____, (3) screen or other $_____

The required accompanying paper is enclosed herewith; Plat or sketch showing location of proposed well relative to existing buildings or other physical features, especially the locations of all known sources of contamination in the vicinity. (Sketch may be made on back of this sheet.)

A log showing the various strata or formations pierced by the well will be forwarded to your office within a few days after completion of drilling operation. All provisions of the Sanitary Code of Florida mentioned above will be complied with.

Respectfully submitted,

CENTRAL FLORIDA WELL DRILLERS

(Signature of Water Utility Representative)

(Signature of Well Drilling Contractor)

Fern Duquette Resident Engineer
(Typed name & title)

George H. Stewart, Owner
(Typed name & Title)

Cape Orlando Project, ROUTE 4
BOX 253, ORLANDO, FLA., 32807
(Address)

3720 N. Orange Blossom Trail, Orlando, F
32804
(Address)

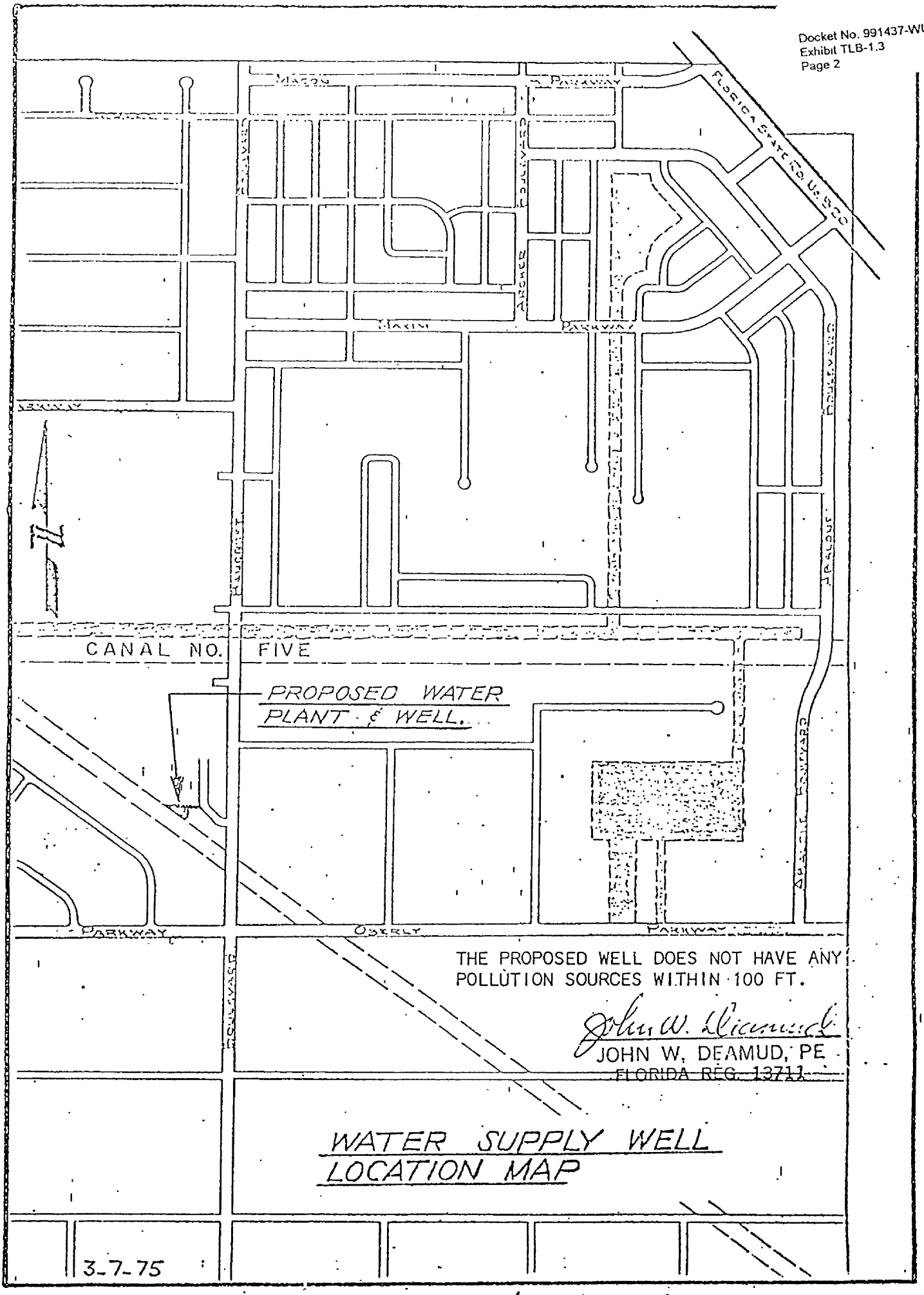
Approved by _____
(Authorized representative of the Division of Health)

Secretary Engr. III
(Title)

VERBAL APPROVAL GIVEN!
(Address)

March 13, 1975
(Date)

Orange County



68584-001 A.E. O'NEALL ASSOC.

Exhibit TLB-1.4
Docket No. 991437-WU

ECON PERMIT OF 6/24/77 FOR

EXPANSION OF DISTRIBUTION SYSTEM

Form 1E-36
(Rev. 9-72)

Docket No. 991437-WU
Exhibit TLB-1.4
Page 1

Orange County
Econ Utilities Corp.
Cape Orlando Est.

This Space For Use By Approving Agency

EXHIBIT TLB-1.4

STATE OF FLORIDA

DEPARTMENT of HEALTH and REHABILITATIVE SERVICES

DIVISION OF HEALTH

Post Office Box 210

Jacksonville, Florida 32201

RECEIVED

JUN 21 1977

SAINT JOHNS
RIVER DISTRICT

APPLICATION FOR APPROVAL OF PLANS & SPECIFICATIONS FOR PUBLIC WATER SUPPLY SYSTEM

DEPARTMENT OF ENVIRONMENTAL REGULATION
APPROVED
Proj.: WC48 2008
WATER SYSTEM
Date: JUN 24 1977
By:
STATE OF FLORIDA

This Space For Use By Approving Agency

Approval Date_____

Serial No._____

To the Division of Health:

DATE 6-20-77

The ECON. UTILITIES CORPORATION
(Insert title of body making application, i.e., municipality, corporation or individual)

whose address is Route 4, Box 256 (Street and Number), Orlando, Florida 32807 (City)

authorized by law to act for the said Corporation
(Insert city, town or corporation)

and to expend its funds for water supply and treatment works, herewith submit for the consideration of the Division of Health, plans, specifications and other necessary data (including Form EWI-36) prepared by

A. E. O'Neall Associates, A division of Reynolds, Smith and Hills
(Engineer or firm)

of 7120 Lake Ellenor Drive, Orlando, Florida 32809
(Address)

who is hereby authorized to represent the applicant in the engineering features including supervision of construction and appropriate certification as to compliance with the approved plans and specifications of this project for the installation of Improvements to existing water plant and distribution system
(Clearly describe new system, new plant, modification, extension)

to serve Cape Orlando Estates (Subdivision, plant, school, other) located at East Central Orange County (Approximate location)

in/near the city of Orlando in the county of Orange, State of Florida, as required by the regulations of the Division of Health and herewith make application to the Division of Health for the approval of this project.

These plans, specifications and related documents will be approved and accepted by Directors (Board, Council, Directors, Etc.) when they have received the approval of the Division of Health.

Upon construction, these facilities will be owned by Econ Utilities Corporation and will be

operated and maintained by Same (City forces, name of utility, co., or owner) whose address is Route 4, Box 256 (Street and Number), Orlando, Florida 32807 (City or town)

This application is made under and in full accord with the provisions of Chapter 381, Section 381.031(1)(g)3 and 5 and Sections 381.251-381.291, inclusive, Florida Statutes. THE APPLICANTS AGREE THAT NO CHANGES IN OR DEVIATION FROM THE PLANS AND SPECIFICATIONS APPROVED BY THE DIVISION OF HEALTH WILL BE MADE EXCEPT WITH THE CONSENT AND APPROVAL OF THE DIVISION OF HEALTH. FURTHER, THE APPLICANTS AND/OR OWNERS AGREE TO THE SPECIFIC REQUIREMENTS RELATIVE TO OPERATION AND OPERATIONAL FUNDS THAT ARE MADE A PART OF THIS APPLICATION. (See Proviso No. 2.)

REMARKS:

Preparation of engineering documents certified by:

Jeffrey D Einhouse
Signature: Engineer registered under Florida Statutes

Jeffrey D. Einhouse 19017
Typed Name and Fla. Registration No.

ENGINEER'S SEAL

Project Engineer
Signature: Mayor, Chairman or President

Fern Duquette
Typed Name and Title of above

Signature: City Clerk, Board Secretary, Etc.

Typed Name and Title of above

Samuel Switt, V. Pres.
Signature: Agent for Utility supplying water if different

Samuel Switt
Typed Name and Title: Agent for Utility supplying water

Co-Signature: Agent for Operation and Maintenance if different

Typed Name and Title: Agent for Operation and Maintenance

INFORMATION REGARDING PROPOSED PUBLIC WATER WORKS

Submit comprehensive engineering report with all plans and specifications, and complete such portions of this form as relate to the treatment plant. (Use supplemental sheets if necessary.)

Docket No. 991437-WU
Exhibit TLB-1.4
Page 3

Name of Water System Supplying Water: Econ Utilities Corporation

Previous approval Serial Number(s): _____

Est. Cost this Project: Supply $ 0 Treatment $ 25,000 Distribution $ 5,000

Total $ 30,000

EXISTING SUPPLY AND TREATMENT FACILITIES:

Supply 0.3 MGD, Treatment 0.3 MGD

Storage: Ground 10,000 gal. Elev. 0 gal: Pressure Tank 5000 gal.

Service Pumping 200 gpm

Capacity of emergency pumping units: Well 200 gpm, service 200 gpm

Utility is Capable of Supplying 110 Equivalent Residential Connections.

Max. Daily output 0.02 MG. (Estimated) (date) Equivalent Residential Connections 45

PROPOSED IMPROVEMENT OR DISTRIBUTION EXTENSION: Plant increase 0 MGD

Supply: 0 Pressure Tank 0

Plant: Aerator 0 Gnd. Storage 12,000 gal. Elve. Storage 0

Chlorinator Replace exist chlorination system and add ~~automatic gas switchover system~~ Service pumping 600 gpm

Aux. Power for No new aux. power (exist. well pump & High Service Pumps have Gasoline engines)

Present Population (municipality, institution, etc.) Approx. 125

Additional Population (served by this project) 225 Equivalent to 65 residential services.

Estimated population to be connected: 5 years 350 10 years _____ 20 years _____

Present per capita consumption 125 GPCD (Estimated) Per capita estimated future 125 GPCD (Estimated)

Give any industrial users or abnormal demands None

Interconnection with other system None cross connections None

Min. size pipe 4 Residual pressure at peak load 25 psi (with fire flow) Is fire control provided? Yes

Describe dead-end conditions and necessity for flushing One 1200' dead end line w/blow-off requires flushing

List lengths of new pipe lines 6" and larger 600 feet of 6" PVC

Remarks The intent of the proposed improvements is to temporarily upgrade the existing facilities to provide adequate domestic supply and fire protection for up to approximately 100 single family residences. ~~Preliminary plans for future water~~ plant at new site have been initiated.

(Form EWI-36 Not Required for Distribution Extension)

Exhibit TLB-1.5
Docket No. 991437-WU

ECON PERMIT OF10/18/78 FOR MAJOR EXPANSION OF DISTRIBUTION SYSTEM

FIL

Docket No. 991437-WU
Exhibit TLB-1.5
Page 1

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

EXHIBIT TLB-1.5

ST. JOHNS RIVER DISTRICT
3319 MAGUIRE BOULEVARD
SUITE 232
ORLANDO, FLORIDA 32803

REUBIN O'D. ASKEW
GOVERNOR

JOSEPH W. LANDERS, JR.
SECRETARY

October 19, 1978

Mr. John W. Deamud, P.E.
Reynolds, Smith and Hills
7120 Lake Ellenor Drive
Orlando, Florida 32809

Orange County MW
Econ Utilities Corp.
Cape Orlando Estates

Dear Mr. Deamud:

This will acknowledge receipt of plans and related documents pertaining to a water distribution system extension.

Effective October 18, 1978 the above project plans and documents are approved under Serial No. WD48-2008 SUBJECT TO PROVISOS ON APPLICATION FORM.

This approval pertains only to the water utilities serving this development and is not to be construed as approval of any other utility aspects. All concerned are reminded that sewerage facilities must be cleared separately through this office.

By copy of this letter to the owner, we are advising that approval is given functional aspects of this project on the basis of representations to and data furnished this department.

The engineer's certification as to construction of this project in accordance with the approved plans together with satisfactory bacteriological analyses shall be provided and a letter of clearance obtained from this Agency before placing these facilities in service.

There may be county, municipal or other local regulations or restrictions to be complied with by the owner prior to construction of the facilities represented by the plans referred to above, and we, therefore, recommend that appropriate local agencies be consulted before starting construction.

Within the next few days, two sets of the approved materials will be returned to you. Thank you for your cooperation.

Yours very truly,

A. Senkevich, P.E.
District Manager

AS/fhs

cc: Orange County Health Department
T. D. Williamson, Jr.
Florida Public Service Commission
Department of Housing and Urban Development

DER Form PERM 13-13(Sep 76)

Orange Co.
Econ Util. Corp.

This Space For Use By Approving District

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

APPLICATION

FOR APPROVAL OF PLANS & SPECIFICATIONS

FOR PUBLIC WATER SUPPLY SYSTEM

This Space For Use By Approving District

Approval Date _____ Permit No. _____

: THE DEPARTMENT OF ENVIRONMENTAL REGULATION Date 9-21-78

e Econ Utilities Corp.
(Insert title of body making application, i.e., municipality, corporation or individual)

ose address is P.O.Box 2449, 1301 West Copen Road, Pompano Beach, Florida 33061
(Street and Number) (City)

horized by law to act for the said Corporation
(Insert city, town or corporation)

l to expend its funds for water supply and treatment works, herewith submit for consideration the plans and specifications and ıer necessary data (including Form PERM 13-2A) prepared by

Reynolds, Smith and Hills, Architects-Engineers-Planners, Incorporated
(Engineer or firm)

7120 Lake Ellenor Drive, Orlando, Florida 32809
(Address)

o is hereby authorized to represent the applicant in the engineering features including supervision of construction and appropri- certification as to compliance with the approved plans and specifications of the project for the installation of

Major extension of existing system
(Clearly describe new system, new plant, modification, extension)

serve Cape Orlando Estates (Subdivision, plant, school, other) located at East Central Orange County (Location)

near the city of Orlando in the county of Orange, State

Florida, as required by the regulations of the Department and herewith make application to the Department for the approval of s project.

ese plans, specifications and related documents will be approved and accepted by Directors (Board, Council, Directors, Etc.)
en they have received the approval of the Department.

on construction, these facilities will be owned by Econ Utilities Corp. and will be

erated and maintained by Same (City forces, name of utility, co., or owner) whose address is Above

(Street and Number) (City or Town)

is application is made under and in full accord with the provisions of Chapter 381, Section 381.031 (1)(g) 3 and 5 and Sections 1.251-381.291, inclusive, Florida Statutes. THE APPLICANTS AGREE THAT NO CHANGES IN OR DEVIATION FROM THE ANS AND SPECIFICATIONS APPROVED BY THE DEPARTMENT WILL BE MADE EXCEPT WITH THE CONSENT AND 'PROVAL OF THE DEPARTMENT. FURTHER, THE APPLICANTS AGREE TO THE SPECIFIC REQUIREMENTS RELA- VE TO OPERATION AND OPERATIONAL FUNDS THAT ARE MADE A PART OF THIS APPLICATION. (See Proviso No. 2, ge 4).

this application associated with or part of a Development of Regional Impact (DRI) pursuant to Chapter 380, Florida Statutes, d Chapter 22F-2, Florida Administrative Code? ____ Yes __X__ No

EMARKS: _____

eparation of engineering documents certified by:

John W Deamud
Signature: Engineer, registered under Florida Statutes

John W. Deamud 13711
Typed Name and Florida Registration No.

IGINEER'S
AL

T.D. Williamson, Jr.
Signature: Mayor, Chairman or President

T.D. Williamson, Jr., Vice President
Typed name and Title of above

Signature: City Clerk, Board Secretary, Etc.

Typed Name and Title of Above

Signature: Agent for Utility supplying water if different

Typed Name and Title: Agent for Utility supplying water

Co-Signature: Agent for Operation and Maintenance if different

Typed Name and Title: Agent for Operation and Maintenance

INFORMATION REGARDING PROPOSED PUBLIC WATER WORKS

Submit comprehensive engineering report with all plans and specifications, and complete such portions of this form as relate to ie treatment plant. (Use supplemental sheets if necessary.)

ıme of Water System Supplying Water: Rocket City Water Treatment Plant

evious approval Permit Number(s): FSBH: SN 61088 DER: SN WC 48-2008 REV.

t. Cost this Project: Supply $ — Treatment $ — Distribution $ 660,000

Total $ 660,000

ISTING SUPPLY AND TREATMENT FACILITIES:

pply 0.3 MGD, Treatment 0.3 MGD

rage: Ground 20,000 gal. Elev. 0 gal.: Pressure Tank 12,000 gal.

vice Pumping 600 gpm

pacity of emergency pumping units: Well 200 gpm, service 200 gpm

lity is Capable of Supplying 100 Equivalent Residential Connections.

x. Daily output .030 MG. ______ (date) Equivalent Residential Connections ______

OPOSED IMPROVEMENT OR DISTRIBUTION EXTENSION — Plant increase ______ MGD

pply: ______ Pressure Tank ______

nt: Aerator ______ Gnd. Storage ______ Elve. Storage ______

Chlorinator ______ Service pumping ______ gpm

Aux. Power for ______

sent Population (Municipality, institution, etc.) Approx 150

ditional Population (served by this project) 8425 Equivalent to 2407 residential services.

imated population to be connected: 5 years 1404 10 years 4212 20 years 8425

sent per capita consumption 100 Per capita estimated future 125

e any industrial users or abnormal demands None

rconnection with other system None cross connections None

. size pipe 2 Residual pressure at peak load 20 psi Is fire control provided? yes

cribe dead-end conditions and necessity for flushing several short dead ends provided with blow-offs

lengths of new pipe lines 6" and larger 12820'-6", 19,040'-8", 14,850'-10", 4,580'-12", 5,500'-14"

ıarks Others PVC / D.I.

per J.W. Dermuel 10-18-78

INFORMATION REGARDING PROPOSED PUBLIC WATER WORKS

Submit comprehensive engineering report with all plans and specifications, and complete such portions of this form as relate to treatment plant. (Use supplemental sheets if necessary.)

ne of Water System Supplying Water Rocket City Water Treatment Plant

vious approval Permit Number(s) FDBH: SN 6108B DER: SN WC 98-2008 REV

Cost this Project: Supply $ ______ Treatment $ ______ Distribution $ 660,000

Total $ 660,000

STING SUPPLY AND TREATMENT FACILITIES:

ply 0.3 MGD, Treatment 0.3 MGD

rage: Ground 20,000 gal. Elev. 0 gal.: Pressure Tank 12,000 gal.

vice Pumping 600 gpm

acity of emergency pumping units: Well 200 gpm, service 200 gpm

ity is Capable of Supplying 100 Equivalent Residential Connections.

. Daily output .030 MG. ______ Equivalent Residential Connections ______
date

OPOSED IMPROVEMENT OR DISTRIBUTION EXTENSION Plant increase ______ MGD

ply: ______ Pressure Tank ______

it: Aerator ______ Gnd. Storage ______ Elve. Storage ______

Chlorinator ______ Service pumping ______ gpm

Aux. Power for ______

ent Population (Municipality, institution, etc.) Approx. 150

litional Population (served by this project) 8425 Equivalent to 2407 residential services.

mated population to be connected: 5 years 1404 10 years 4212 20 years 8425

ent per capita consumption 100 Per capita estimated future 125

This data per other the complete appl. 10-4-7

any industrial users or abnormal demands None

rconnection with other system None cross connections None

size pipe 2 Residual pressure at peak load 20 psi Is fire control provided? yes

cribe dead-end conditions and necessity for flushing several short dead ends provided with blow-offs

lengths of new pipe lines 6" and larger 12820'-6", 19,040'-8", 14,850'-10", 4,580'-12", 5,500'-14"

arks ______ PVC / D.I.

T.W. D[illegible]

THE DEPARTMENT OF ENVIRONMENTAL REGULATION

Date 9-21-78

Docket No. 991437-WU
Exhibit TLB-1.5
Page 6

Econ Utilities Corp.
(Insert title of body making application, i.e., municipality, corporation or individual)

ıse address is P.O.Box 2449, 1301 West Copen Road, Pompano Beach, Florida 33061
(Street and Number) (City)

ıorized by law to act for the said Corporation
(Insert city, town or corporation)

to expend its funds for water supply and treatment works, herewith submit for consideration the plans and specifications and :r necessary data (including Form PERM 13-2A) prepared by

Reynolds, Smith and Hills, Architects-Engineers-Planners, Incorporated
(Engineer or firm)

7120 Lake Ellenor Drive, Orlando, Florida 32809
(Address)

, is hereby authorized to represent the applicant in the engineering features including supervision of construction and appropri- :ertification as to compliance with the approved plans and specifications of the project for the installation of

Major extension of existing system
(Clearly describe new system, new plant, modification, extension)

:rve Cape Orlando Estates (Subdivision, plant, school, other) located at East Central Orange County (Location)

ear the city of Orlando in the county of Orange, State

'lorida, as required by the regulations of the Department and herewith make application to the Department for the approval of project.

ıe plans, specifications and related documents will be approved and accepted by Directors (Board, Council, Directors, Etc.)
n they have received the approval of the Department.

n construction, these facilities will be owned by Econ Utilities Corp. and will be

ated and maintained by Same (City forces, name of utility, co., or owner) whose address is Above
(Street and Number) (City or Town)

application is made under and in full accord with the provisions of Chapter 381, Section 381.031 (1)(g) 3 and 5 and Sections 251-381.291, inclusive, Florida Statutes. THE APPLICANTS AGREE THAT NO CHANGES IN OR DEVIATION FROM THE NS AND SPECIFICATIONS APPROVED BY THE DEPARTMENT WILL BE MADE EXCEPT WITH THE CONSENT AND ROVAL OF THE DEPARTMENT. FURTHER, THE APPLICANTS AGREE TO THE SPECIFIC REQUIREMENTS RELA- E TO OPERATION AND OPERATIONAL FUNDS THAT ARE MADE A PART OF THIS APPLICATION. (See Proviso No. 2, 4).

ıis application associated with or part of a Development of Regional Impact (DRI) pursuant to Chapter 380, Florida Statutes, Chapter 22F-2, Florida Administrative Code? ____ Yes X No

1ARKS:

aration of engineering documents certified by:

John W Deamud
Signature: Engineer, registered under Florida Statutes

John W. Deamud 13711
Typed Name and Florida Registration No.

INEER'S
L

T D Williamson Jr
Signature: Mayor, Chairman or President

T.D. Williamson, Jr., Vice President
Typed name and Title of above

Signature: City Clerk, Board Secretary, Etc.

Typed Name and Title of Above

Signature: Agent for Utility supplying water if different

Typed Name and Title: Agent for Utility supplying water

Co-Signature: Agent for Operation and Maintenance if different

Typed Name and Title: Agent for Operation and Maintenance

Exhibit TLB-1.6
Docket No. 991437-WU

ECON PERMIT OF 4/14/80 FOR WELL NO. 2

EXHIBIT TLB-1.6

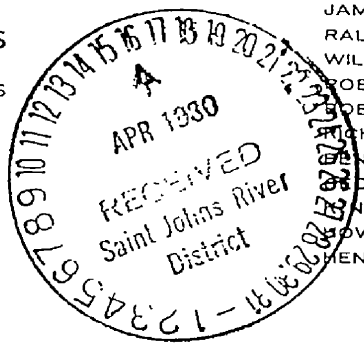
1552

Docket No. 991437-WU
Exhibit TLB-1.6
Page 1

REYNOLDS, SMITH AND HILLS

ARCHITECTS · ENGINEERS · PLANNERS

INCORPORATED



April 14, 1980

HOWARD B BOCHIARDY
VICE PRESIDENT
ORLANDO REGIONAL OFFICE

Mr. Wm. Bostwick, P.E.
Florida Department of Environmental Regulation
Water Engineering Section
3319 Maguire Blvd., Suite 232
Orlando, Florida 32803

Re: Application for Construction Permit - Public Drinking Water System (New Well #2); Cape Orlando Estates, Orange County - AEP No. 78761

Dear Mr. Bostwick:

Enclosed please find four copies of the subject permit application to construct Well No. 2 along with four sets of engineering drawings and two sets of specifications and a check in the amount of $20.00.

The proposed Well No. 2 is to be used as a backup facility to the existing Well No. 1 in Cape Orlando Estates. Firm well capacity will then be available in the event one of the two wells or pumps require maintenance. As you are no doubt aware, an application for well drilling permit from the St. Johns River Water Management District has already been submitted and is being processed under emergency basis due to damage to the existing well pump. A temporary submersible pump has been installed in Well No. 1 to provide potable water service to the subdivision. Once Well No. 2 is constructed and approved for use, the temporary submersible pump from Well No. 1 is to be removed, the column pipe broken loose from the damaged pump is to be removed if possible and the rebuilt original well pump is to be reinstalled in Well No. 1.

We respectfully request your early review and approval of this application. If you have any questions, please contact us.

Thank you.

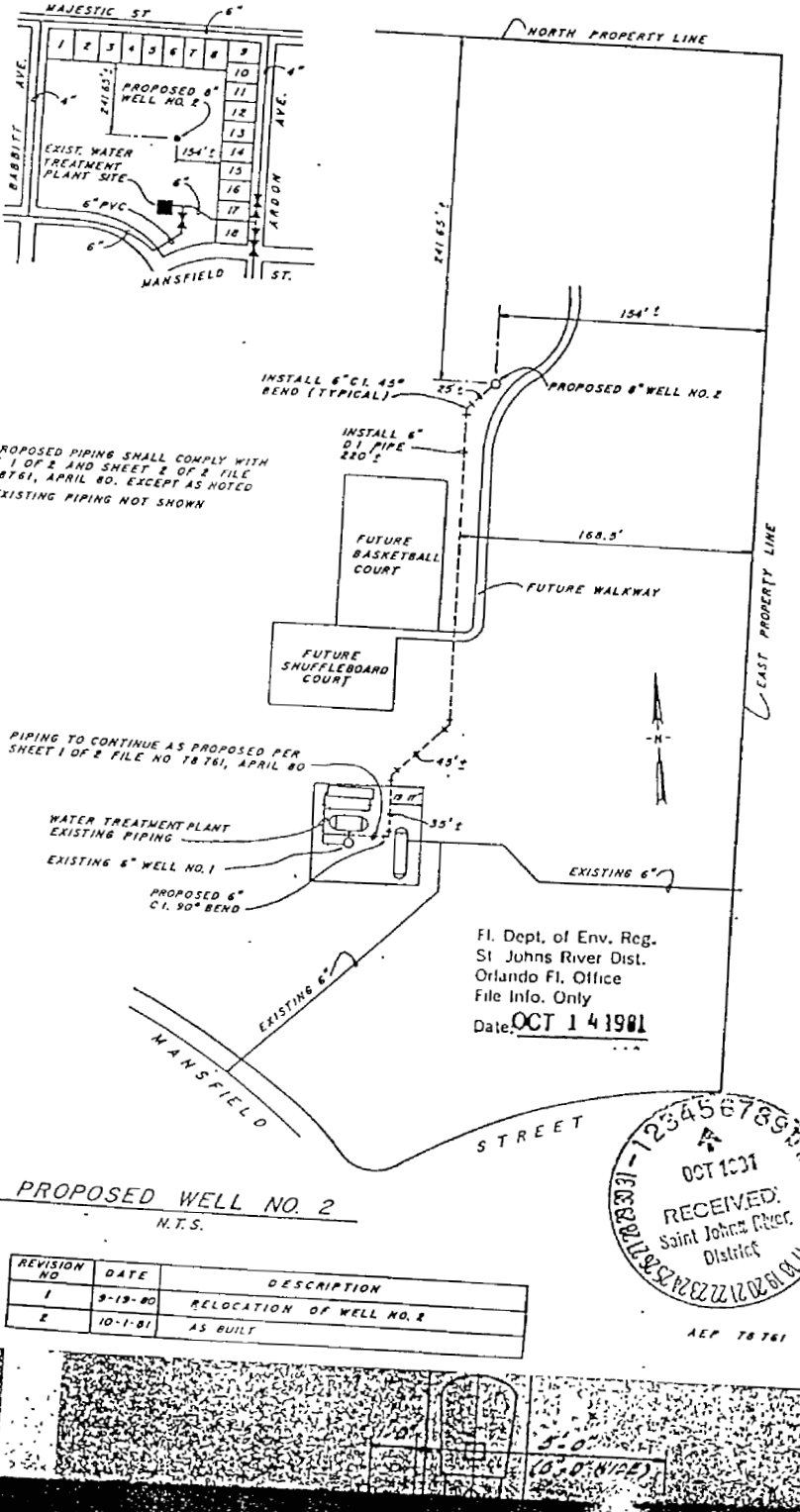
Sincerely,

Michael J. Henry

Michael J. Henry, P.E.
Civil Engineering Department Head

MJH/ljc

Enclosure
cc: Magni Properties, Inc., Attn: Mr. T.D. Williamson, Jr.



PROPOSED WELL NO. 2
N.T.S.

REVISION NO.	DATE	DESCRIPTION
1	9-19-80	RELOCATION OF WELL NO. 2
2	10-1-81	AS BUILT

1558

Docket No. 991437-WU
Exhibit TLB-1.6
Page 3

APR 16 1980

R... DISTRICT

RECEIVED APR 1980 Saint Johns River District

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

APPLICATION FOR CONSTRUCTION PERMIT
PUBLIC DRINKING WATER SYSTEM

INSTRUCTIONS: All of the application forms, including engineering plans and specifications, must be completed and submitted. For construction of facilities consisting solely of pumping and disinfection, Parts A, B, C, D, and E 2. (d) through (f), as well as engineering plans and specifications, must be completed and submitted. Submission of any false statement or representation in this application is a violation of the law.

System Name: Cape Orlando Estates County: Orange

System Address: Street 510 Maxim Parkway, Rt. 4 Box 56 City: Orlando, Florida 32820

Applicant's Name and Title: Econ Utilities Corporation

Applicant's Address: P.O. Box 2449, Pompano Beach, Florida 33061

Utility Supplying Water Name: Cape Orlando Estates

Utility Address: Same

Owner/Operator After Construction, if different: Same

Owner/Operator Address:

Type of Proposed Facility: Deep well, vertical turbine pump

To Serve: Subdivision
(Subdivision, school, trailer park, etc.)

A. Applicant:

I, the owner/authorized representative* of T.D. Williamson, Jr.

am fully aware that the statements made in this application for a permit to construct a deep well are true, correct and complete to the best of my knowledge and belief. Further, the undersigned agrees to maintain and operate the facility in such a manner as to comply with the provisions of Chapter 403, Florida Statutes, and all the rules and regulations of the department. The undersigned also understands that a permit, if granted by the department, will be non-transferable and will promptly notify the department upon sale or legal transfer of the permitted facility.

*Attach letter of authorization

Signed: [signature]
Owner/Authorized Representative

T.D. Williamson, Jr., President
Name and Title (Please Type)

Date: April 10, 1980 Telephone No. 305/971-9100

B. OWNER/AUTHORIZED REPRESENTATIVE OF UTILITY SUPPLYING WATER (if applicable)

The undersigned, owner/authorized representative* of ______ hereby certifies that the above reference utility has adequate reserve capacity to supply water to this project and will provide the necessary treatment as required by Chapter 403, Florida Statutes, and all rules and regulations of the department. Further, the undersigned verifies that his treatment plant is operating under a valid permit, No. ______ dated ______, issued by the department, and the connection of the proposed project will not be in violation of any condition of said permit.

*Attach letter of authorization

Signed: [signature]

T.D. Williamson, Jr., President
Name and Title (Please Type)

Date: April 10, 1080 Telephone No. 305/971-9100

NOTE TO ENGINEER & APPLICANT:

REFER TO CHAPTER 17-22 SECTION .107(2) FLORIDA ADMINISTRATIVE CODE REGARDING CERTIFICATION OF COMPLETION AND CLEARANCE REQUIREMENTS SUBSEQUENT TO CONSTRUCTION.

OWNER/OPERATOR* AFTER CONSTRUCTION (if different from applicant)

I, the undersigned, do certify that I will become the owner/operator of the proposed facility after construction. Further, I certify that I am fully aware that the statements made in this application are true, correct and complete to the best of my knowledge. Also, I agree to operate and maintain the facilities in such a manner as to comply with the provisions of Chapter 403, Florida Statutes, and all rules and regulations of the department. I understand the permit is non-transferable and will promptly notify the department upon sale or legal transfer of the permitted establishment.

*If signed by an authorized agent, attach letter of authorization.

Signed: _____

_____
Name and Title (Please Type)

Date: _____ Telephone No. _____

PROFESSIONAL ENGINEER REGISTERED IN FLORIDA

This is to certify that the engineering features of this public drinking water system have been designed/examined by me and found to be in conformity with modern engineering principles, applicable to the treatment and distribution of drinking water characterized in this application. There is reasonable assurance in my professional judgment that the facility, when constructed as planned and properly maintained and operated, will comply with all applicable statutes of the State of Florida and the rules and regulations of the department.

Signed: Michael J. Henry
Michael J. Henry, P.E.
Name (Please Type)
Reynolds, Smith and Hills
Company Name (Please Type)
P.O. Box 8006, Orlando, Florida 32856
Mailing Address (Please Type)

(Affix Seal)

Florida Registration No. 16040 Date: April 10, 1980 Telephone No. 305/851-0840

PART A – GENERAL

- Estimated total cost of project $25,000.00 Water Treatment $25,000.00
- Plant capacity increase (MGD) 0.36 Distribution N/A
- Previous permit number(s), if any WD 48-2008, October 18, 1978
- Present population (municipality, institution, etc.) Approximately 140
- Design population (additional served by this project) 970
- Per capita consumption 150 gpd
- Give any industrial users or abnormal demands: None
- Is plant designed for 24-hour operation or what portion? yes
- Give characteristics of raw water (attach chemical analysis) _____
- Give source proposed water 8" deep well
(deep well, shallow well, spring, surface)
- Sewage disposal Econ Utilities Corporation
(Name and address of sewerage utility)
- Purified water storage: Capacity present elevated N/A Ground 20,000 gal.
- Static head in relation to pumping plant 10 ft.
- Is this application associated with or part of a Development of Regional Impact (DRI) pursuant to Chapter 380, Florida Statutes, and Chapter 22F-2, Florida Administrative Code? _____ Yes X No

PART B – DISTRIBUTION SYSTEM

1. Interconnection with other system N/A
2. Min. size pipe _____ Residual pressure at peak load _____
3. Is fire control provided in design? _____
4. Describe dead-end conditions and necessity for flushing _____
5. Cross-connection control program _____

PART C – WELL SUPPLY

Existing Wells									
NUMBERS	#1								
SIZES	6"								
DEPTHS	365'								
PUMP (type)	Turbine								
CAPACITY	240 gpm								

Proposed Wells									
NUMBERS	#2								
SIZES	8"								
DEPTHS	350'								
PUMP (type)	Turbine								
CAPACITY	250 gpm								

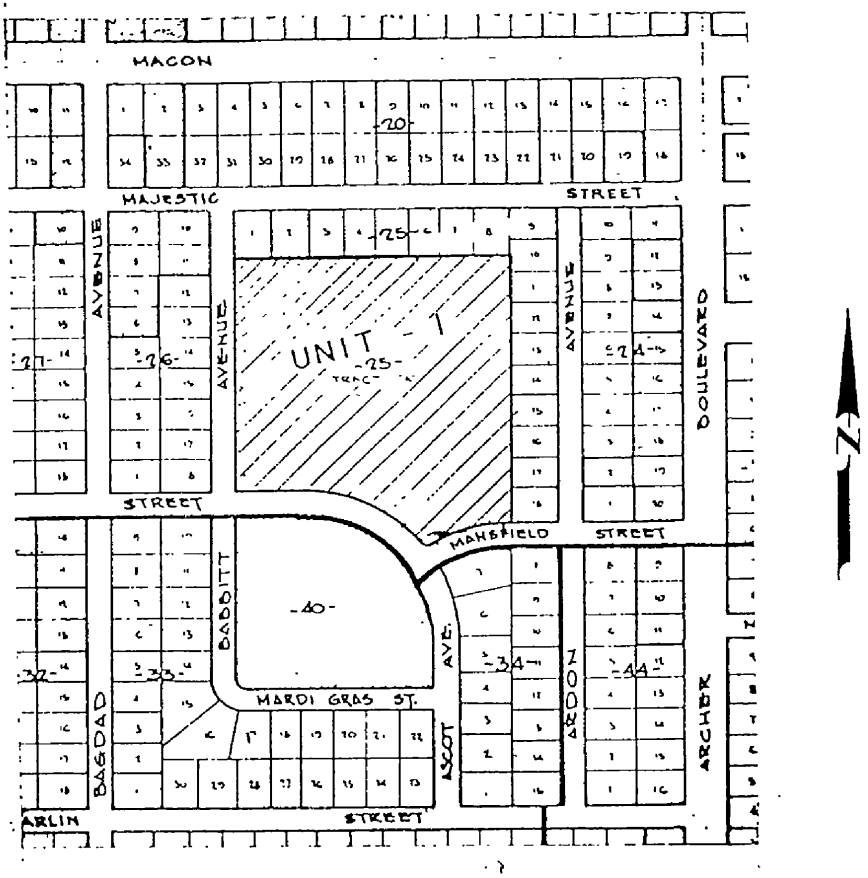
Type of construction Rotary Casing Black Steel

Give all geological data, including log of test wells or wells in vicinity (attach sheet)

Describe possible sources of contamination None (Closest sewerage-250 ft.)

PART D – SURFACE SUPPLIES

1. Name of stream, lake, or pond N/A
2. Show by attached map watershed, towns or communities above intake, industrial plants, and in immediate vicinity, farm house, picnic ground, abattoirs and other sources of pollution, with distance from intake. Locate intake on map.
3. Size of watershed in square miles _____ Est. Min. dry-weather flow at intake _____.
4. Basis of min. dry-weather flow estimate _____



LOCATION SKETCH
1" = 300'

SKETCH OF SURVEY

TRACT "A", ROCKET CITY UNIT 1,
AS RECORDED IN PLAT BOOK 2,
PAGE 30, ORANGE COUNTY, FLA.

PROPOSED SITE
WELL NO. 2
CAPE ORLANDO ESTATES

SPOT TOPO & WATER PLANT
LOCATION, CAPE ORLANDO ESTATES

SURVEYOR'S CERTIFICATION: We hereby certify that the attached "Sketch of Survey" of the above described property is true and correct to the best of our knowledge and belief as recently surveyed under our direction.

DONALD W. McINTOSH ASSOCIATES, INC.

Reg. Surveyor 3422 State of Florida

NOT VALID UNLESS SEALED

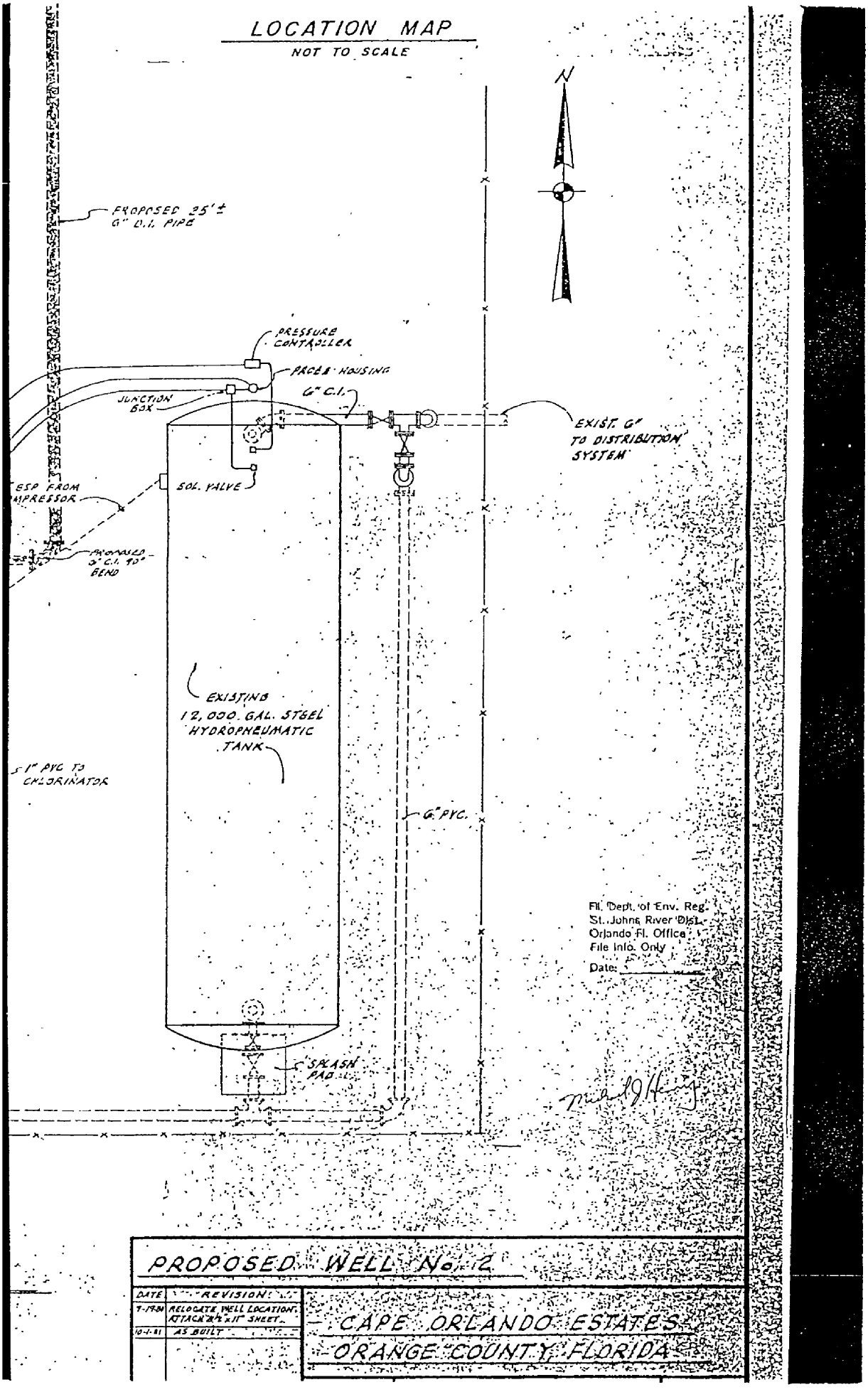
July 17, 1980

SMITH, AND HILLS

DONALD W. McINTOSH ASSOCIATES, INC.
ENGINEERS PLANNERS SURVEYORS
SUITE 104 329 WEST FAIRBANKS AVENUE WINTER PARK FLORIDA 32789-(305) 644-4068

LOCATION MAP

NOT TO SCALE

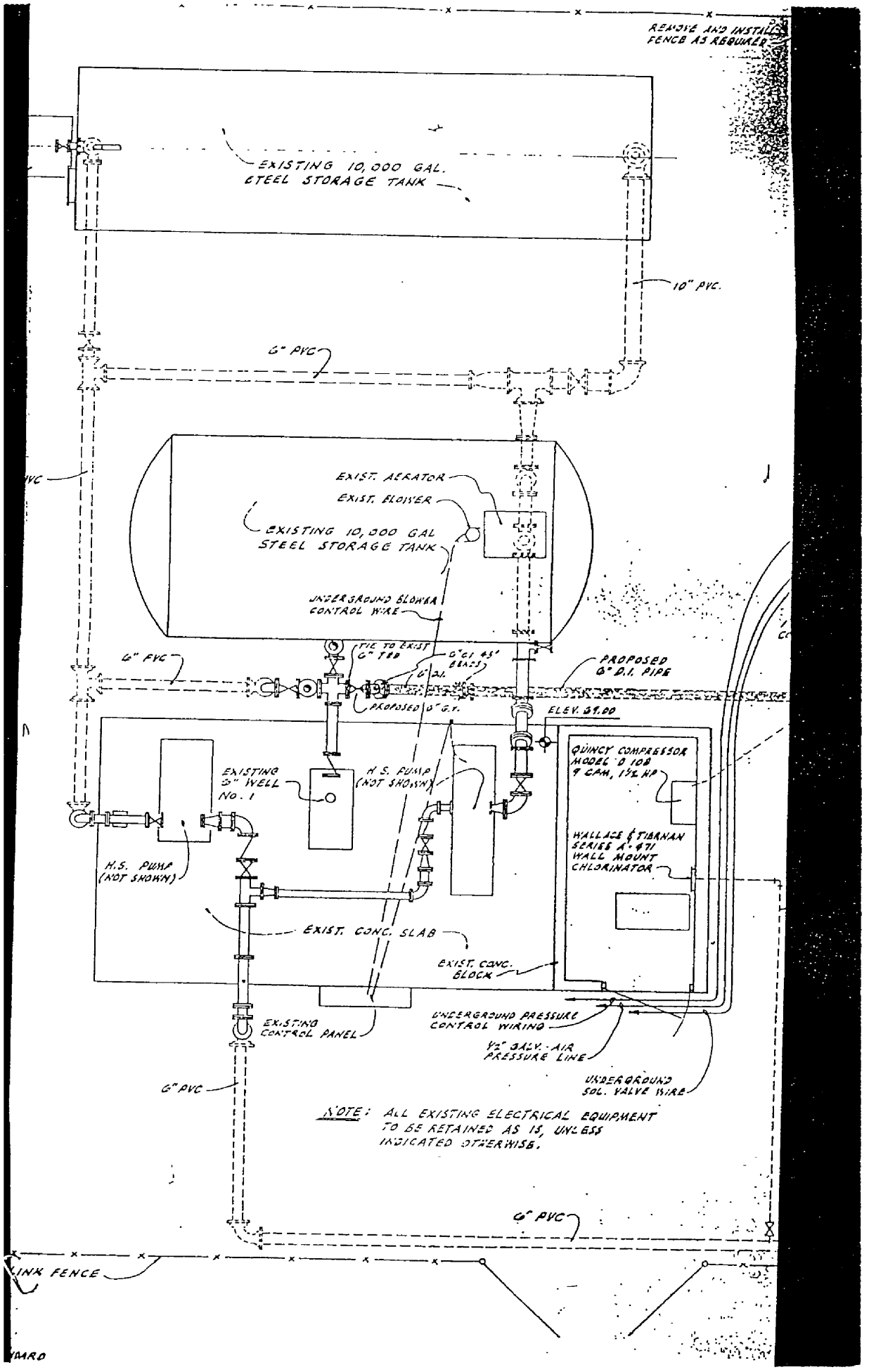


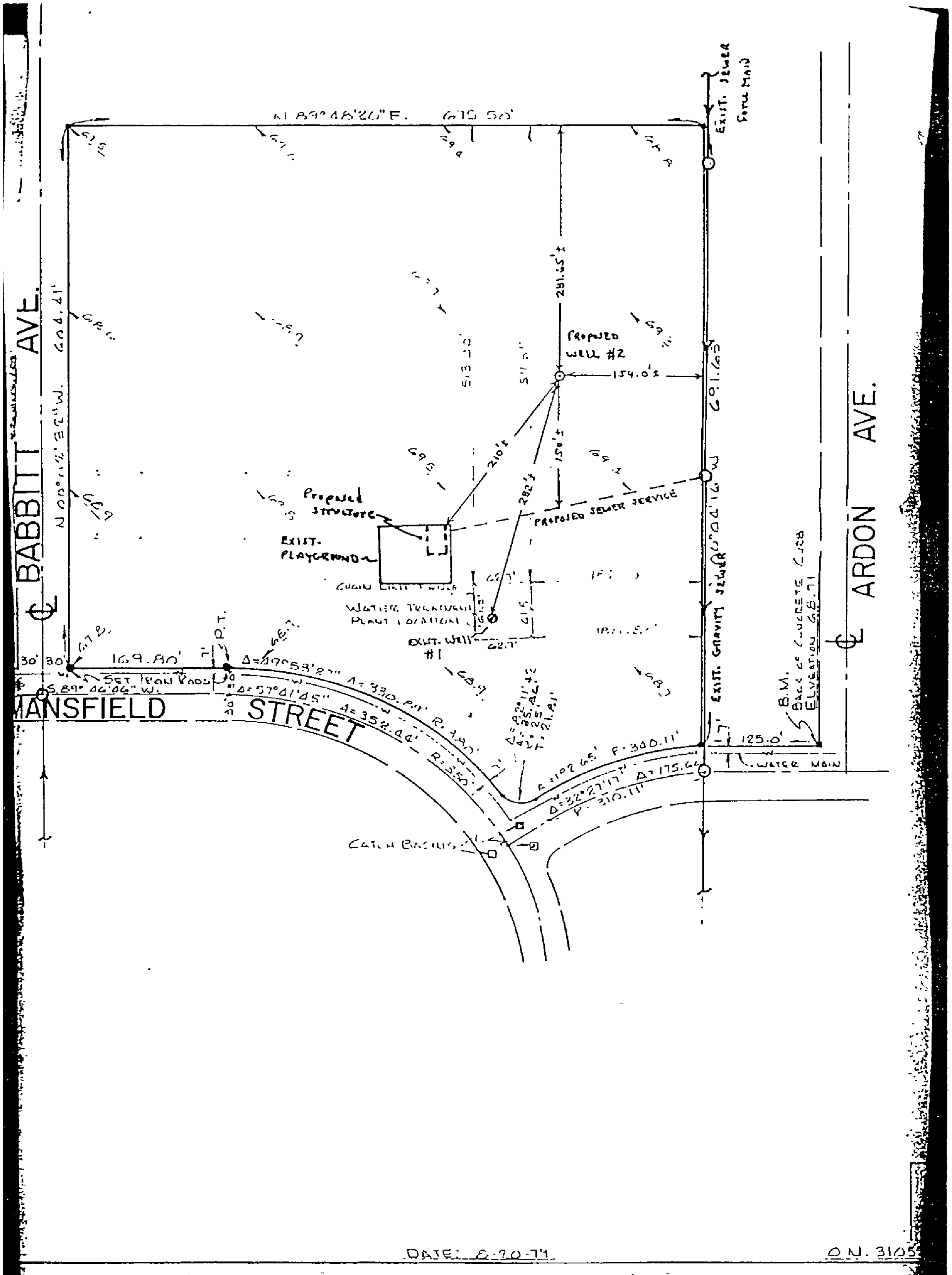
Fl. Dept. of Env. Reg.
St. Johns River Dist.
Orlando Fl. Office
File Info. Only
Date: _____

PROPOSED WELL No. 12

DATE	REVISION:
9-1-98	RELOCATE WELL LOCATION; ATTACH 24" x 11" SHEET.
10-1-01	AS BUILT

CAPE ORLANDO ESTATES
ORANGE COUNTY, FLORIDA


REMOVE AND INSTALL FENCE AS REQUIRED
EXISTING 10,000 GAL. STEEL STORAGE TANK
10" PVC.
6" PVC
EXIST. AERATOR
EXIST. BLOWER
EXISTING 10,000 GAL STEEL STORAGE TANK
UNDERGROUND BLOWER CONTROL WIRE
TIE TO EXIST 6" TEE
6" G.I. 45° BENDS
6" NIPPLE
PROPOSED 6" D.I. PIPE
PROPOSED 6" G.V.
ELEV. 59.00
QUINCY COMPRESSOR MODEL D 10B 9 CAM, 1½ HP
EXISTING 8" WELL NO. 1
H.S. PUMP (NOT SHOWN)
WALLACE & TIBANAN SERIES A-471 WALL MOUNT CHLORINATOR
EXIST. CONC. SLAB
EXIST. CONC. BLOCK
EXISTING CONTROL PANEL
UNDERGROUND PRESSURE CONTROL WIRING
½" GALV. AIR PRESSURE LINE
UNDERGROUND SOL. VALVE WIRE
NOTE: ALL EXISTING ELECTRICAL EQUIPMENT TO BE RETAINED AS IS, UNLESS INDICATED OTHERWISE.
LINK FENCE


BABBITT AVE.
ARDON AVE.
MANSFIELD STREET
Proposed Well #2
154.0'±
Proposed structure
Exist. Playground
Proposed sewer service
Water Treatment Plant Location
Exist. Well #1
Exist. Gravity Sewer
Exist. Sewer Force Main
Water Main
125.0'
169.80'
Set Iron Rods
Catch Basins
DATE: 6-20-79
O.N. 3105

ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
Route 2, Box 695
Palatka, Florida 32077
Telephone (904) 325-5383

PERMIT

ST. JOHNS RIVER
WATER MANAGEMENT DISTRICT
PUBLIC WATER SUPPLY WELL CONSTRUCTION PERMIT
FOR

Cape Orlando Estates

Mansfield Street

Orlando, Florida 32820
ORANGE COUNTY WSW

PERMIT NO. 3-095-0034 DATE OF ISSUANCE April 11, 1980

DATE OF EXPIRATION October 11, 1980

Pursuant to the provisions of Chapter 16I-3, Florida Administrative Code, and Application No. 3-4654, this permit is issued to:

Joseph E. Phillips License No. 2093

For the construction of the following;

8" Public Supply Well

Rotary method of drilling, with steel A53 Grade B casing material

LOCATED AT: Mansfield Street

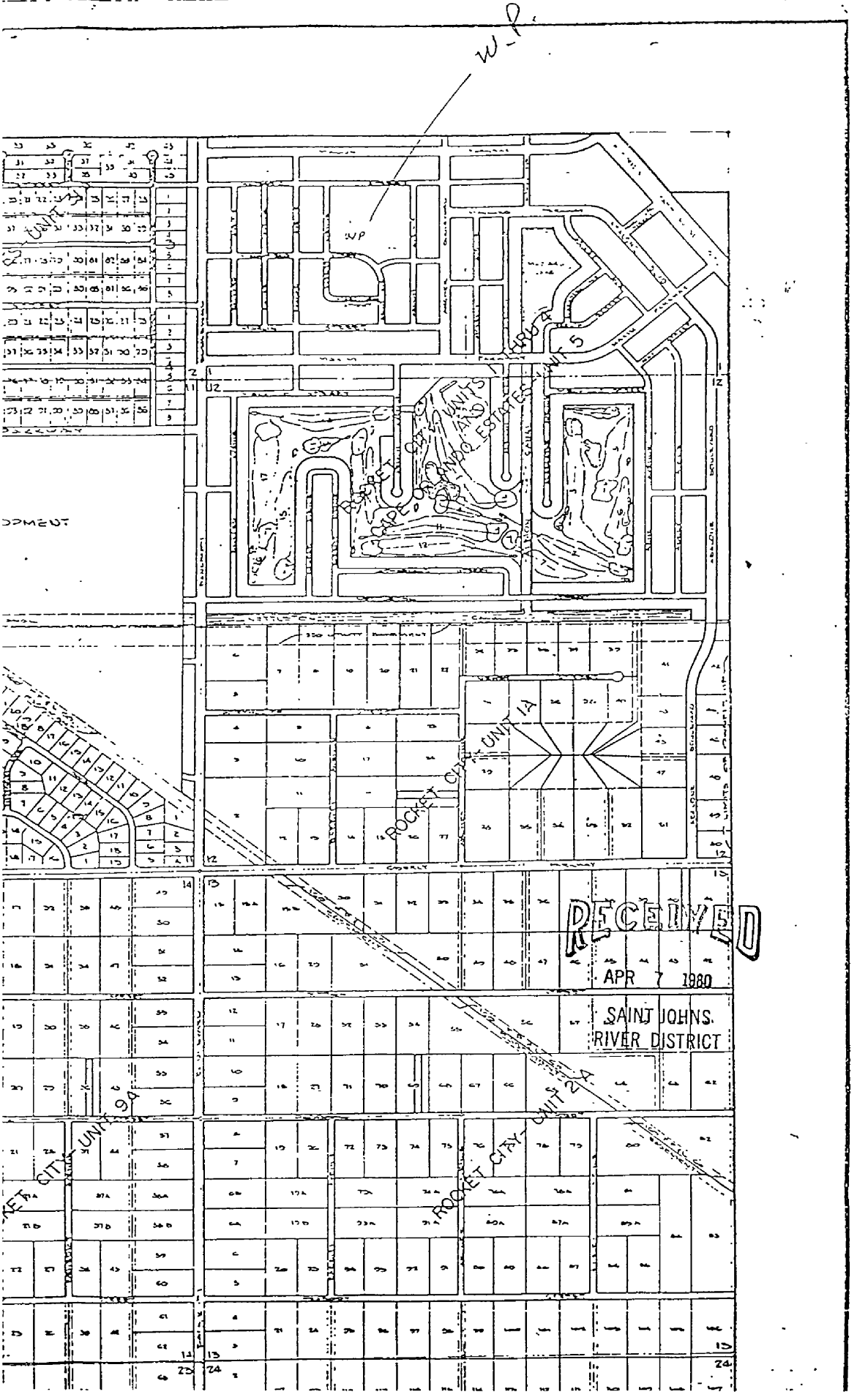
Section1 Township 23 Range 32 E in Orange County

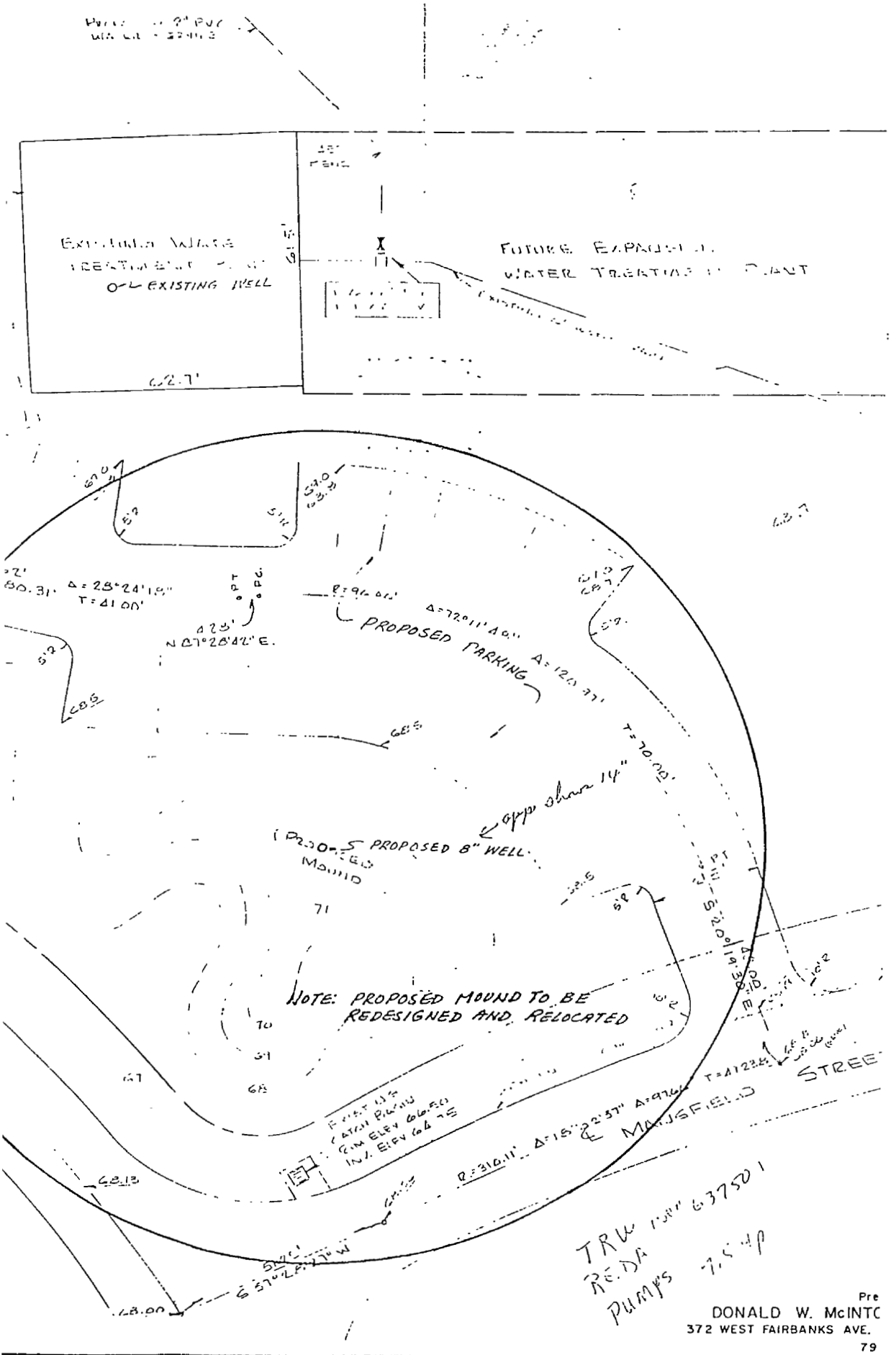
In accordance with the application Dated: April 1, 1980

Permission for construction of this well is granted in accordance with the Rules and Regulations of St. Johns River Water Management District and subject to conditions set forth on the reverse of this permit. Failure to comply with said provisions shall constitute a violation of this permit and shall subject the applicant to such civil and criminal penalties as provided by law. All drilling shall be performed within 6 months of issuance date and a copy of the well log will be submitted to this office within 30 days after drilling operations cease. In the event construction or repair is not completed within this time, an extension may be obtained upon written request by the permittee. This permit does not imply allocation of water. approval of sewage or other waste disposal facilities, or of water supply and other facilities in the area to be supplied by the well.

GRANTED BY: Bob Morris

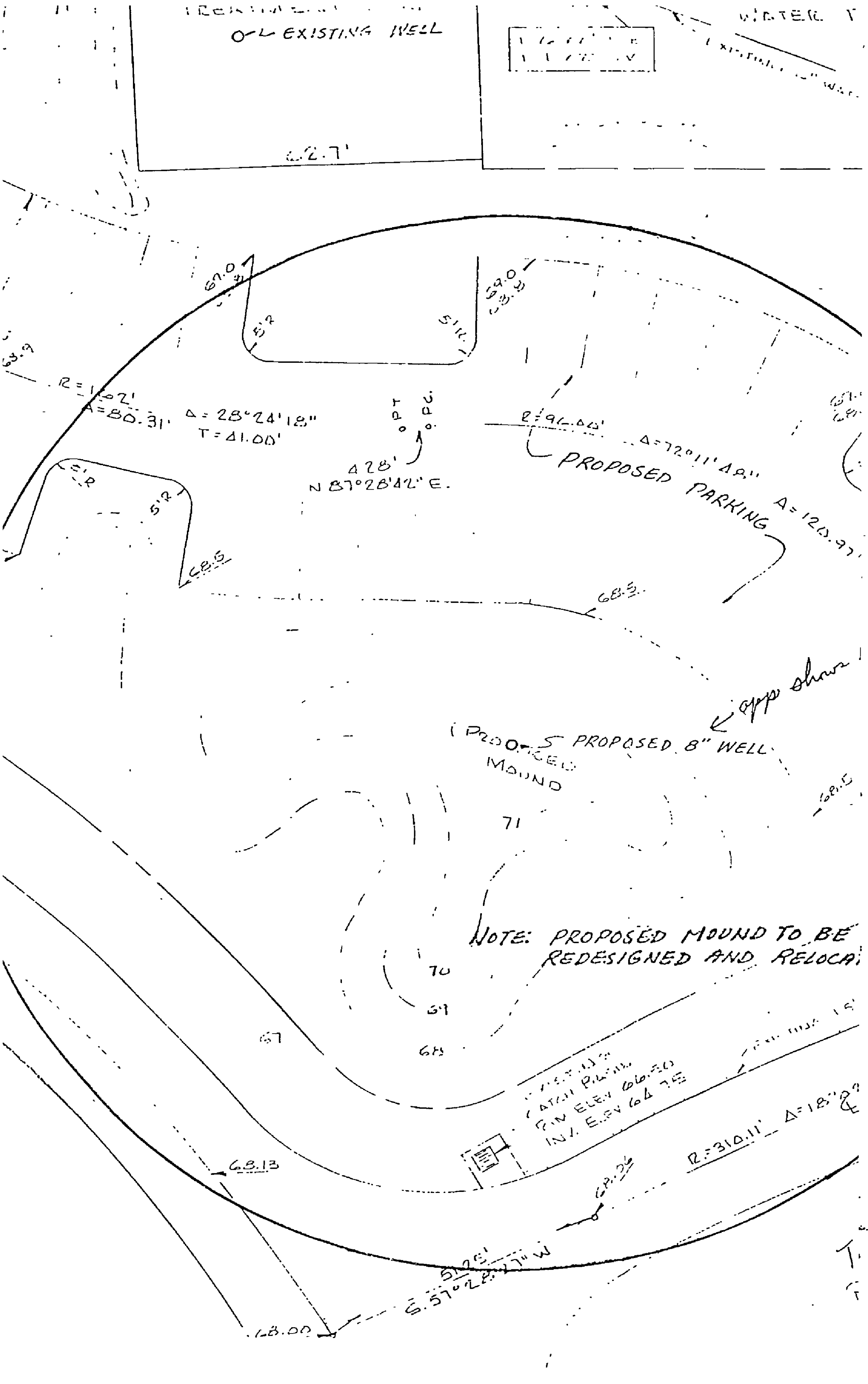
TITLE: Director, Resource Management


W.P.
WP
CAPE ORLANDO ESTATES UNITS 1 AND 2
ROCKET CITY UNIT 5
ROCKET CITY UNIT 1A
ROCKET CITY UNIT 2A
ROCKET CITY UNIT 9A
RECEIVED
APR 7 1980
SAINT JOHNS
RIVER DISTRICT

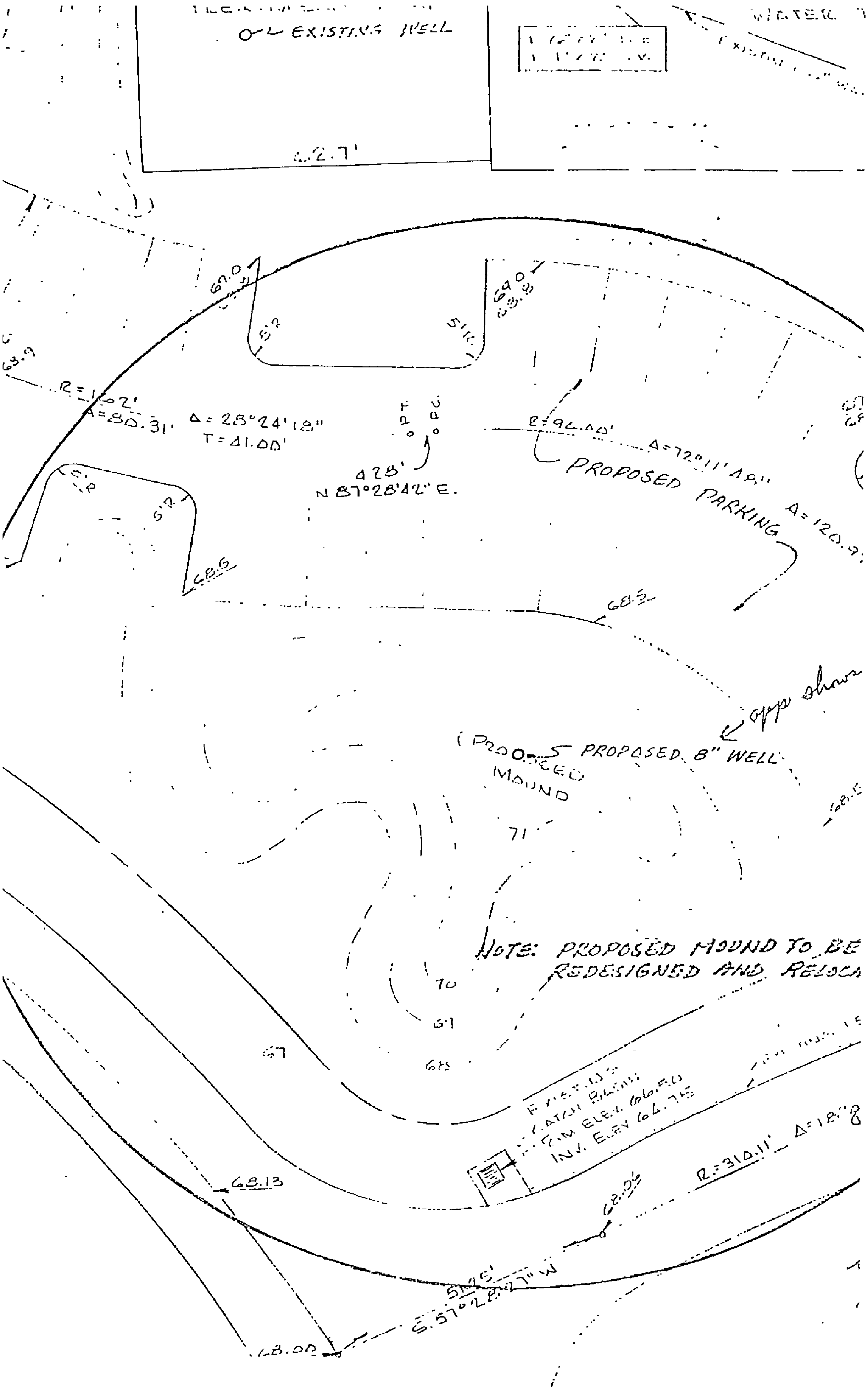


Pre
DONALD W. McINTC
372 WEST FAIRBANKS AVE.

Docket No. 991437-WU
Exhibit TLB-1 6
Page 13



Docket No. 991437-WU
Exhibit TLB-1.6
Page 14



Docket No. 991437-WU
Exhibit TLB-1.6
Page 1 5

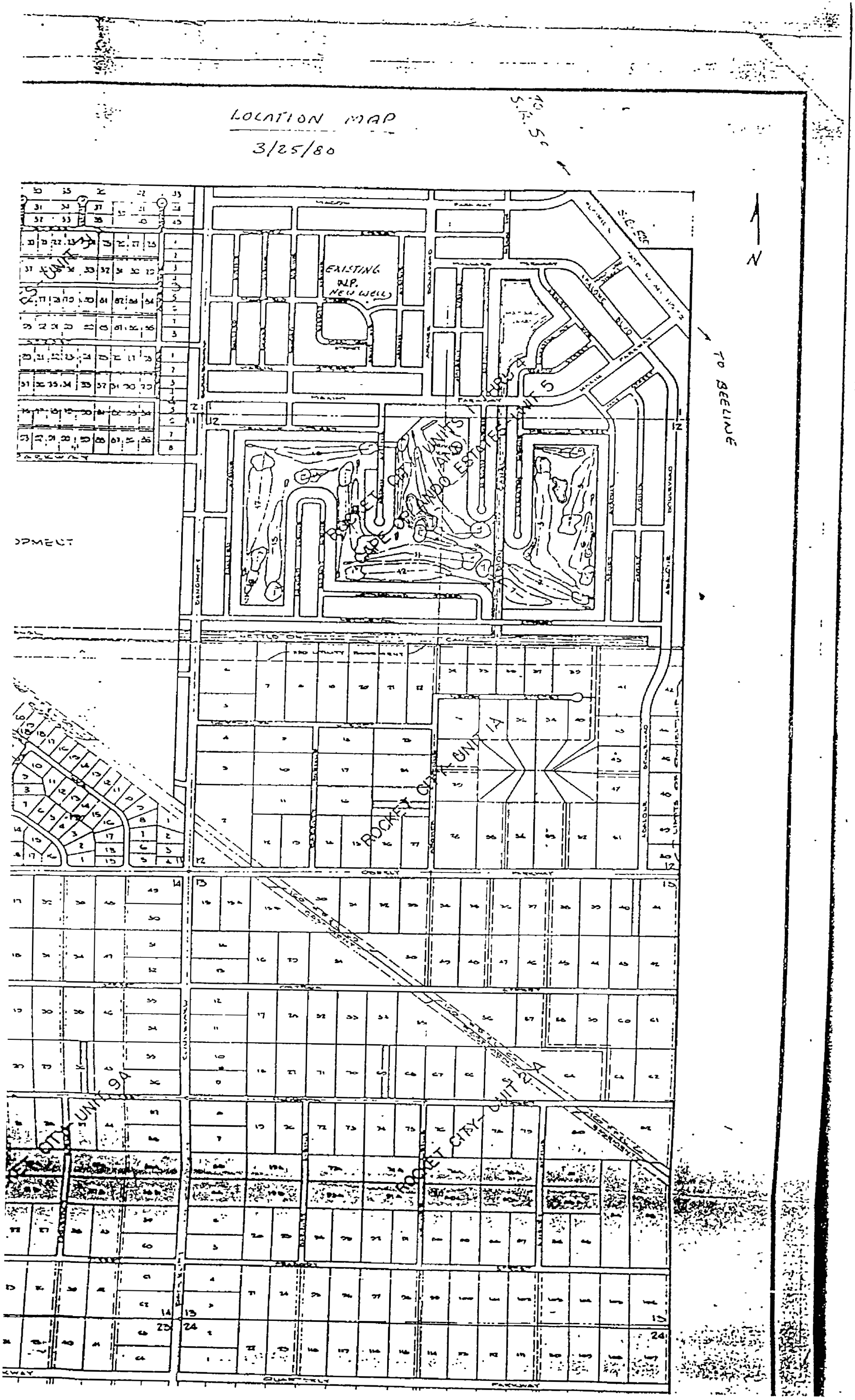


Exhibit TLB-1.7
Docket No. 991437-WU

ECON PERMIT OF 11/19/84 FOR ION EXCHANGE SOFTENER & LIME

EXHIBIT TLB-1.7

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

Docket No. 991437-WU
Exhibit TLB-1.7
Page 1

JOHNS RIVER
TRICT
MAGUIRE BOULEVARD
E 232
NDO, FLORIDA 32803

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

ALEX SENKEVICH
DISTRICT MANAGER

SEP 07 1984
SAINT JOHNS
RIVER DISTRICT

RECEIVED
SEP 1984
Saint Johns River District

APPLICATION TO CONSTRUCT A PUBLIC DRINKING WATER SYSTEM

INSTRUCTIONS: All of the application forms, including engineering plans and specifications, must be completed and submitted. For construction of facilities consisting solely of pumping and disinfection, Parts A, B, C, D, and E 1 and 2, (d) through (f), as well as engineering plans and specifications, must be completed and submitted. When using this form for distribution systems alone, only Part B and applicable sections of Part A need to be completed. Submission of any false statement or representation in this application is a violation of the law. Attach additional sheets as necessary.

System Name: WEDGEFIELD(CAPE ORLANDO ESTATES) County: ORANGE

System Address: Street MANSFIELD STREET City: CAPE ORLANDO ESTATE

Applicant's Name and Title: RALPH A. LOPEZ, P.E., AUTHORIZED REPRESENTATIVE

Applicant's Address: 2200 PARK AVENUE NORTH, WINTER PARK, FL 32789

Utility Supplying Water: Name: ECON UTILITIES CORPORATION

Utility Address: 20550 MAXIM PARKWAY, ORLANDO, FL 32820

Owner/Operator After Construction, if different:

Owner/Operator Address:

Type of Proposed Facility: ION EXCHANGE SYSTEM

Latitude 28° 30' 00" N Longitude 81° 04' 30" W

APPROVED
WC 48 2008A
WATER PLANT
MODIFICATIONS
Date: NOV 19 1984
To Serve: SUBDIVISION
(Subdivision, trailer park, school, etc.)
STATE OF FLORIDA

Applicant:

I, the ~~owner~~/authorized representative* of ECON UTILITIES CORPORATION am fully aware that the statements made in this application for a permit to construct an ION EXCHANGE SYSTEM are true, correct and complete to the best of my knowledge and belief. Further, the undersigned agrees to maintain and operate the facility in such a manner as to comply with the provisions of Chapter 403, Florida Statutes, and all the rules of the department. The undersigned also understands that a permit, if granted by the department, will be non-transferable and will promptly notify the department upon sale or legal transfer of the permitted facility. The undersigned also accepts responsibility for retaining the project engineer as indicated on this application to observe that construction of the project is in accordance with engineering plans as submitted.

*Attach letter of authorization.

Signed: _____
~~Owner~~/Authorized Representative

RALPH A. LOPEZ, P.E.
Name and Title (Please type)

Date: 9/6/84 Telephone No. (305)644-4068

Form 17-1.208(1)
Effective November 30, 1982

Owner/Authorized Representative of Utility Supplying Water (if applicable)

The undersigned, owner/authorized representative* of _____ hereby certifies that the above reference utility has adequate reserve capacity to supply water to this project and will provide the necessary treatment as required by Chapter 403, Florida Statutes, and all rules of the department. Further, the undersigned verifies that his treatment plant was constructed under a valid permit, Number _____ dated _____ issued by the department, and the connection of the proposed project will not be in violation of any condition of said permit.

*Attach letter of authorization

Signed: _____

_____
Name and Title (Please Type)

Date: _____ Phone No.: _____

Owner/Operator* After Construction (if different from applicant)

I, the undersigned, do certify that I will become the owner/operator of the proposed facility after construction. Further, I certify that I am fully aware that the statements made in this application are true, correct and complete to the best of my knowledge. Also, I agree to operate and maintain the facilities in such a manner as to comply with the provisions of Chapter 403, Florida Statutes, and all rules of the department. I understand the permit is non-transferable and will promptly notify the department upon sale or legal transfer of the permitted establishment.

*Attach letter of authorization

Signed: _____

_____
Name and Title (Please Type)

Date: _____ Phone No. _____

Professional Engineer Registered in Florida

This is to certify that the engineering features of this public drinking water system have been designed/examined by me and found to be in conformity with modern engineering principles, applicable to the treatment and distribution of drinking water characterized in this application. There is reasonable assurance in my professional judgment that the facility, when constructed as planned and properly maintained and operated, will comply with all applicable statutes of the State of Florida and the rules of the department.

Signed: _____

RALPH A. LOPEZ, P.E., VICE PRESIDENT
Name (Please Type)

(Affix Seal)

DONALD W. McINTOSH ASSOCIATES, INC.
Company Name (Please Type)

2200 PARK AVE. NORTH, WINTER PARK, FL 32789
Mailing Address (Please Type)

Florida Registration No. 12274 Date: 9/6/84 Phone No. (305) 644-4068

PART A - GENERAL

Estimated total cost of project $30,000 Describe all water treatment ION EXCHANGE SOFTENING AND LIME ADDITION

Existing plant capacity (MGD) 0.86 Plant capacity increase (MGD) 0

Previous DER permit number(s), if any WC48-2008

Present population of area served 156 (52 HOMES) Per capita consumption _____

Design population (additional served by this project) NONE

Total ERC's* served _____ Total ERC's approved 579

Additional ERC's _____ [ERC (Equivalent Residential Connection) = 3.5 persons]

Give any industrial users of abnormal demands NONE

Current system water demand, in MGD (from plant operation report)

Average day 0.04 Maximum day _____ Maximum hour (GPM) _____

Additional water demand, MGD: Avg. day _____ Max. day _____ Max. Hr. (GPM) _____

Is plant designed for 24-hour operation or what portion? YES

Give characteristics of raw water (attach chemical analysis) ATTACHED

Give source proposed water (deep well, shallow well, spring, surface) N/A

Sewage disposal ECON UTILITIES CORPORATION
(Name and Address of sewerage utility)

Finished water storage: Elevated _____ Ground 20,000 GAL

Existing Capacity 20,000 GAL Capacity Increase 0

Existing service pump capacity (MGD) 1.07 Additional service pump cap. (MGD) 0

Static head in relation to pumping plant 92 TO 139 FEET

Well permit from water management district? Yes ___ Permit No. _____

No X Explain CONSUMPTIVE USE PERMIT FOR EXISTING WELLS IS CURRENTLY BEING APPLIED FOR.

PART B - DISTRIBUTION SYSTEM

Interconnection with other system NONE

Minimum size pipe 4" Maximum size pipe 14" Minimum system pressure 25 PSI

Maximum system pressure 60 PSI

Is fire control provided in design? YES

Describe dead-end conditions and necessity for flushing including number of such conditions and flushing schedule ONE 1200' DEAD END LINE WITH BLOW OFF; WEEKLY FLUSHING.

Describe cross-connection control program _____

Describe corrosion control program as necessary _____

Water demand for additional connections (MGD) _____

Number of each type of additional connections (residential, commercial, agricultural, industrial) to be served _____

PART C - WELL SUPPLY

Existing Wells

l Identification	#1	#2						
e of Casing	6"	8"						
th of Casing	225'	250'						
th of Well	360'	350'						
p (type)	VT	VT						
p Capacity (GPM)	200	400						

Proposed Wells

l Identification								
e of Casing								
th of Casing								
th of Well								
p (type)								
p Capacity (GPM)								

of well construction CABLE DRILLED

g material STEEL Aquifer FLORIDAN

all geological data, including log of test wells or wells in vicinity. NO OTHER WELLS

ibe possible sources of contamination (particularly those within 100' of well). NONE

PART D - SURFACE SUPPLIES

Name of stream, lake, or pond _____

Show by attached map watershed, towns or communities above intake, industrial plants, and in immediate vicinity, farm house, picnic ground, abattoirs and other sources of pollution, with distance from intake. Locate intake on map.

Size of watershed in square miles_____

Est. Min. dry-weather flow intake_____

Basis of min. dry-weather flow estimate_____

	Existing Raw Water Pumps			Proposed Raw Water Pumps		
pe						
pacity						
ction Head						
scharge Head						

PART E - TREATMENT PLANT

Type of treatment:

a) Pumping and disinfection YES b) Conventional floc and settling_____

c) Upflow_____ d) Demineralization (type)_____ e) Other ION EXCHANGE

Design details:

a) Emergency intake_____ bypass of raw water YES

b) Aeration: type MULTIPLE TRAY max. design rate 600 GPM detention_____

orifices_____ number of trays_____ loss of head_____

c) Service pumps: existing (no. & cap.) 1-600 GPM; 1-140 GPM

proposed (no. & cap.)_____

d) Disinfection: type disinfectant CHLORINE GAS

type, make, capacity and number of feeders SOLUTION; W&T; 100 PPD; TWO

e) Auxiliary power 6" WELL PUMP AND 140 GPM SERVICE PUMP HAVE GASOLINE ENGINES

f) Metering device and location TURBINE METER; DOWNSTREAM OF SERVICE PUMPS

g) Mixing chamber (conventional): type_____

dimensions_____ capacity_____ detention_____

velocity (at maximum design rate)_____ Allowable head: total_____

per baffle_____ Mechanical agitator: size blade_____

motor_____ peripheral speed_____ bypass_____

drainage _____

h) Coagulating basins (conventional):_____

Exhibit TLB-1.8
Docket No. 991437-WU

ECON PERMIT OF 9/28/87 FOR 350,000 GAL. STORAGE TANK AND 2,000 GPM ROOF MOUNTED AERATOR

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

CENTRAL FLORIDA DISTRICT
3319 MAGUIRE BOULEVARD
SUITE 232
ORLANDO, FLORIDA 32803-3767

Permittee:
Econ Utilities Corporation
20751 State Road 520
Orlando, FL 32820

Attn: Robert B. Root, Vice Pres.

I. D. Number:
Permit/Certification
Number: WC48-2008B
Date of Issue:
Expiration Date: 03/01/87
County: Orange
Project: Wedgefield Water Treatment Plant Modifications

This permit is issued under the provisions of Chapter(s) 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-22. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

Modifications to the Wedgefield water plant including a new 350,000 gallon ground storage tank with 2,000 gpm aerator. The project is located on the west side of State Road 520 south of State Road 50.

General Conditions 1 through 15 are attached to be distributed to the permittee only.

1/29/87

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REG

JTHEAST FLORIDA
TRICT
G N CLUB ROAD
BOX 3858
T PALM BEACH, FLORIDA 33402

PAID
JUL 17 1987

CENTRAL FLORIDA
DISTRICT

JUL 1987
RECEIVED
Central Florida
District

Docket No. 991437-WU
Exhibit TLB-1.8
Page 2

APPLICATION TO CONSTRUCT A PUBLIC DRINKING WATER SYSTEM

NSTRUCTIONS: All of the application forms, including engineering plans and specifications, must be completed and submitted. For construction of facilities consisting solely of pumping and disinfection, Parts A, B, C, D, and E 1 and 2, (d) through (f), as well as engineering plans and specifications, must be completed and submitted. When using this form for distribution systems alone, only Part B and applicable sections of Part A need to be completed. Submission of any false statement or representation in this application is a violation of the law. Attach additional sheets as necessary.

System Name: Wedgefield (Cape Orlando Estates) County: Orange

System Address: Street Mansfield Street City: Cape Orlando Estate

Applicant's Name and Title: Charles H. True, P.E. - Authorized representative

Applicant's Address: Donald W. McIntosh Assoc., Inc., 2200 Park Avenue North, Winter Park, FL 32789

Utility Supplying Water: Name: Econ Utilities Corp.

Utility Address: 20550 Maxim Parkway, Orlando, FL 32820

Owner/Operator After Construction, if different:

Owner/Operator Address:

Type of Proposed Facility: Ground storage tank To Serve: Subdivision (Subdivision, trailer park, school, etc.)

Latitude 28 ° 30 ' 00 "N Longitude 81 ° 04 ' 30 "W

A. Applicant:

I, the ~~xxxxx~~/authorized representative* of Econ Utilities Corp. am fully aware that the statements made in this application for a permit to construct a ground storage tank are true, correct and complete to the best of my knowledge and belief. Further, the undersigned agrees to maintain and operate the facility in such a manner as to comply with the provisions of Chapter 403, Florida Statutes, and all the rules of the department. The undersigned also understands that a permit, if granted by the department, will be non-transferable and will promptly notify the department upon sale or legal transfer of the permitted facility. The undersigned also accepts responsibility for retaining the project engineer as indicated on this application to observe that construction of the project is in accordance with engineering plans as submitted.

*Attach letter of authorization

WC48 2008B
WATER PLANT
MODIFICATIONS
SEP 28 1987

Signed: _____
~~xxxxx~~/Authorized Representative
DONALD W. McINTOSH ASSOCIATES, INC.
Charles H. True, P.E., Senior Vice President
Name and Title (Please type)

Date: 7/14/87 Telephone No. (305) 644-4068

DER Form 17-1.208(1) JP 6
Effective November 30, 1982

Owner/Authorized Representative of Utility Supplying Water (if applicable)

The undersigned, owner/authorized representative* of _____ hereby certifies that the above reference utility has adequate reserve capacity to supply water to this project and will provide the necessary treatment as required by Chapter 403, Florida Statutes, and all rules of the department. Further, the undersigned verifies that his treatment plant was constructed under a valid permit, Number _____ dated _____ issued by the department, and the connection of the proposed project will not be in violation of any condition of said permit.

*Attach letter of authorization

Signed: _____

_____
Name and Title (Please Type)

Date: _____ Phone No.: _____

Owner/Operator* After Construction (if different from applicant)

I, the undersigned, do certify that I will becomes the owner/operator of the proposed facility after construction. Further, I certify that I am fully aware that the statements made in this application are true, correct and complete to the best of my knowledge. Also, I agree to operate and maintain the facilities in such a manner as to comply with the provisions of Chapter 403, Florida Statutes, and all rules of the department. I understand the permit is non-transferable and will promptly notify the department upon sale or legal transfer of the permitted establishment.

*Attach letter of authorization

Signed: _____

_____
Name and Title (Please Type)

Date: _____ Phone No. _____

Professional Engineer Registered in Florida

This is to certify that the engineering features of this public drinking water system have been designed/examined by me and found to be in conformity with modern engineering principles, applicable to the treatment and distribution of drinking water characterized in this application. There is reasonable assurance in my professional judgment that the facility, when constructed as planned and properly maintained and operated, will comply with all applicable statutes of the State of Florida and the rules of the department.

Signed: _____

Charles H. True, P.E.
Name (Please Type)

(Affix Seal)

Donald W. McIntosh Associates, Inc.
Company Name (Please Type)

2200 Park Avenue North
Winter Park, FL 32789
Mailing Address (Please Type)

Florida Registration No. 9703 Date: 7/14/87 Phone No. (305) 644-4068

PART A - GENERAL

stimated total cost of project $160,000 Describe all water treatment 350,000 gal
und storage tank with 2,000 gpm roof mounted aerator

xisting plant capacity (MGD) 0.86 Plant capacity increase (MGD) 0

revious DER permit number(s), if any WC48-2008A

resent population of area served 969 (323 homes) Per capita consumption

esign population (additional served by this project) None

otal ERC's* served Total ERC's approved 579

dditional ERC's [ERC (Equivalent Residential Connection) = 3.5 persons]

ive any industrial users of abnormal demands None

urrent system water demand, in MGD (from plant operation report)

verage day 0.12 Maximum day 0.36 Maximum hour (GPM)

dditional water demand, MGD: Avg. day Max. day Max. Hr. (GPM)

s plant designed for 24-hour operation or what portion? Yes

ive characteristics of raw water (attach chemical analysis) Attached

ive source proposed water (deep well, shallow well, spring, surface) N/A

ewage disposal Econ Utilities Corporation
(Name and Address of sewerage utility)

inished water storage: Elevated Ground X

Existing Capacity 20,000 gal Capacity Increase 330,000 gal

xisting service pump capacity (MGD) 1.30 Additional service pump cap. (MGD) 0

tatic head in relation to pumping plant 92 to 139 feet

ell permit from water management district? Yes X Permit No. 2-095-0278A4

o ____ Explain

PART B - DISTRIBUTION SYSTEM

nterconnection with other system None

inimum size pipe 4" Maximum size pipe 14" Minimum system pressure 20 psi

aximum system pressure 60 psi

s fire control provided in design? Yes

escribe dead-end conditions and necessity for flushing including number of such
onditions and flushing schedule One 1200' dead end line with blowoff; weekly flushing

Describe cross-connection control program _____

Describe corrosion control program as necessary _____

Water demand for additional connections (MGD) _____

Number of each type of additional connections (residential, commercial, agricultural, industrial) to be served _____

PART C - WELL SUPPLY

Existing Wells

Identification	#1	#2						
of Casing	6"	8"						
h of Casing	225'	250'						
h of Well	360'	350'						
(type)	VT	VT						
Capacity (GPM)	200	400						

Proposed Wells

Identification								
of Casing								
h of Casing								
h of Well								
(type)								
Capacity (GPM)								

f well construction Cable drilled

material Steel Aquifer Floridan

ll geological data, including log of test wells or wells in vicinity. No other wells

e possible sources of contamination (particularly those within 100' of well). None

PART D - SURFACE SUPPLIES

me of stream, lake, or pond _____

ow by attached map watershed, towns or communities above intake, industrial plants, d in immediate vicinity, farm house, picnic ground, abattoirs and other sources of llution, with distance from intake. Locate intake on map.

m 17-1.208(1)
ve November 30, 1982

Size of watershed in square miles_____

Est. Min. dry-weather flow intake_____

Basis of min. dry-weather flow estimate_____

	Existing Raw Water Pumps			Proposed Raw Water Pumps		
city						
ion Head						
harge Head						

PART E - TREATMENT PLANT

Type of treatment:

a) Pumping and disinfection Yes b) Conventional floc and settling_____

c) Upflow_____ d) Demineralization (type)_____ e) Other Ion exchange

Design details:

a) Emergency intake_____ bypass of raw water Yes

b) Aeration: type multiple tray max. design rate 2,000 gpm detention_____

orifices_____ number of trays_____ loss of head_____

c) Service pumps: existing (no. & cap.) 1 - 600 gpm; 1 - 300 gpm

proposed (no. & cap.)_____

d) Disinfection: type disinfectant Chlorine gas

type, make, capacity and number of feeders Solution; W & T; 100 ppd; two

e) Auxiliary power Existing onsite emergency generator with automatic startup

f) Metering device and location Turbine meter; downstream of service pumps

g) Mixing chamber (conventional): type_____

dimensions_____ capacity_____ detention_____

velocity (at maximum design rate)_____ Allowable head: total_____

per baffle_____ Mechanical agitator: size blade_____

motor_____ peripheral speed_____ bypass_____

drainage _____

h) Coagulating basins (conventional):_____

capacity_____ detention time at maximum plant capacity_____

velocity _____ capacity of each compartment _____

Distribution flow: inlet devices_____ outlet devices_____

i) Suspended solids contact units (upflow)_____

ocess	Diameter	Capacity	Upflow rate	Detention period	Overflow Rate
ftening					
arification					

rks:_____

j) Chemical dosing devices (other type disinfecting): Four; slurry (two for alkali; two for polyphosphate)

Number of machines and type feeding: Alum_____ Lime _____

coagulant aid (Name) _____ Activated Carbon_____

recarbonation_____

number and size of solution tanks Two; 275 gal each

points of application Suction side of service pumps

size and kind of piping 3/4 inch polybutylene tubing

k) Filter units:

type, material, number units_____

areas, dimensions, capacity of each unit and for total plant_____

_____

wash troughs, number and shape_____

dimensions and distance above sand (top trough and top sand)_____

spacing (center to center)_____

max. travel suspended particles_____

filtering material: gravel (depth & size)_____

sand or other media (specify)_____

depth of bed_____ mean effective size (in mm.)_____

uniformity coefficient_____

filter bottom: type_____

ratio total area of perforations to sand area_____

laterals: size and spacing on manifold_____

perforations: size and spacing on laterals_____

on manifold_____

ratio: total area perforations to total cross-sectional area of laterals_____

manifold size and cross-sectional area_____

backwash pump(s): type and design rate_____

depth water on sand: maximum_____ minimum_____ average_____

wash tank capacity_____

Appurtenances: loss of head gauges_____ rate of flow gauges_____

rate controllers_____

Clear well: location_____ capacity_____ dimensions_____

l) Laboratory: room and bench space (areas)_____

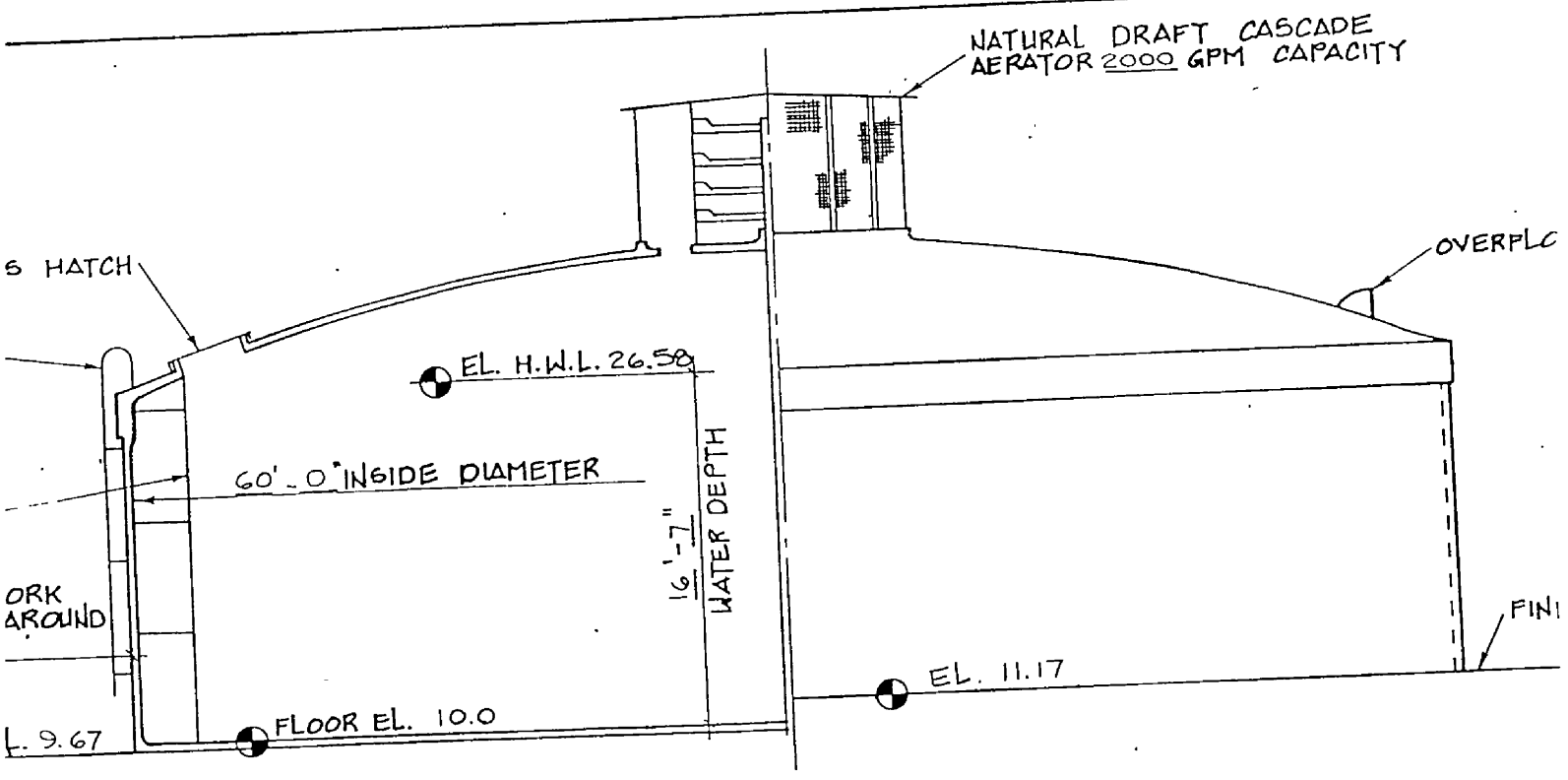
scope of tests provided for_____

m) Bypass to plant_____ emergency intake_____

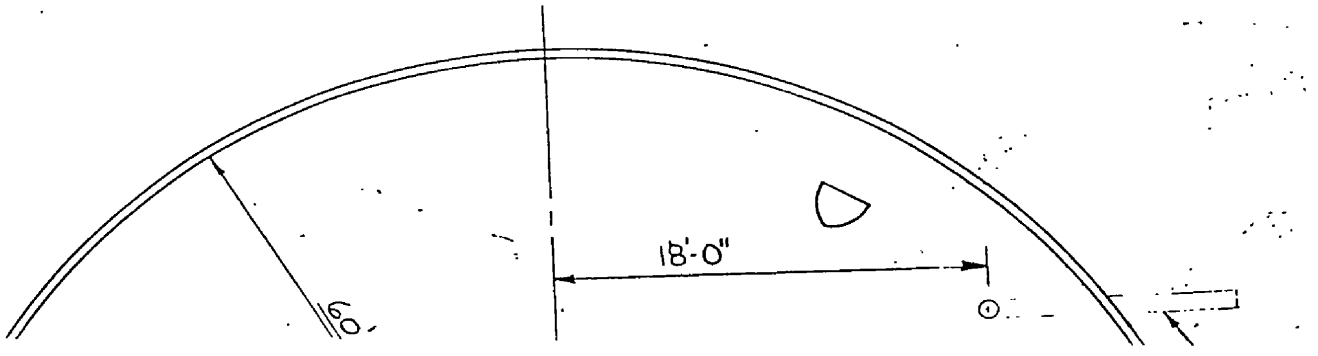
n) List type and capacities of emergency well and service pumping units_____

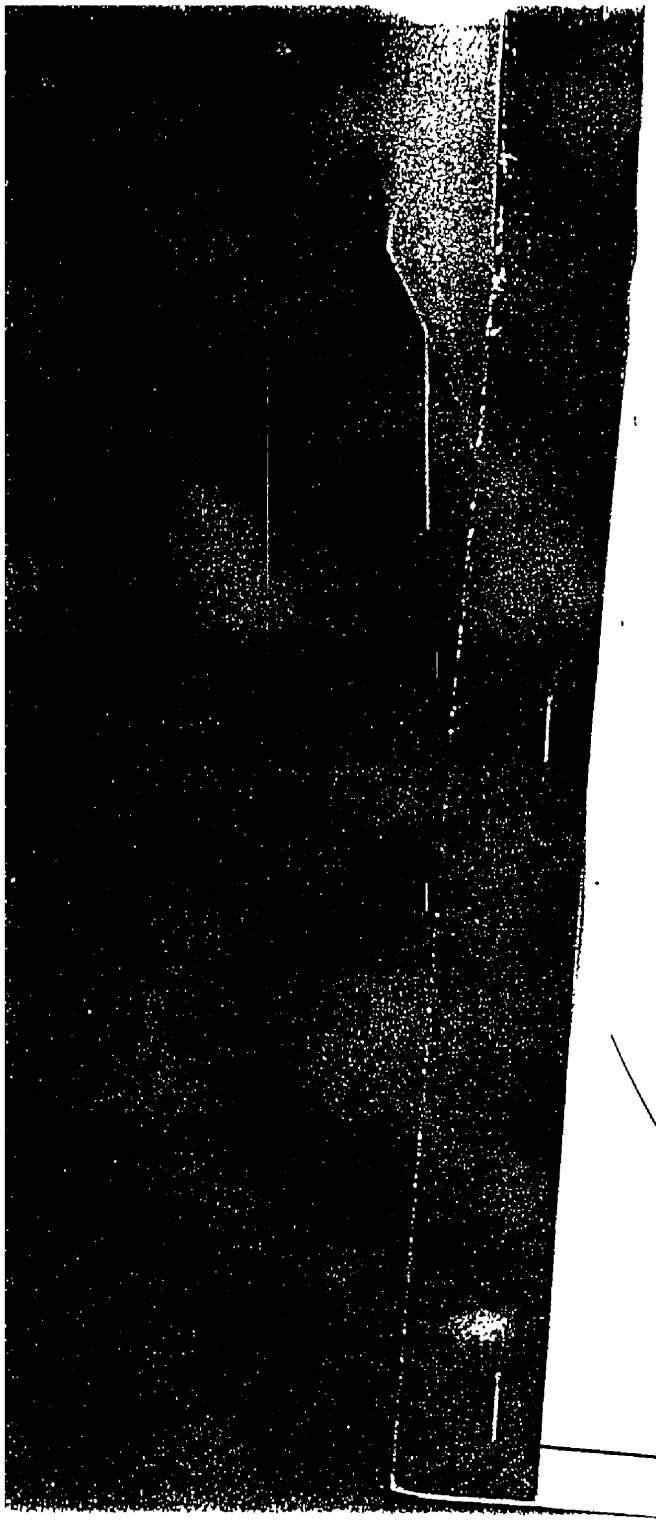
_____

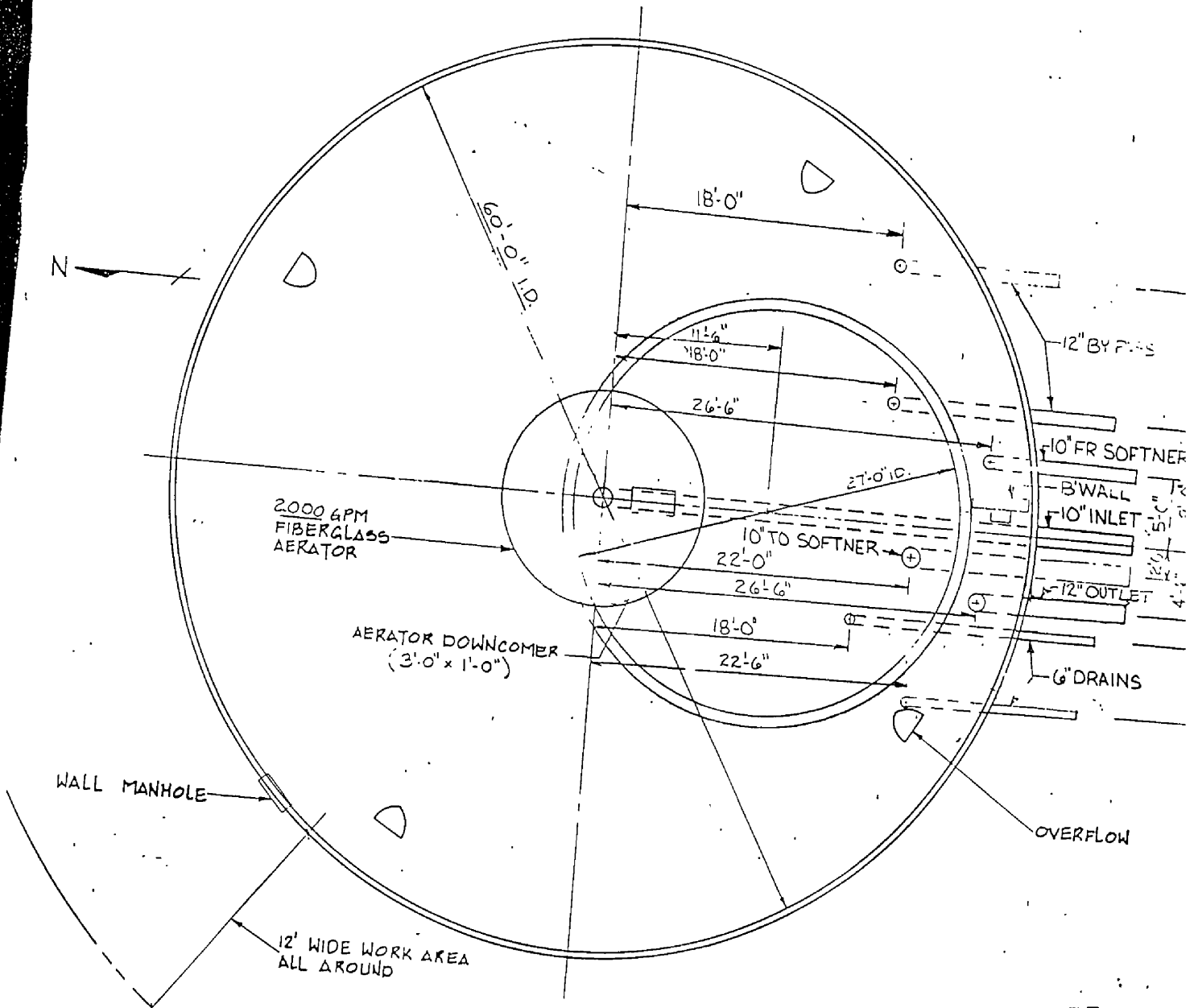
o) Attach schematic diagram, plans and specifications showing pump(s), pipe sizes, valves, etc.



SECTION ELEVATION






N
60'-0" I.D.
18'-0"
11'-6"
18'-0"
26'-6"
27'-0" I.D.
12" BY PASS
10" FR SOFTNER
B'WALL
10" INLET
10" TO SOFTNER
22'-0"
26'-6"
12" OUTLET
18'-0"
22'-6"
6" DRAINS
2000 GPM
FIBERGLASS
AERATOR
AERATOR DOWNCOMER
(3'-0" x 1'-0")
WALL MANHOLE
OVERFLOW
12' WIDE WORK AREA
ALL AROUND

PLAN

N.T.S.

Exhibit TLB-1.9
Docket No. 991437-WU

ECON PERMIT OF 7/15/88 FOR THREE NEW ION EXCHANGE SOFTENERS AND HIGH SERVICE PUMPS

Enforcement
EXHIBIT TLB-1.9

ERTIFIED
937 425 389

Docket No. 991437-WU
Exhibit TLB-1.9
Page 1

JUN 16 1988
ENFORCEMENT

INTENT TO ISSUE
BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

n the Matter of an
pplication for Permit by:
con Utilities Corporation /
0751 S.R. 520 /
rlando, FL 32820 /
ttention: Robert B. Root /

Orange County - MW
Wedgefield Water Treatment Plant
Expansion
DER File No. 146006

INTENT TO ISSUE

The Division of Environmental Permitting hereby gives notice of its ıtent to issue a permit (copy attached) for the proposed project as detailed ı the application specified above. The Division is issuing this Intent to ;sue for the reasons stated below.

The applicant, Econ Utilities Corporation, applied on March 1, 1988 to ıe Department of Environmental Regulation for a permit to upgrade the :isting Wedgefield water plant located in the Wedgefield Subdivision west of .ate Road 520 in Orange County, Florida. Additions include 3 new ion :change softeners rated at 400 GPM each, 3 new high service pumps rated at 00, 1350 and 1350 GPM respectively, and associated chemical feed equipment, ping and appurtenances.

The department has permitting jurisdiction under Section 403.861(9) orida Statutes (F.S.) and Chapter 17-22 Florida Administrative Code .A.C.). The project is not exempt from permitting procedures. The partment has determined that a construction permit is required for the oposed work.

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

Docket No. 991437-WU
Exhibit TLB-1.9
Page 2

APPLICATION TO CONSTRUCT A PUBLIC DRINKING WATER SYSTEM

TRUCTIONS: All of the application forms, including engineering plans and specifi-
is, must be completed and submitted. For construction of facilities consisting solely
pumping and disinfection, Parts A, B, C, D, and E 1 and 2, (d) through (f), as well as
ineering plans and specifications, must be completed and submitted. When using this
n for distribution systems alone, only Part B and applicable sections of Part A need to
completed. Submission of any false statement or representation in this application is a
lation of the law. Attach additional sheets as necessary.

tem Name: WEDGEFIELD (CAPE ORLANDO ESTATES) County: ORANGE

tem Address: Street MANSFIELD STREET City: CAPE ORLANDO ESTATES

icant's Name and Title: CHARLES H. TRUE, P.E. - AUTHORIZED REPRESENTATIVE

icant's Address: DONALD W. McINTOSH ASSOC., INC., 2200 PARK AVENUE N., WINTER PARK, FL 3278

ity Supplying Water: Name: ECON UTILITIES CORP.

ity Address: 20550 MAXIM PARKWAY, ORLANDO, FL 32820

r/Operator After Construction, if different: _____

r/Operator Address: _____

of Proposed Facility: TREATMENT PLANT EXPANSION To Serve: SUBDIVISION
(Subdivision, trailer park, school, etc.)

tude 28 ° 30 ' 00 "N Longitude 81 ° 04 ' 30 "W

Applicant:

I, the ~~XXXXX~~/authorized representative* of ECON UTILITIES CORP. am fully aware that the statements made in this application for a permit to construct a TREATMENT PLANT EXPANSION are true, correct and complete to the best of my knowledge and belief. Further, the undersigned agrees to maintain and operate the facility in such a manner as to comply with the provisions of Chapter 403, Florida Statutes, and all the rules of the department. The undersigned also understands that a permit, if granted by the department, will be non-transferable and will promptly notify the department upon sale or legal transfer of the permitted facility. The undersigned also accepts responsibility for retaining the project engineer as indicated on this application to observe that construction of the project is in accordance with engineering plans as submitted.

*Attach letter of authorization.

DONALD W. McINTOSH ASSOCIATES, INC.

Signed: _____
Owner/Authorized Representative

CHARLES H. TRUE, P.E., SENIOR VICE PRESIDENT
Name and Title (Please type)

Date: 2/4/88 Telephone No. (305)644-4068

Owner/Authorized Representative of Utility Supplying Water (if applicable)

The undersigned, owner/authorized representative* of _____ hereby certifies that the above reference utility has adequate reserve capacity to supply water to this project and will provide the necessary treatment as required by Chapter 403, Florida Statutes, and all rules of the department. Further, the undersigned verifies that his treatment plant was constructed under a valid permit, Number _____ dated _____ issued by the department, and the connection of the proposed project will not be in violation of any condition of said permit.

*Attach letter of authorization

Signed: _____

_____
Name and Title (Please Type)

Date: _____ Phone No.: _____

Owner/Operator* After Construction (if different from applicant)

I, the undersigned, do certify that I will become the owner/operator of the proposed facility after construction. Further, I certify that I am fully aware that the statements made in this application are true, correct and complete to the best of my knowledge. Also, I agree to operate and maintain the facilities in such a manner as to comply with the provisions of Chapter 403, Florida Statutes, and all rules of the department. I understand the permit is non-transferable and will promptly notify the department upon sale or legal transfer of the permitted establishment.

*Attach letter of authorization

Signed: _____

_____
Name and Title (Please Type)

Date: _____ Phone No. _____

Professional Engineer Registered in Florida

This is to certify that the engineering features of this public drinking water system have been designed/examined by me and found to be in conformity with modern engineering principles, applicable to the treatment and distribution of drinking water characterized in this application. There is reasonable assurance in my professional judgment that the facility, when constructed as planned and properly maintained and operated, will comply with all applicable statutes of the State of Florida and the rules of the department.

Signed: _____

CHARLES H. TRUE, P.E.
Name (Please Type)

Affix Seal)

DONALD W. McINTOSH ASSOCIATES, INC.
Company Name (Please Type)

2200 PARK AVE. N., WINTER PARK, FL 32789
Mailing Address (Please Type)

Florida Registration No. 9703 Date: 2/4/88 Phone No. (305)644-4068

Form 17-1.208(1)
Effective November 30, 1982

PART A - GENERAL

timated total cost of project $762,850 Describe all water treatment AERATION,
FTENING, ALKALI ADDITION, CHLORINATION

isting plant capacity (MGD) 0.86 Plant capacity increase (MGD) 1.73

evious DER permit number(s), if any WC48-2008 B

esent population of area served 969 (323 HOMES) Per capita consumption

sign population (additional served by this project) NONE

tal ERC's* served Total ERC's approved 579

ditional ERC's [ERC (Equivalent Residential Connection) = 3.5 persons]

ve any industrial users of abnormal demands NONE

rrent system water demand, in MGD (from plant operation report)

erage day 0.12 Maximum day 0.36 Maximum hour (GPM)

ditional water demand, MGD: Avg. day Max. day Max. Hr. (GPM)

plant designed for 24-hour operation or what portion? YES

e characteristics of raw water (attach chemical analysis) ATTACHED

e source proposed water (deep well, shallow well, spring, surface) DEEP WELLS

age disposal ECON UTILITIES CORPORATION
(Name and Address of sewerage utility)

ished water storage: Elevated Ground X

Existing Capacity 350,000 GAL Capacity Increase

sting service pump capacity (MGD) 1.30 Additional service pump cap. (MGD) 0

tic head in relation to pumping plant 150 FEET

l permit from water management district? Yes X Permit No. 2-095-0278A4

____ Explain

PART B - DISTRIBUTION SYSTEM

erconnection with other system NONE

imum size pipe 4" Maximum size pipe 14" Minimum system pressure 20 PSI

imum system pressure 65 PSI

fire control provided in design? YES

cribe dead-end conditions and necessity for flushing including number of such
ditions and flushing schedule ONE 1200' DEAD END LINE WITH BLOWOFF; WEEKLY FLUSHING

icribe cross-connection control program_____

icribe corrosion control program as necessary_____

.er demand for additional connections (MGD)_____

ber of each type of additional connections (residential, commercial, agricultural, ustrial) to be served_____

PART C - WELL SUPPLY

Existing Wells

dentification	#1	#2						
f Casing	6"	8"						
of Casing	225'	250'						
of Well	360'	350'						
:ype)	VT	VT						
ipacity (GPM)	200	400						

Proposed Wells

'ontification								
Casing								
f Casing								
f Well								
ype)								
pacity (GPM)								

oll construction CABLE DRILLED

torial STEEL Aquifer FLORIDAN

geological data, including log of test wells or wells in vicinity. NO OTHER WELLS

possible sources of contamination (particularly those within 100' of well). NONE

PART D - SURFACE SUPPLIES

of stream, lake, or pond_____

by attached map watershed, towns or communities above intake, industrial plants, n immediate vicinity, farm house, picnic ground, abattoirs and other sources of ition, with distance from intake. Locate intake on map.

ze of watershed in square miles_____

t. Min. dry-weather flow intake_____

sis of min. dry-weather flow estimate_____

	Existing Raw Water Pumps			Proposed Raw Water Pumps		
:y						
Head						
ge Head						

PART E - TREATMENT PLANT

e of treatment:

Pumping and disinfection YES b) Conventional floc and settling_____

Upflow_____ d) Demineralization (type)_____ e) Other ION EXCHANGE

ign details:

Emergency intake_____ bypass of raw water YES

Aeration: type MULTIPLE TRAY max. design rate 2,000 GPM detention_____

orifices_____ number of trays_____ loss of head_____

Service pumps: existing (no. & cap.) 1 - 600 GPM; 1 - 300 GPM

proposed (no. & cap.)_____

Disinfection: type disinfectant CHLORINE GAS

ype, make, capacity and number of feeders SOLUTION; W & T; 100 PPD; TWO

uxiliary power EXISTING ONSITE EMERGENCY GENERATOR WITH AUTOMATIC START UP

etering device and location FLOW INDICATING TOTALIZER; DOWNSTREAM OF SERVICE PUMPS

ixing chamber (conventional): type_____

nsions_____ capacity_____ detention_____

city (at maximum design rate)_____ Allowable head: total_____

baffle_____ Mechanical agitator: size blade_____

r_____ peripheral speed_____ bypass_____

nage _____

oagulating basins (conventional):_____

17-1.208(1).

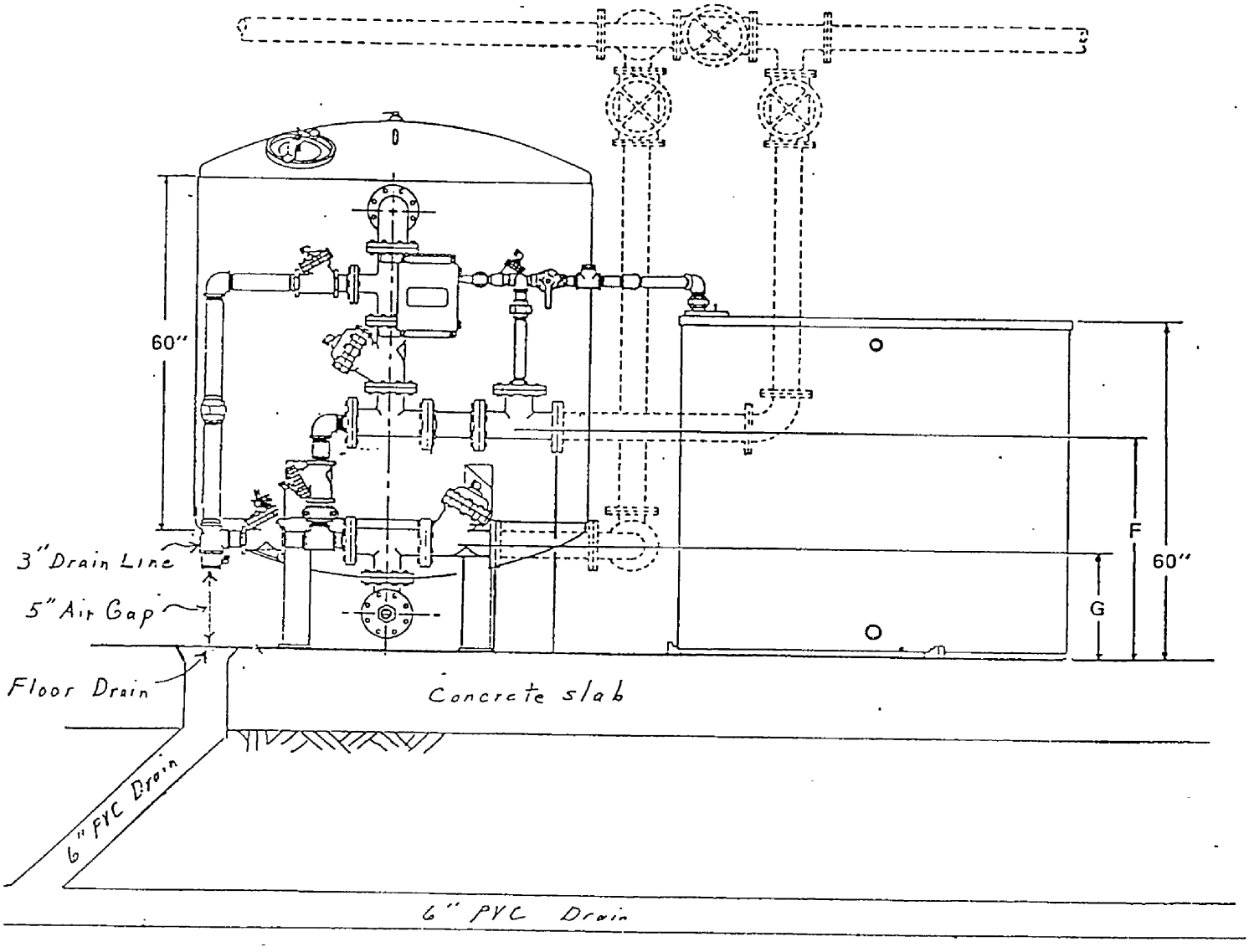
DONALD W. McINTOSH ASSOCIATES, INC.
ENGINEERS PLANNERS SURVEYORS
2200 PARK AVENUE, NORTH WINTER PARK, FLORIDA 32789 (305) 644-4068

BY DRW DATE 4/25/88
CK. _____ DATE _____
NO. _____
SHEET _____ OF _____

PROJECT Wedgefield Water Plant

SUBJECT _____

Air Gap between the Discharge of the Water Softeners and the Sanitary Sewer



ECON
20751 State Road 520
Orlando, Florida 32820
Utilities Corp.

July 14, 1987

Donald W. McIntosh Associates, Inc.
2200 Park Avenue North
Winter Park, Florida 32789

Subject: Econ Utility Corp. - Water Treatment Facility
Wastewater Treatment & Disposal Facility

Dear Mr. McIntosh:

This letter will authorize Donald W. McIntosh Associates, Inc. to act as authorized agent for Econ Utilities Corp. with respect to the permitting for the Water Treatment Facility with Orange County and Florida Department of Environmental Regulation (FDER).

Very truly yours,

Robert B. Root
Vice President

RBR/cld

Exhibit TLB-1.10
Docket No. 991437-WU

ECON PERMIT OF 9/12/90 FOR NEW 10" WELL NO. 3

EXHIBIT TLB-1,10

CERTIFIED
P231 666 724

INTENT TO ISSUE
BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of an
Application for Permit by:
Econ Utilities Corporation
20751 State Road 520
Orlando, FL 32820
Attention: Robert B. Root
Vice President

Orange County - PW
Wedgefield
New Well #3 (727 ERCs)
DER File No. 174384

INTENT TO ISSUE

The Central District Office of the Department of Environmental Regulation hereby gives notice of its intent to issue a permit (draft copy enclosed) for the proposed project as detailed in the application specified above. The Central District is issuing this Intent to Issue for the reasons stated below.

The applicant, Econ Utilities Corporation, applied on December 28, 1989 to the Department of Environmental Regulation for a permit to equip and connect a new 10-inch well with 600 gpm pump to the existing Wedgefield water plant located on Mansfield Street in east Orange County, Florida. The rated design capacity of the water plant is .573 mgd requiring a minimum Class C operator on-site three hours a day, five days a week and one visit on each weekend day.

The department has permitting jurisdiction under Section 120 Florida Statutes (F.S.) and Chapter 17-555 Florida Administrative Code (F.A.C.). The project is not exempt from permitting procedures. The department has determined that a construction permit is required for the proposed work.

Pursuant to Section 403.815, F.S. and DER Rule 17-103.150, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Notice of Intent to Issue Permit. The Notice must be published one time only within

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF INTENT TO ISSUE PERMIT

The Department of Environmental Regulation gives notice of its intent to issue a permit to Econ Utilities Corporation, 20751 State Road 520, Orlando, Florida 32820 to equip and connect a new 10-inch well with 600 gpm pump to the existing Wedgefield water plant located on Mansfield Street in east Orange County, Florida. The rated design capacity of the water plant is .573 mgd requiring a minimum Class C operator on-site three hours a day, five days a week and one visit on each weekend day. The department has assigned File Number 174384 to the project.

A person whose substantial interests are affected by the department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within fourteen (14) days of publication of this notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) pursuant to Section 120.57, F.S.

The petition shall contain the following information; (a) the name, address and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the department's action or proposed action; (c) A statement of how each petitioner's substantial interests are affected by the department's action or proposed action; (d) A statement of the material facts disputed by Petitioner, if any; (e) A statement of facts which petitioner contends warrant reversal or modification of the department's action or proposed action; (f) A statement of which rules or statutes petitioner contends require reversal or modification of the department's action or proposed action; and (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the department to take with respect to the department's action or proposed action.

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 position taken by it in this Notice. Persons whose substantial interests will be affected by any decision of the department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office of General Counsel at the above address of the department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207 Florida Administrative Code.

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

. JOHNS RIVER
STRICT
9 MAGUIRE BOULEVARD
ITE 232
LANDO, FLORIDA 3280

PAID
100
DEC 28 1989

CENTRAL FLORIDA
DISTRICT

BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY
ALEX SENKEVICH
DISTRICT MANAGER

DEC 1989
RECEIVED
Central Florida
District

APPLICATION TO CONSTRUCT A PUBLIC DRINKING WATER SYSTEM

INSTRUCTIONS: All of the application forms, including engineering plans and specifications, must be completed and submitted. For construction of facilities consisting solely of pumping and disinfection, Parts A, B, C, D, and E 1 and 2, (d) through (f), as well as engineering plans and specifications, must be completed and submitted. When using this form for distribution systems alone, only Part B and applicable sections of Part A need to be completed. Submission of any false statement or representation in this application is a violation of the law. Attach additional sheets as necessary.

System Name: Wedgefield (Cape Orlando Estates) County: Orange

System Address: Street Mansfield Street City: Cape Orlando Estat

Applicant's Name and Title: Donald W. McIntosh Associates, Inc: David R. Weaver, P.E., Authorized Representative

Applicant's Address: 2200 Park Avenue North, Winter Park, FL 32789

Utility Supplying Water: Name: Econ Utilities Corporation

Utility Address: 20550 Maxim Parkway, Orlando, FL 32820

Owner/Operator After Construction, if different:

Owner/Operator Address:

Type of Proposed Facility: 10" Well To Serve: Subdivision
(Subdivision, trailer park, school, etc.)

Latitude 28 ° 30 ' 00 "N Longitude 81 ° 04 ' 30 "W

APPROVED
WC48 174384
SEP 12 1990
Date:
By:

1. Applicant:

I, the owner/authorized representative* of Econ Utilities Corporation am fully aware that the statements made in this application for a permit to construct a 10" Well are true, correct and complete to the best of my knowledge and belief. Further, the undersigned agrees to maintain and operate the facility in such a manner as to comply with the provisions of Chapter 403, Florida Statutes, and all the rules of the department. The undersigned also understands that a permit, if granted by the department, will be non-transferable and will promptly notify the department upon sale or legal transfer of the permitted facility. The undersigned also accepts responsibility for retaining the project engineer as indicated on this application to observe that construction of the project is in accordance with engineering plans as submitted.

DONALD W. McINTOSH ASSOCIATES, INC.

*Attach letter of authorization.

Signed: David R. Weaver
Owner/Authorized Representative

David R. Weaver, P.E., Const. Admin.
Name and Title (Please type)

Date: 12/19/89 Telephone No. (407) 644-4068

Owner/Authorized Representative of Utility Supplying Water (if applicable)

The undersigned, owner/authorized representative* of _____ hereby certifies that the above reference utility has adequate reserve capacity to supply water to this project and will provide the necessary treatment as required by Chapter 403, Florida Statutes, and all rules of the department. Further, the undersigned verifies that his treatment plant was constructed under a valid permit, Number _____ dated _____ issued by the department, and the connection of the proposed project will not be in violation of any condition of said permit.

*Attach letter of authorization

Signed: _____

_____
Name and Title (Please Type)

Date: _____ Phone No.: _____

Owner/Operator* After Construction (if different from applicant)

I, the undersigned, do certify that I will become the owner/operator of the proposed facility after construction. Further, I certify that I am fully aware that the statements made in this application are true, correct and complete to the best of my knowledge. Also, I agree to operate and maintain the facilities in such a manner as to comply with the provisions of Chapter 403, Florida Statutes, and all rules of the department. I understand the permit is non-transferable and will promptly notify the department upon sale or legal transfer of the permitted establishment.

*Attach letter of authorization

Signed: _____

_____
Name and Title (Please Type)

Date: _____ Phone No. _____

Professional Engineer Registered in Florida

This is to certify that the engineering features of this public drinking water system have been designed/examined by me and found to be in conformity with modern engineering principles, applicable to the treatment and distribution of drinking water characterized in this application. There is reasonable assurance in my professional judgment that the facility, when constructed as planned and properly maintained and operated, will comply with all applicable statutes of the State of Florida and the rules of the department.

Signed: David R. Weaver

David R. Weaver, P.E.
Name (Please Type)

(Affix Seal)

Donald W. McIntosh Associates, Inc.
Company Name (Please Type)

2200 Park Avenue North, Winter Park, FL 32789
Mailing Address (Please Type)

Florida Registration No. 38867 Date: 12/19/89 Phone No. (407) 644-4068

1200 gpm

PART A - GENERAL

Estimated total cost of project $52,000.00 Describe all water treatment aeration, softening, alkali addition, chlorination

Existing plant capacity (MGD) 0.86 Plant capacity increase (MGD) 1.73

Previous DER permit number(s), if any WC48-2008B, WC48-2008C

Present population of area served 1050 (350 homes) Per capita consumption _____

Design population (additional served by this project) None

Total ERC's* served _____ Total ERC's approved 579

Additional ERC's _____ [ERC (Equivalent Residential Connection) = 3.5 persons]

Give any industrial users of abnormal demands None

Current system water demand, in MGD (from plant operation report)

Average day _____ Maximum day _____ Maximum hour (GPM) _____

Additional water demand, MGD: Avg. day _____ Max. day _____ Max. Hr. (GPM) _____

Is plant designed for 24-hour operation or what portion? Yes

. Give characteristics of raw water (attach chemical analysis) Attached

. Give source proposed water (deep well, shallow well, spring, surface) Deep well

. Sewage disposal Econ Utilities Corporation
(Name and Address of sewerage utility)

. Finished water storage: Elevated _____ Ground _____

Existing Capacity 350,000 gallon Capacity Increase _____

. Existing service pump capacity (MGD) 1.30 Additional service pump cap. (MGD) _____

. Static head in relation to pumping plant 150

. Well permit from water management district? Yes xx Permit No. 2-095-0278A4

No ____ Explain _____

PART B - DISTRIBUTION SYSTEM

Interconnection with other system _____

Minimum size pipe _____ Maximum size pipe _____ Minimum system pressure _____

Maximum system pressure _____

Is fire control provided in design? _____

Describe dead-end conditions and necessity for flushing including number of such conditions and flushing schedule _____

Describe cross-connection control program _____

Describe corrosion control program as necessary _____

Water demand for additional connections (MGD) _____

Number of each type of additional connections (residential, commercial, agricultural, industrial) to be served _____

PART C - WELL SUPPLY

Existing Wells

Well Identification	#1	#2						
Size of Casing	6"	8"						
Depth of Casing	225'	250'						
Depth of Well	360'	350'						
Pump (type)	VT	VT						
Pump Capacity (GPM)	200	400						

Proposed Wells

Well Identification	#3							
Size of Casing	10"							
Depth of Casing	320'							
Depth of Well	450'							
Pump (type)	VT							
Pump Capacity (GPM)	600							

e of well construction Cable drilled

ing material Steel Aquifer Floridan

e all geological data, including log of test wells or wells in vicinity.

cribe possible sources of contamination (particularly those within 100' of well).

Enclosed are: Driller's log, test analysis of raw water

PART D - SURFACE SUPPLIES

Name of stream, lake, or pond _____

Show by attached map watershed, towns or communities above intake, industrial plants, and in immediate vicinity, farm house, picnic ground, abattoirs and other sources of pollution, with distance from intake. Locate intake on map.

DONALD W. McINTOSH Associates, Inc. 2200 PARK AVENUE NORTH, WINTER PARK, FLORIDA 32789 • (407) 644-4068

July 26, 1990

Mr. Frank Huttner
Florida Department of Environmental Regulation
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803

Re: Wedgefield, New Well #3, PATS Number 174384

Dear Mr. Huttner:

The following is our response to your letter dated June 13, 1990, requesting additional information for the above referenced project.

1. A retest of the well water shows a color content of 20 units (test results enclosed). This compares similarly to the color content of the existing 8" well which tests at 20 to 25 units. This existing condition is being successfully treated with chlorination upstream of aeration. The treated water color content is testing at less than five units. Enclosed are test results for the raw water and treated water from the 8" well.

   The new 10" well (Well #3) will operate in tandem with the existing 8" well (Well #2). The existing 6" well (Well #1) will be grouted and capped as agreed with the Florida Department of Environmental Regulation and the St. Johns River Water Management District.

2. The statement that the bottom of the well casing is not grouted was an error on my part. After checking with the driller, the casing was grouted in accordance with the Florida Administrative Code.

4. Enclosed is a site plan depicting the new well and piping in relationship to the water plant. The shed which was shown over the pipe is constructed on wooden skids and has been moved. Locations of trust blocks have been added to the plans. A down opening sample tap has been added to the well head.

6. The raw water main was tested at 150 psi for 2 hours and measured leakage was less than allowable under AWWA specifications. Bacteriological samples are to be taken on two consecutive days with satisfactory results being forwarded to the Florida Department of Environmental Regulation.

Sincerely,

DONALD W. McINTOSH ASSOCIATES, INC.

David R. Weaver

David R. Weaver, P.E.
Construction Administrator
Florida Registration No. 38867

/lhp
Enclosures
EC3872

cc: Mike McBee - John Webb & Associates

Exhibit TLB-2
Docket No. 991437-WU

CORRESPONDENCE BETWEEN FDEP AND ECON RELATING TO PERMITS, SANITARY SURVEYS, ETC.

EXHIBIT TLB – 2

CORRESPONDENCE BETWEEN FDER AND ECON/WEDGEFIELD FROM FDEP FILES

INDEX OF CORRESPONDENCE

1. 9/15/87 Sanitary Survey Report by FDER
2. 9/15/87 FDER Inter-office Memorandum Requesting Enforcement Action
3. 11/2/87 Letter from Econ to FDER
4. 12/28/87 Letter from Econ's Consulting Engineer, McIntosh Assocs., Inc to FDER
5. 7/19/88 FDER Letter to Econ
6. 12/19/89 Letter from Econ's Consulting Engineer, McIntosh Assocs., Inc. to FDER
7. 1/4/90 FDER Reissue of Permit for 3 Ion Exchange Softeners & High Service Pumps
8. 3/22/90 Letter from Econ to FDER in Reference to Old 6" Well
9. 6/1/90 Letter from Econ's new Consulting Engineer, Webb & Assocs., Inc. to FDER
10. 6/22/90 Letter from FDER to Econ's Consulting Engineer, Webb & Assocs., Inc.
11. 8/6/90 Letter from Econ's Consulting Engineer, Webb & Assocs., Inc to FDER
12. 8/9/90 Letter from FDER To Webb & Assocs., Inc.
13. 11/15/90 Letter from Webb & Assocs., Inc. to FDER
14. 12/13/90 Letter from FDER to Econ approving first Softener and High Service Pump
15. 12/17/90 Letter from Webb & Assocs., Inc to FDER
16. 3/10/97 Letter from FDEP to Utilities, Inc. sending Sanitary Survey performed by FDEP on Wedgefield System on 2/25/97

STATE OF FLORIDA
DEPARTMENT of ENVIRONMENTAL REGULATION
Sanitary Survey Report

SEP 15 1987

Plant Name WEDGEFIELD ESTATES County ORANGE PWS ID 3480149
Plant Address 20751, SR 520, ORLANDO Zip Code FL 32833 Plant Phone 305-568-2113
Owner Name JOHN FORRER / ECON UTILITIES Owner Phone 305-568-2113
Owner Address 20751, SR 520, ORLANDO FL Zip Code 32833
Date of this inspection 9-14-87 Date of last inspection 5-11-87 Person contacted TIM JOHNSON, ECON. UTILITY MGR
Certified operators and cert. nos. 0.5HRS/DAY. 5 DAY/WEEK ONLY. DOUGLAS GOODWIN C-2740 OF ENVIRONMENTAL MARKETING GROUP, Inc., P.O.Box.7124, ORLANDO, FL 32854, Tel.-331-5299.
Population served ± 650 Service connections 317 Percent metered 100% Design capacity 345,000 GPD
Design storage capacity ____ Average output ____ Maximum hour ____ Maximum day 272,000 GPD
Approval no. and date WC48-2008 10/78 WC-48-2008A 11-26-84 Type meter and capy STERLING MECH. METER / SIGNET FLOW METER

Service area characteristics: (check all that apply) ✓ COMMUNITY/ ___ NON-COMMUNITY

___ Airport	___ Institution	___ Recreation area	✓ Subdivision
___ Bathing area	___ Interstate Carrier	✓ Residential	___ Trailer Park
___ Campground	___ Lodge	___ Rest area	___ Visitor Center
___ Company Town	___ Marina	___ Restaurant	✓ Other GOLF COURSE
___ Indian Reservation	___ Motel	___ School	

Emergency Water Source OLD 6" WELL. Emergency Power Source ____
Type of Standby GASOLINE WISCONSIN Capacity of Standby 15HP

Sources of Raw Water:

✓ Ground*	___ Surface**	___ Purchased***
How many Wells? 2	Identify Source: ____	Identify supply System: ____

Treatment in use at this plant: (check all that apply)

✓ Aeration	___ E.D.	___ Iron Removal	___ pH adjustment
✓ Chlorination	___ Filtration	___ Lime Softening	___ T & O control
___ Chlor.-pre.	___ Filt.hi-rate	___ Recarbonation	___ Settling
___ Chlor.-post	___ Fluoridation	___ Reverse Osmosis	✓ Zeolite Soft.
___ Coagulation	___ Other--specify ____		

What, if any, additional treatment is needed? ____
For the control of what deficiencies? ____

*Use page 2 (Ground).
**Use page 2 (Surface).
***Page 2 not required.

Sanitary Survey (Groundwater)
Page Two

PWS ID: 3480149

	OLD	NEW					
Well Number*	1	2					
Year Drilled	APPROX 1960	1981					
Depth Drilled	360'	440'					
Length, outside casing	225'	250'					
Diameter, outside casing	6"	8"					
Material, outside casing	STEEL						
Depth to static water level		37'					
Normal suction lift (wkng. level)							
Normal yield, GPM							
Test yield, GPM		400					
Type of grout							
Drilling method	UNK	ROTARY					
Type of strainer							
Depth to top of strainer							
Protection from surface water?	YES	YES					
Is inundation of well possible?	NO	NO					
Salt intrusion noted in past?							
Has the well ever been contaminated?							
Pump manufacturer's name	V.T. JOHNSTON	V.T. WORTHINGTON					
Model number							
Capacity	200	15HP. 400					
Check valve present in line?	YES	YES					
Date of last servicing	—	—					
Maintenance schedule (day/mo.)	—	—					
RAW WATER TAP	YES	YES.					

COMMENTS (condition): EXIST. 6" IS USED FOR EMERGENCY ONLY. NEW 8" WELL HAS HIGH HYDROGEN SULPHIDE CONTENT. 6" WELL IS BEING FLUSHED. SHOWS BLACK PARTICLES IN WATER. WHITISH SETTLEMENT ON GRASS AND CONCRETE NEAR F. PUMP PACKING LEAKING AT OLD WELL.

*Attach additional copies of this page as needed.

Sanitary Survey
Page Four

PWS ID: 3480149

FILTERS & FILTRATION

Type of filters _____
Size and number _____
Length of filter runs _____
Can you see filter media _____ Is it clean after backwash _____
Are mudballs visible _____ Is there air-binding _____
What is the normal filter rate _____
What is the usual backwash rate _____
Capacity of filters _____
Are filters overloaded _____
Loss in head ga. present _____ At what head loss is BW done _____
Cracks and Channelling _____
Has cementation ever occurred _____ Where in relation to filtration is stabilization done _____
If high rate, what is turbidity at interface _____
Range of turbidity in effluent _____
Can you observe algae in filters _____
Distance from top of media to trough overflow _____

REVERSE OSMOSIS

Make and type of units _____
Pressure required _____
Auxiliary chemicals used _____
Proportion of waste to product streams _____
Quality of effluent _____
Stabilization _____
Booster pump _____ Type of pre-treatment _____
Type of membranes _____

ZEOLITE SOFTENING

Unit mfg. & model CULLIGAN
Resin capy 200LBS
Disinfection of beds _____ Grade of salt for regen. _____
Stability of effluent _____
Resin prevented fm escaping _____

****

In the space below, give a rough sketch of the flow diagram of the plant, showing all important parts of the plant (not to scale):

SOFTNERS NOT OPERATIVE. PRESENTLY BY PASSED.
BRINE TANK VALVE STUCK OPEN. RESIDENTS COMPLAINED ABOUT SALTY WATER.
DISTRIBUTION SYSTEM BEING FLUSHED THRU HYDRANTS.
-VALVE REPAIRS ORDERED.
OPERATOR INDICATED HAVING MECHANICAL PROBLEMS WITH SOFTNERS MANY TIMES.
— NEED MAINTENANCE PROGRAM

Sanitary Survey
Page Six

PWS ID: 3480149

DISTRIBUTION SYSTEM
Material of mains D.I, PVC, AC
System looped YES
Operation pressure 50/60
Max. pipe diam. 14"
Min. pipe diam. 2"
No. of dead ends 1
How often flushed MONTH
No. of fire hydrants 51
Known cross-connections with private supplies NO
Blowoff lines below grade 4, 2"
Routine cross-connection control program YES

PLANT LABORATORY CAPABILITY

	✓ pH	✓ Chlorine: type		___ Color
___ Bacteriological	___ Iron	___ Turbidity	___ Alkalinity	___ Hardness
___ Chlorides	___ Stability	___ Jar tests	___ Fluorides	___ Complete
___ Radiological	___ Marble tests	___ Organics	___ Inorganics	

Person in charge of laboratory, and credentials:

COMPLIANCE MONITORING
System is in full compliance with which requirements? Check.

		Inorganic	Organic	
✓ Bacteriological	___ Turbidity	✓ chemical	___ chemical	___ THM
✓ Radiological	✓ Secondaries	___ Other: VOC's / SOC's ✓		

Violations of sampling requirements: RECHECK FOR TURBIDITY. RECHECK FOR ODOR. CHECK FOR SALT.
Violations of maximum contaminant levels: NO MOR'S SINCE JUNE, 87.

The following deficiencies are noted, with recommended corrective action: (if none, write "none" in this space).

DEFICIENCY	REGULATION PERTAINING	RECOMMENDED ACTION
1. APPROVED LABORATORY	17-22-105	SEE LETTER
2. RECHECK FOR TURBIDITY SODIUM ODOR	17-22-105	SEE LETTER
3. OLD WELL WATER QUALITY/CASING.	17-22-105 17-32-106	" "
4. UNOPERATIVE SOFTNERS.	17-22-107	" "
5. LEAK AT PUMP PACKING.	17-22-107	" "
6. RUST AND SCALING ON OLD TANK	17-22-107	" "
7. MONTHLY OPERATING REPORTS.	17-22-111	" "
8. OPERATOR TIME	17-16.370	" "
9. SANITARY HAZARD, REST ROOM SEWER LESS THAN 100' FROM WELL #1.	17-22-106	" "

Inspector's signature: B. Crum Engineer Date: 9-15-87

Title Engineer II Approved by: F. P. Kuth Date: 9-15-87
District Manager (signature)

DER Form PERM 13-24 (Aug. 80)

Sanitary Survey
Page Three

PWS ID: 3480149

PLANT EQUIPMENT - CHLORINATOR

Make of chlorinator PENNWALT V-100
Capacity, lb./24 hr 100
Dual system? YES
Backup machine Operative YES
Gas or hypo used GAS
Chlorine feed rate 45 GPD
Evidence of leaks
Reserve supply
Condition of equipment Good
Automatic switchover YES
Air-pack or respirator adequate
Ammonia smells fresh
More capacity needed NO
Residual at plant 2-5 mg/l
Residual at remote tap
Comments on chlorination

Cl2 CYLINDER ON SCALE AND CHAINED. ADEQUATE VENTILATION.

AERATOR

Type of aerator MULTIPLE TRAY, CASCADES
Tray area or weir length 600 GPM
Condition of screens Good
Bloodworms present NO
Condition of aerator Good
Adequate for Fe, H_2S control

COAGULATION

Chemical used
Purpose
Blanket visible
Flocculation good or poor
Settling good?
Carryover

LIME SOFTENING

Quicklime or hydrated
Name of unit
Size and type
Any auxiliary chemicals used
Points of application (in unit)
Nature and abundance of floc
Appearance of sludge blanket
Is settling good
Excessive carryover
Turbidity in clearwell
Secondary precipitation
Any filter cementation
Effluent stability
Recarbonation type
Sludge recirculation used

FLUORIDATION

Chemical used
Strength if acid
Is dilution used (acid)
Corrosion noted
Gelling or plugging
Feeder make and model
Split sample agreement
Sufficient analyses
Feeder condition

STABILIZATION

Stability index of effluent 0.06
Is pH control practiced YES
Chemical(s) used POLYPHOSPHATE, POTASSIUM HYDROXIDE

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

Interoffice Memorandum

FOR ROUTING TO OTHER THAN THE ADDRESSEE

To: Marie Locth:
To: Locth:
To: Locth:
From: Date:

CENTRAL FLORIDA DISTRICT

TO: G. Gionis

THROUGH: W.M. Bostwick, Jr.

THROUGH: Carlos Rivero deAguilar

FROM: Frank P. Huttner FPH

DATE: September 15, 1987

SUBJECT: Request for Potable Water Enforcement Activity

The minimum information required to initiate Enforcement is submitted as follows:

1. Name of Facility: Wedgefield Estates

2. County: Orange Phone Number: (305)568-2113

3. Owner or Other Responsible Party and Address (if Corporation, include name of registered agent): John Forrer, Owner; Tim Johnson, Econ Utilities; 20751 S.R. 520; Orlando, FL 32833

   Permit Numbers: WC48-2008, WC48-2008A Issued Date: 10/ /78, 11/26/84 Expiration Date:

4. Type of System (Comm. or N/C): Comm

5. Date of Last Sanitary Survey: 09/14/81

6. Date of Last Analysis for:

   A. Primary Organics: 07/15/83

   B. Primary Inorganics (NO_3 if N/C): 05/20/87

   C. Turbidity: 05/20/87

   D. Radionuclides: 06/14/80; 04/16/84 (no hard copy)

   E. Trihalomethanes: N/A

Form PW-ER 9/86

Wedgefield Estates
Form PW Enforcement Activity
Page Two

F. Secondaries: 05/20/87

G. Special Sodium Monitoring: 07/15/83

H. Special Corrosivity Monitoring: 07/15/83

I. V.O.C.'s: 03/07/86

J. S.O.C.'s: 03/07/86

11. Are monthly operating reports submitted as required? No
If not, give the date of the last submittal: June, 1987

12. Is the facility operated by a certified operator? Yes
If yes, does it receive the minimum number of hours of attention required under 17-16? No; only 0.5 hr/day; 5/day/wk

13. Is there presently an active project in-house for this facility? Yes. If yes, give project number and date of submittal. New ground storage ~~& service pump~~ only. File # 136979 submitted 8/5/87.

14. Reason for requesting enforcement action for this source:

1. Sodium in water, repeated complaints.
2. Water quality in emergency well.
3. Unoperative softeners.
4. Sanitary hazards.
5. Maintenance program.
6. Certified operator time.
7. Operating reports.

PWD ID #3480179

Violation ID #'s

7128387 7129187
7128987 7129487

Required Attachments:

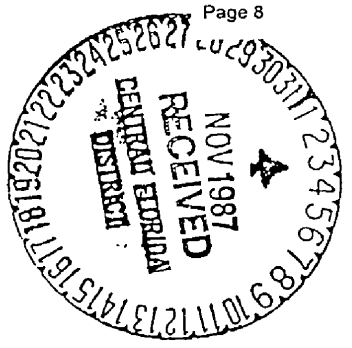
1. Dates of construction, completion and placing system in service (if known).

2. Copies of sanitary survey, permit and legal description of property.

(Note: Failure to supply the information requested on this form will result in the return of the file to the preparer for lack of sufficient information.

cc: Marie Carrasquillo

ECON
20751 State Road 520
Orlando, Florida 32820
Utilities Corp.



November 2, 1987

Attn: Bob Ansag
Dept. of Environmental Regulation
3319 Maguire Blvd., Suite 232
Orlando, Fl. 32803

Dear Mr. Ansag:

The softening units have been valve back into service after replacement of "1" Ion Exchange Unit, resin and under bedding. The complete distribution system should have soft water in a weeks time.

The six inch well has been completely re-done by pulling the old pump and motor, and installing a new submersible pump with an in-line filter to keep any residue from entering the system.

The sanitary hazard mentioned in the inspection is in the process of being moved to the north several feet, to come into compliance of more than 100' from the six inch well.

The stand-by generator is in place at this time, and is in the process of being connected into the system. Hopefully within two weeks this will be completed and the generator will be on line.

The new ground storage tank has not been started as of this date, but we have hopes of a start on the construction very soon.

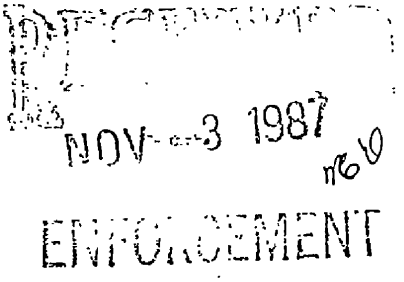
If you have any questions regarding these subjects or anything concerning Econ Utilities Wedgefield Treatment Plant please do not hesitate to contact me.

I am looking forward to hearing from you in the future.

Sincerely,

Tim Johnson
Utility Manager
Econ Utilities

TJ/nc



DONALD W. McINTOSH Associates, Inc. 2200 PARK AVENUE NORTH, WINTER PARK, FLORIDA 32789 • (305) 644-4068

December 28, 1987

Mr. Carlos deAguilar, P.E.
Department of Environmental Regulation
3319 Maguire Boulevard, Suite 232
Orlando, FL 32789

RE: Econ Utilities - Wedgefield Ground Storage Tank

Dear Carlos:

Per your letter of December 18, 1987, please find enclosed four (4) sets of plans.

In response to your letter, see the items listed below:

1. Signed and sealed plans are enclosed. We have not included the landscape plan sheet 4 of 4.

2. Please note, the plans do show the extent of the 10" piping.

3. The existing flow control valve located northwest of the existing ion exchangers determines the flow rate (see sheet 3 of 4). The water is softened prior to entering the ground storage tank and will not be repumped. The softened water is circulated from the inner tank to the outer tank via the 12" bypass.

4. The total ground storage tank capacity is 350,000 gallons. The inner tank capacity is 71,000 gallons and the outer tank capacity is 279,000 gallons. The projected maximum daily flow is 1800 GPM. Therefore, the detention time for H_2S removal is 71,000 gallons/1800 GPM = 39.4 minutes. H_2S removal is accomplished via the 1) chlorination prior to aeration 2) aeration and 3) thirty-nine minutes of detention after aeration.

Will also have 279,000 gal. detention after softening
279,000 gal / 1800 gpm = 155 min
155 + 39 = 194 = 3.2 hr

5. The disinfection points are shown on sheet 3 of 4.

6. There is no top to the inner tank (see sheet 4 of 6 of Precon's plans). Therefore, the inner tank would overflow to the outer tank and then through the overflow for the outer tank. Access will be obtained to the inner tank via location of opening directly over the inner tank wall. Interior ladders to the inner and outer tanks are now shown (see sheet 1 of 6 of Precon's plans).

Please continue your review and approval. If you need any additional information, please feel free to call.

Sincerely,

DONALD W. McINTOSH ASSOCIATES, INC.

Charles H. True,. P.E.
Senior Vice President

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

CENTRAL FLORIDA DISTRICT
3319 MAGUIRE BOULEVARD
SUITE 232
ORLANDO, FLORIDA 32803-3767

CERTIFIED
P655-626-593

July 19, 1988

Econ Utilities Corporation
20751 State Road 520
Orlando, Fl 32820

OCF-MW-88-0457

Attn: Robert B. Root, Vice President

Orange County-MW
Wedgefield
Water Treatment Plant
Letter of Non-Compliance

This will confirm a July 14th visit to the subject water treatment plant by Messrs. Frank Huttner and Gary Miller of this office and Mr. Richard Redemann of the Florida Public Service Commission in the presence of Tim Johnson, your utility manager. The purpose of the visit was to determine the status of water plant improvements.

As a result of the visit, your attention is directed to the following:

1. The new ground storage tank which is now in service was never certified complete by your project engineer. By copy of this letter, we are advising him of the need for his certification of completion letter and record drawings.

2. The older Well #1 which is being utilized only as an emergency backup well, due to deterioration in water quality, must be replaced. A well permit needs to be obtained from the St. Johns River Water Management District for a replacement well. It is strongly recommended that you consult with Mr. Jim Frazee of the St. Johns River Water Management District's Orlando office regarding any special well construction techniques which could be utilized to prevent future iron sulfide problems.

3. This plant requires a minimum Class C certified water operator to operate and maintain the plant three (3) hours per day, seven (7) days per week. This is not being done. A copy of your contract with the operator which specifies this minimum on-site time is required.

4. The following parameters are not being reported and are required on the monthly operating report form: daily free chlorine residual from the remote tap, weekly sodium level and Langelier Index leaving the plant, daily pH level leaving the plant and daily KOH dosage.

5. The brine storage tank must be covered.

6. A capped well was observed outside the fenced plant site. Has this well been properly abandoned?

Incl 7. It is recommended that the hydropneumatic tank pressure relief valve be tested for proper operation.

√8. Turbidity on treated water exceeded 5.0 n.t.u.'s in a May, 1987, sample. The two required rechecks were never submitted.

You are hereby advised to contact this office within ten (10) days of receipt of this letter to arrange a meeting to discuss a schedule for correction of the above deficiencies. It is requested that you have your consulting engineer present at the meeting.

Your cooperation in this matter will be appreciated.

Sincerely,

Joseph M. McNamara, P.E.
Manager, Drinking Water Program

JMMc:fhp

cc: Orange County Health Department
Richard Redemann, FPSC
Charles H. True, P.E.; McIntosh & Associates
Paul Morrison, DER Enforcement

DONALD W. McINTOSH Associates, Inc. 2200 PARK AVENUE NORTH, WINTER PARK, FLORIDA 32789 • (407) 644-4068

December 19, 1989

Mr. Joe McNamara, P.E.
Department of Environmental Regulation
3319 Maguire Boulevard
Orlando, Florida 32803

Re: Wedgefield Water Plant, Permit No. WC48-2008C

Dear Mr. McNamara:

In response to your letter dated October 20, 1989, the following is the status of the construction on the referenced water plant.

1. The 350,000 gallon ground storage tank (Permit No. WC48-2008B) was put into service and the existing steel storage tanks were removed.

2. The first water softening unit and its related piping has been installed and put into service. The existing softening system has been removed.

3. The piping and concrete pad for service pumps has been installed but has not been tested and put into service.

4. The 2,000 gpm high service pump is scheduled to be installed during January, 1990.

5. The new electrical system for the plant is being installed and should be finished during the month of February, 1990.

6. The 2nd water softening unit and the first 1,300 gpm service pump is scheduled to be installed during January,1991 (as increase in capacity dictates).

7. The 3rd water softening unit and the 2nd 1,300 gpm pump will be installed when capacity is required, approximately January, 1992.

8. Well number 3 has been drilled and tested and application for permit has been submitted.

Enclosed is a plan noting items which have been installed.

Should you require additional information, please call.

Sincerely,

DONALD W. McINTOSH ASSOCIATES, INC.

David R. Weaver

David R. Weaver, P.E.
Construction Administrator

/lhp
EC3060

Jim - I believe that this was for a reapproval request on a WC

FDC

Florida Department of Environmental Regulation
Central District • 3319 Maguire Boulevard, Suite 232 • Orlando, Florida 32803-3767 • 407-894-7555
Bob Martinez, Governor Dale Twachtmann, Secretary John Shearer, Assistant Secretary
Alex Alexander, Deputy Assistant Secretary

NOTICE OF PERMIT

Econ Utilities Corporation
20751 State Road 520
Orlando, FL 32820

Attention: Robert B. Root, Vice President

Orange County - PW
Wedgefield Water Treatment Plant Expansion

Dear Mr. Root:

Enclosed is Permit Number WC48-20080 (reissued), dated 1-4-90, to upgrade the water plant, issued pursuant to Section 403.861, Florida Statutes (F.S.).

Persons whose substantial interests are affected by this permit have a right, pursuant to Section 120.57, F.S., to petition for an administrative determination (hearing), unless the right to petition has been waived. The petition must conform to the requirements of Chapter 17-103, Florida Administrative Code (F.A.C.), and must be filed (received) in the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within fourteen (14) days of receipt of this notice. Failure to file a petition within that time constitutes a waiver of any right such person has to an administrative determination (hearing) pursuant to Section 120.57, F.S.

The petition shall contain the following information; (a) the name, address and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the department's action or proposed action; (c) A statement of how each petitioner's substantial interests are affected by the department's action or proposed action; (d) A statement of the material facts disputed by Petitioner, if any; (e) A statement of facts which petitioner contends warrant reversal or modification of the department's action or proposed action; (f) A statement of which rules or statutes petitioner contends require reversal or modification of the department's action or proposed action; and (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the department to take with respect to the department's action or proposed action.

This Order (Permit) is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above paragraph. Upon the timely filing of a petition this Order will not be effective until further Order of the department.

Any party to the Order has the right to seek judicial review of the Order pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate district Court of Appeal. The Notice of Appeal must be filed within 30 days from the date the Final Order is filed with the Clerk of the Department.

Executed in Orlando, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

A. Alexander
Deputy Assistant Secretary
3319 Maguire Boulevard
Suite 232
Orlando, Florida 32803

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

Clerk Date 1/4/90

AA/jap

Copies furnished to:

Charles H. True, P.E.
DER Enforcement

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT and all copies were mailed before the close of business on JAN 04 1990 to the listed persons, by

Florida Department of Environmental Regulation
Central District • 3319 Maguire Boulevard, Suite 232 • Orlando, Florida 32803-3767 • 407-894-7555
Bob Martinez, Governor Dale Twachtmann, Secretary John Shearer, Assistant Secretary
Alex Alexander, Deputy Assistant Secretary

Permittee:
Econ Utilities Corporation
20751 State Road 520
Orlando, FL 32820

Attention: Robert B. Root
Vice President

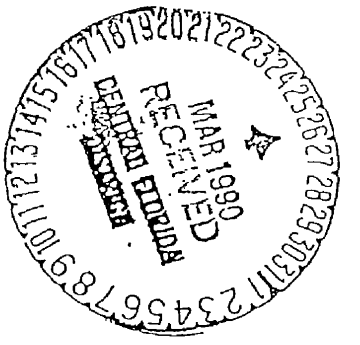
I. D. Number:
Permit/Certification
Number: WC48-2008C (reissued)
Date of Issue:
Expiration Date: 01/15/91
County: Orange
Project: Wedgefield Water Treatment Plant Expansion

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule 17-555, (F.A.C.). The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing, plans, and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

Upgrading of the existing Wedgefield water plant located in the Wedgefield Subdivision west of State Road 520 in Orange County, Florida. Additions include 3 new ion exchange softeners rated at 400 gpm each, 3 new high service pumps rated at 2000, 1350 and 1350 gpm respecitvely, and associated chemical feed equipment, piping and appurtenances.

General Conditions are attached to be distributed to the permittee only.

ECON
20751 State Road 520
Orlando, Florida 32833
Utilities Corp.



March 22, 1990

Dept. of Enviornmental Regulation
Attn: Marie C.
3319 MaGuire Blvd., Suite 232
Orlando, Fl. 32803-3767

Subject: Wedgefield Estates - Econ Utilities
Testing of 6 inch well

Dear Ms. Marie C:

Attached is a copy of our last monthley bacteriological analysis. The sample taken from the 6 inch well that needs to be re-submited was taken in error. This well has not been used in over five years or more, and is going to be abandoned as soon as our new well is on line. We are presently waiting for our new ten inch well to be cleared through D.E.R. This six inch well is not piped into anything. If you need to ask any questions please call Econ Utilities at 568-2113 and ask for Wayne Hunneman.

Sincerely,

Wayne Hunneman

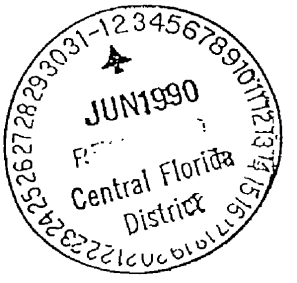
Wayne Hunneman
Econ Utilities

WH/nc

attachment:

John B. Webb & Associates, Inc. Consulting Engineers

3319 MAGUIRE BOULEVARD, SUITE 100, ORLANDO, FLORIDA 32803 (407) 898-9322 FAX (407) 894-0169



June 1, 1990

Mr. Joe McNamara, P.E.
Florida Department of Environmental Regulation
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803

Subject: Wedgefield Water Plant Phase I
Permit No. WC 48-2008C
E03-02.2

Dear Mr. McNamara:

This is to certify that the project has been completed substantially in accordance with the construction permit and the approved plans and specifications, or that deviations will not prevent the system from functioning in compliance with the requirements of Chapter 17-555, F.A.C., when properly operated and maintained. These determinations have been based upon on-site observation of construction, conducted by me or by a project representative under my direct supervision, for the purpose of determining if the work proceeded in compliance with the construction permit and the approved plans and specifications. I further certify that the record drawing identifies those substantial deviations noted below to the best of my knowledge since we became the Engineer of Record.

1. In lieu of finished water for backwashing the water softener (ion exchange), aerated water is used for this purpose.
2. The chlorine ejector for pre-chlorination will be installed downstream of new well #3 upon clearance of well.
3. Modifications to the electrical/control system has been made.
4. Storage/chemical feed building has <u>not</u> been constructed.
5. Swale and site drainage has <u>not</u> been constructed.
6. Ground storage tank drain line has <u>not</u> been constructed.
7. Concrete pads around well(s) <u>have not</u> been constructed.
8. The access road has not been constructed.
9. The existing meter will be removed in the near future and a new 8" turbine will be installed as per Record Drawing.

We have enclosed a Record Drawing E03-02.2 sheet 1 of 1 which note items that have been installed.

Should you require additional information, please advise our office at your earliest convenience.

Sincerely,
JOHN B. WEBB & ASSOCIATES, INC.

James N Broome

James N. Broome, P.E., P.L.S.
Vice President

cc: Mr. Gerald Braley

JNB/ap

Florida Department of Environmental Regulation
Central District • 3319 Maguire Boulevard, Suite 232 • Orlando, Florida 32803-3767 • 407-894-7555
Bob Martinez, Governor · Dale Twachtmann, Secretary · John Shearer, Assistant Secretary
Alex Alexander, Deputy Assistant Secretary

June 22, 1990

John B. Webb and Associates, Inc.
3319 Maguire Blvd., Suite 100
Orlando, FL 32803

Attention: James N. Broome, P.E., P.L.S.

Orange County-PW
Wedgefield Water Treatment Plant Expansion

Dear Mr. Broome:

Your letter dated June 11, 1990 certifying the construction of the subject water treatment plant in accordance with our Permit Number WC48-2008C dated January 4, 1990 was received on June 1, 1990.

The records of this office indicate that the following items have not been received:

✓ 1. Bacteriological clearance of the water treatment plant, consisting of satisfactory samples for two consecutive days from the finished water leaving the plant as required by Section 17-555.340-.360, Florida Administrative Code.

— 2. Completion of deficiencies noted in the Letter of Certification.

— 3. Information requested in items 6, 7, 8, and 9 of the permit.

✓ 4. Regarding item 1 in the Certification Letter, we are concerned about the use of aerated water for backwashing the water softener. Aerated water increases dissolved oxygen making a water more corrosive which can be harmful to the internal working parts and valves of the system.

If you have any questions please call Mr. James Afghani at the above telephone number.

Until we have received the required information, we cannot approve these facilities for service, and the system cannot be used.

Sincerely,

Frank P. Huttner, Section Supervisor
Drinking Water Permitting

FPH:jad

cc: Robert B. Root, Vice President
DER Enforcement

Joe

John B. Webb & Associates, Inc. Consulting Engineers

3319 MAGUIRE BOULEVARD, SUITE 100, ORLANDO, FLORIDA 32803 (407) 898-9322 FAX (407) 894-0169

August 6, 1990

Department of Environmental Regulation
Drinking Water Program
3319 Maguire Boulevard, Suite 232
Orlando, Florida

Attention: Mr. Joseph M. McNamara, Program Manager
Mr. Frank P. Huttman, Permitting Supervisor

Subject: Econ Utilities Corporation
Water Treatment Plant Expansion
Permit No. WC48-2008 "C" and Future Planning
E03-02.2

Gentlemen:

Please find enclosed the meeting agenda for the Thursday, August 9, 1990, meeting at 10:00 a.m. At that time, we will be discussing several items regarding the above, referenced project.

Should you have any questions prior to the meeting, please do not hesitate to contact us at (407) 898-9322. Thank you.

Sincerely,

JOHN B. WEBB AND ASSOCIATES, INC.

Jim Broome

Mr. James N. Broome, P.E., P.L.S.
Vice President

James M. McBee/BR

Mr. James M. McBee, P.E.
Project Engineer

JNB:E03-64
Enclosures

cc: Mr. Gerald Braley, Vice President
Econ Utilities Corporation

ECON UTILITIES CORPORATION

DER Meeting Agenda - August 9, 1990 - 10:00 a.m.

Subject: Water Treatment Plant Expansion
Permit No. WC48-2008 "C"

1. OVERVIEW OF DISCUSSION

1.1 Applicable Standards: AWWA, 10 States, Orange County
1.2 Permit - Renewal required by January, 1991
1.3 Discussion of certification of Phase I improvements
1.4 Planning for future phases

2. DISCUSSION

2.1 Chapter 17-555 F.A.C. contains few design standards for sizing required supply and storage capacity.

2.1.1 Please clarify the intention of Rule 17-555.320 (6) - Does the standby pumping capacity include wells or just service pumps? Does maximum daily system demand include fire flow?

2.1.2 Please clarify Rule 17-555.320 (7) - We assume maximum hourly system demand includes fire flow + max day rate.

2.2 Permit WC48-2008 "C" will expire January 15, 1991

2.2.1 Why was permit duration so short? (only months?)

2.2.2 a) Phase Two construction probably will not commence until February, 1991 or later
b) Phase Three construction may not commence until 1993 or later

2.2.3 a) Can a permit extension be obtained with or without additional fees?
b) Can permit extension be five (5) years?
c) Can permit be rewritten to indicate a phased permit with separate certifications - at least two, preferably four (one for each remaining softener and H.S. pump)?
d) Can permit be modified to include other improvements?- new wells, additional storage - or should new permit(s) be sought?

2.3 Certification of Phase I Improvements

2.3.1 Previous engineers plan called for construction of new building but did include any details or indicate which phase (1, 2, or 3). Is a building required? If so, when? To include what items?

2.3.2 Ground storage drain line shall be completed as soon as possible. Can plant be cleared for use before then?

2.3.3 What items must be covered in the plant O + M manual?

2.3.4 Please clarify permit WC48-2008 "C" special condition #9. Are any other assurances required?

2.3.5 Any other questions re. certification?

2.3.6 Schedule for completing above items?

2.4 Planning for Future Improvements

2.4.1 Planned water capacity needs will equal or exceed 1881 ERC's (658,350 gpd). Within 5-10 years. Possible ultimate capacity may be over 1.5 MGD.

2.4.2 For planned needs (1881 ERC's)

a) Per 10 States standards - need one additional supply well with capacity $\geq$ 685 GPM
b) Per Orange County standards - need total additional well capacity $\geq$ 1193 GPM
c) Per 10 States standards - need additional storage capacity $\geq$ 595,000 gallons
d) Per Orange County standards - need additional storage capacity $\geq$ 308,000 gallons (use 300,000?)
e) Per 10 States standards - need just one additional service pump $\geq$ 793 gpm unless also replace old 600 gpm pump
f) Per Orange County standards - need additional service pumps $\geq$ 1486 gpm unless also replace old 600 gpm pump, (then need $\geq$ 2086 gpm).
g) Where to locate well(s)?

3.0 SUMMARIZE - CONCLUSIONS

Florida Department of Environmental Regulation
Central District • 3319 Maguire Boulevard, Suite 232 • Orlando, Florida 32803-3767 • 407-894-7555
Bob Martinez, Governor Dale Twachtmann, Secretary John Shearer, Assistant Secretary
Alex Alexander, Deputy Assistant Secretary

August 9, 1990

John B. Webb and Associates, Inc.
3319 Maguire Boulevard, Suite 100
Orlando, FL 32803

OCD-PW-90-0401

Attention: James N. Broome, P.E., P.L.S., and
James Michael McBee, P.E.

Orange County-PW
Wedgefield Water Treatment Plant Expansion
WC48-1008C Dated January 4, 1990

Dear Messrs. Broome and McBee:

Your July 16th response to our June 22nd letter requesting resolution of items for acceptance of the subject partially completed expansion was received on July 23, 1990. This will also confirm an August 9th meeting in this office between you and Mr. Frank Huttner regarding this subject.

The following items must be satisfactorily resolved and documented on certified record drawings before we can issue a partial clearance:

✓1. Certification on the drawings that the proposed new flow meter has been relocated along with specifications for same.

✓2. Protection of the chemical feed system from the weather.

✓3. Adequate drainage line for ground storage tank.

4. O & M Manual (provide copy separately from record drawings).

✓5. Protection of softner transfer pump suction line (provide separately from record drawings if using calculations to demonstrate protection).

✓6. Air gap and sewer line for brine discharge ≥100 feet from water supply well.

We will expect these items to be complete by November 15, 1990.

Sincerely,

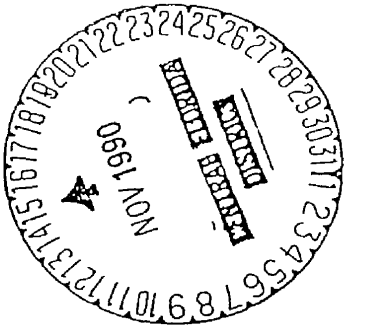
Joseph M. McNamara, P.E.
Manager, Drinking Water Program

JMMc:
cc: Robert B. Root, Vice President

John B. Webb & Associates, Inc. Consulting Engineers

3319 MAGUIRE BOULEVARD, SUITE 100, ORLANDO, FLORIDA 32803 (407) 898-9322 FAX (407) 894-0169

November 15, 1990



Department of Environmental Regulation
Drinking Water Program
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803

Attention: Mr. Joseph M. McNamara, Program Manager
Mr. Frank P. Huttner, Permitting Supervisor

Subject: Econ Utilities Corporation
Water Treatment Plant Expansion
Permit No. WC48-2008 "C"
E03-02.2

Gentlemen:

Per your request on August 9, 1990, we are attaching herewith, one (1) set of "Record Drawings" and one (1) set of O & M Manuals for the subject project. These items are in response to your letter dated August 9, 1990 and they are as follows (FDER comments in bold).

✓1. **Certification on the drawings that the proposed new flow meter has been relocated along with specifications for same.**

Response - The "Record Drawings" reflect the location of the new Master Meter and By-pass. The flow meter is a Metok Model 512 Manufactured by McCrometer Corporation with indicator and totalizer with straightening vanes. The meter has been installed in a 4' x 5' meter vault with a 8" Ductile Iron Pipe by-pass. 2500 Gpm

✓2. **Protection of the chemical feed system from the weather.**

Response - Econ Utilities has enclosed the existing chemical feed system from the weather by means of fiberglass sheeting. (see Record Drawings Detail).

✓3. **Adequate drainage line for ground storage tank.**

Response - As discussed with Mr. Huttner on September 26, 1990, the ground storage tank does have two (2) drain lines. These lines (one for inner tank and one for outer tank) are as shown on the Record Drawings. These lines are turned and stubbed up 6-inches above ground

with a blind flange cap. When the tank requires draining, the valves will be opened and the tank will be allowed to drain. At the owners option, a flexible hose could be fitted to the flange connections and drained off-site. The site is graded to allow for the tank run-off to drain away from the plant.

4. O & M Manual (provide copy separately from record drawings).

   Draft copy is attached.

✓ 5. **Protection of softener transfer pump suction line (provide separately from record drawings if using calculations to demonstrate protection).**

   Response - Attached are calculations which reflect sufficient protection of the softener transfer pump suction line.

✓ 6. **Air gap and sewer line for brine discharge ≥100 feet from water supply well.**

   Response - As discussed with Mr. Huttner on September 26, 1990 the 18" air gap is located 125 ft. +/- from the water supply well. The sewer line for the brine discharge has been relocated over 100 ft. from sewer as shown on the Record Drawings.

We trust that the above meet with your departments approval and should you have any questions, please feel free to call.

Sincerely,
JOHN B. WEBB & ASSOCIATES, INC.

James Michael McBee

James Michael McBee, P.E.
Project Manager

cc: Mr. Gerald Braley - Vice President - Econ Utilities Corporation
Mr. Wayne Hunneman - Lead Operator - Econ Utilities Corporation

Docket No. 991437-WU
Exhibit TLB-2
Page 26

cc: Jim VanOstran

Florida Department of Environmental Regulation

Central District • 3319 Maguire Boulevard, Suite 232 • Orlando, Florida 32803-3767 • 407-894-7555

Bob Martinez, Governor | Dale Twachtmann, Secretary | John Shearer, Assistant Secretary | Alex Alexander, Deputy Assistant Secretary

December 13, 1990

RECEIVED
DEC 17 1990
AT ECON UTILITIES CORP.

Econ Utilities Corporation
20751 State Road 520
Orlando, FL 32820

Attention: Robert B. Root, Vice President

Orange County - PW
Wedgefield. Phase I
Water Treatment Plant Expansion (1,100 ERCs/.864 MGD)
PATS Number 146006

Dear Mr. Root:

This acknowledges receipt of certification that the subject water plant expansion has been partially completed in accordance with the plans and related materials permitted by this agency on Permit Number WC48-1008C (Reissued) dated January 4, 1990.

Based on this certification and satisfactory bacteriological results, we are approving these facilities for service.

The completed components of the expansion include the first 600 GPM softener and 2,000 GPM high service pump. Phase II will include a second 600 GPM softener and 1,350 GPM high service pump. Phase III will include a third 600 GPM softener and 1,350 GPM high service pump.

Since the reissued construction permit for Phases I, III and III will expire on January 15, 1991, it will be necessary to request reapproval in writing. If this request is not received by December 17, 1990 a fee of $500 will be required for subsequent reissuance.

Your continued cooperation in our water supply program is appreciated.

Sincerely,

Joseph M. McNamara, P.E.
Manager, Drinking Water Program

JMMc:fh:pp

cc: Orange County Health Department
Charles H. True, P.E.
James N. Broome, P.E. (John B. Webb and Associates)

John B. Webb & Associates, Inc. C

3319 MAGUIRE BOULEVARD, SUITE 100, ORLANDO, FLORIDA

Yes, but are attached re: who should receive it. Shall I go ahead, they got it in yesterday — the 17th — did they make it? Patty

December 17, 1990

Florida Department of Environmental Regulations
3319 Maguire Blvd., Suite 232
Orlando, Florida 32803-3767

Attn: Mr. Joseph M. McNamara, P.E.
Manager, Drinking Water Program

Docket No. 991437-WU
Exhibit TLB-2
Page 27

Re: Request for Reissuance of Permit
Permit # WC48-1008 C - Reissued 1/4/90
Wedgefield Water Treatment Plant
Orange County, Florida
E03-02.2

Gentlemen:

We have just received today your letter dated December 13, 1990 in reference to the subject water treatment plant operated by Econ Utilities Corporation. Thank you for your approval of the Phase I facilities for service.

In your letter, (copy attached) you note that request for reissuance of the subject permit should be made in writing by December 17, 1990. **We are hereby making formal request on behalf of our client for reissuance of the subject permit for a minimum period of one year from it's current expiration date.**

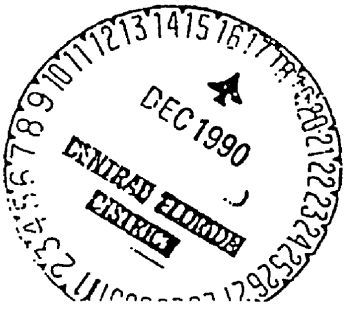
Please acknowledge in writing receipt of this request.

We believe that you are up-to-date on the status of construction. Phase I softener and high service pump are installed, approved, and in service. Improvements as discussed in our 11/15/90 certification letter have been made. In addition, Well No. 3 has been approved by your office and is in service.

In regards to names and addresses, please note the following important information:

1) The correct address for Econ Utilities Corporation is:

20750 Macon Parkway
Orlando, Florida 32833



2) As we have discussed before, Mr. Robert B. Root is no longer acting as Vice President of the utility, and no correspondence should be addressed to him. Instead, all permits, or correspondence which would normally be addressed to Econ Utilities Corporation should be addressed to Mr. Gerald B. Braley, Vice President.

3) Mr. Charles H. True, P.E. of McIntosh and Associates is no longer Engineer of Record for the subject plant or permit (see attached letter). No correspondence should be addressed to him, or to McIntosh and Associates. Instead, all correspondence which would normally be sent to the Engineer of Record should be addressed to Mr. John B. Webb, P.E. Other engineering or permitting correspondence can be sent to the indicated member of our firm (Mr. J. M. McBee, P.E.).

Thank you again for your diligent approval of the water plant and your attention to these matters. We look forward to soon receiving written notice of the reissued permit. Should you have any questions or comments, please do not hesitate to contact us.

Sincerely yours,

JOHN B. WEBB & ASSOCIATES, INC.

John B. Webb, P.E.
President

James Michael McBee, P.E.
Project Engineer

JMM/ckh

cc: Orange County Health Department
Mr. Gerald B. Braley, Vice President, Econ Utilities Corporation

SF3/14

Department of Environmental Protection

Docket No. 991437-WU
Exhibit TLB-2
Page 29

Lawton Chiles
Governor

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Virginia B. Wetherell
Secretary

March 10, 1997

Utilities Inc. of Florida
200 Weathersfield Avenue
Altamonte Springs, Fl 32714

OCD-PW-SS-97-0540

Attention: Bob Cross, Area Manager

Orange County - PW
Wedgefield Ests.(Cape Orlando)
PWS ID Number -3480149

Dear Mr. Cross:

The Department conducted a sanitary survey of your public water system on February 25, 1997. This inspection was conducted by me in your presence. A copy of the sanitary survey report is enclosed for your reference and records.

Deficiencies found during the sanitary survey and in Department records are listed on page six of the enclosed report. These deficiencies shall be corrected in order to return to compliance with Florida Administrative Code (F.A.C.) Rules 62-550, 62-555, 62-560 and 61E12.

Please correct the indicated deficiencies, and notify the Department in writing that the deficiencies have been corrected, no later than April 10, 1997. *(You may use the enclosed response form to indicate the corrective actions taken.)*

The Department values your continued cooperation in operating and maintaining your water system, and appreciates the assistance provided during the sanitary survey.

If you have any questions concerning this letter, please contact me at the above address or by phone at (407) 893-3319.

Sincerely,

Roberto C. Ansag

Roberto C. Ansag, Supervisor
Drinking Water Compliance/Enforcement

RCA
Enclosures

cc: Orange County Public Health Unit

State of Florida
Department of Environmental Protection
Central District

SANITARY SURVEY REPORT

Plant Name WEDGEFIELD ESTS.(CAPE ORLANDO) County Orange PWS ID # 3480149
Plant Location 20751 SR-50 Orlando,Fl 32833 Phone 407/869-1919
Owner Name Utilities Inc. of Florida Phone 407/869-1919
Owner Address 200 Weathersfield ave..Altamonte.Fl 32714
Contact Person Bob Cross Title Area Manager Phone 407/869-1919
This Survey Date 2/24/97 Last Survey Date 8/17/93 Last C.I. Date 4/5/95

PWS TYPE & CLASS
- ☒ Community
- ☐ Non-transient Non-community
- ☐ Non-Community

PWS STATUS
- ☒ Approved system with approval number & date
- ☐ Unapproved system

SERVICE AREA CHARACTERISTICS
S/D Residential
4C
Food Service: ☐ Yes ☐ No ☒ N/A

OPERATION & MAINTENANCE
Certified Operator: ☒ Yes ☐ No ☐ Not required
Operator(s) & Certification Class-Number
Roger Halsapple "C"-7436

O & M Log: ☒ Yes ☐ No ☐ Not required
Operator Visitation Frequency
Hrs/day: *Required* _____ *Actual* _____
Days/wk: *Required* 6/wk *Actual* 6/wk
Non-consecutive Days? ☐ Yes ☐ No ☒ N/A
MORs submitted regularly? ☒ Yes ☐ No ☐ N/A
Data missing from MORs? ☒ No ☐ Yes ☐ N/A

Number of Service Connections 765
Population Served 2,677 Basis _____
Average Day (from MORs) 310,000 gpd
Max. Day (from MORs) 387,000 gpd
Max-day Design Capacity 576,800 gpd
Comments _____

COMET: SITE ID 80718 PROJECT ID _____

RAW WATER SOURCE
- ☒ GROUND; Number of Wells 2
- ☐ SURFACE/UDI; Source _____
- ☐ PURCHASED from PWS ID # _____
- ☐ Emergency Water Source _____
  Emergency Water Capacity _____

AUXILIARY POWER SOURCE
☒ Yes ☐ None ☐ Not Required
Source Diesel (Cummins)
Capacity of Standby (kW) 250
Switchover: ☒ Automatic ☐ Manual
Standby Plan: ☒ Yes ☐ No
Hrs Operated Under Load 1 hr/wk.
What equipment does it operate?
- ☒ Well pumps
- ☒ High Service Pumps
- ☒ Treatment Equipment

Satisfy 1/2 max-day demand? ☒Yes ☐No ☐Unk
Comments _____

TREATMENT PROCESSES IN USE
Aeration/Softener
Disinfection
What additional treatment is needed?

For control of what deficiencies?

DISTRIBUTION SYSTEM
Flow Measuring Device Flow Meter
Meter Size & Type 6" 1mgd
Backflow Prevention Devices: ☒ Yes ☐ No
Cross-connections None Observed
Written Cross-connection Control Program: Yes
Coliform Sampling Plan: ☐ Yes ☒ No ☐ N/A
Comments Stabilization treatment have been disconnected.

PWS ID # 3480149
Date 2/24/97

GROUND WATER SOURCE

Well Number		2	3		
Year Drilled		1980	1988		
Depth Drilled		440'	unk		
Drilling Method		Rotary	Cable		
Type of Grout		unk	unk		
Static Water Level		unk	unk		
Pumping Water Level		--	--		
Design Well Yield		unk	unk		
Test Yield		unk	unk		
Actual Yield (if different than rated capacity)		unk	unk		
Strainer		unk	unk		
Length (outside casing)		248'	320'		
Diameter (outside casing)		8"	10"		
Material (outside casing)		Steel	Steel		
Well Contamination History		unk	unk		
Is inundation of well possible?		No	No		
6' X 6' X 4" Concrete Pad		Yes	Yes		
SET BACKS	Septic Tank	--	--		
	Reuse Water	--	--		
	WW Plumbing	>100'	>100'		
	Other Sanitary Hazard	--	--		
PUMP	Type	V.T.	V.T.		
	Manufacturer Name	Wtngton	Goulds		
	Model Number	8H48	unk		
	Rated Capacity (gpm)	400	600		
	Motor Horsepower	15	25		
Well casing 12" above grade?		Yes	Yes		
Well Casing Sanitary Seal		Yes	Yes		
Raw Water Sampling Tap		Yes	Yes		
Above Ground Check Valve		Yes	Yes		
Fence/Housing		Yes	Yes		
Well Vent Protection		Yes	Yes		

COMMENTS _____

PWS ID # 3480149
Date 2/24/97

CHLORINATION (Disinfection)
Type: ☒ Gas ☐ Hypo
Make Regal Capacity 150 ppd
Chlorine Feed Rate 25/lbs/day
Avg. Amount of Cl_2 gas used unk
Chlorine Residuals: Plant 1.5 Remote .4
Remote tap location
DPD Test Kit: ☒ On-site ☐ With operator ☐ None ☐ Not Used Daily
Injection Points
Booster Pump Info Goulds 1hp
Comments Plant has a pre-and pos chlorination-

Chlorine Gas Use Requirements	YES	NO	Comments
Dual System	☒	☐	
Auto-switchover	☒	☐	
Alarms:			
Loss of Cl_2 capability	☒	☐	
Loss of Cl_2 residual	☒	☐	
Cl_2 leak detection	☒	☐	
Scale	☒	☐	
Chained Cylinders	☒	☐	
Reserve Supply	☒	☐	
Adequate Air-pak	☐	☒	
Sign of Leaks	☐	☒	
Fresh Ammonia	☒	☐	
Ventilation	☒	☐	
Room Lighting	☒	☐	
Warning Signs	☒	☐	
Repair Kits	☒	☐	
Fitted Wrench	☒	☐	
Housing/Protection	☒	☐	

AERATION (Gases, Fe, & Mn Removal)
Type Cascade Capacity 2,000gpm
Aerator Condition Satisfactory
Bloodworm Presence None
Visible Algae Growth None
Protective Screen Condition Satisfactory
Comments

STORAGE FACILITIES
(G) Ground (H) Hydropneumatic (E) Elevated
(B) Bladder (C) Clearwell

Tank Type/Number	G/1	H/1	
Capacity (gal)	350,000	12,000	
Material	Crom	Steel	
Gravity Drain	Yes	Yes	
By-pass Piping	Yes	Yes	
Pressure Gauge	N/A	Yes	
Sight Glass or Level Indicator	N/A	Yes	
Fittings for Sight Glass	N/A	N/A	
Protected Openings	Yes	Yes	
PRV/ARV	N/A	ARV	
On/Off Pressure		55/65	
Access Padlocked	Yes	Yes	
Height to Bottom of Elevated Tank	--	--	
Height to Max. Water Level	--	--	

Comments GST--Inner tank cap.-71,000. Outside tank cap.-279.000gls.

HIGH SERVICE PUMPS

Pump Number	1	2	3
Type	Cent.	Cent.	Cent.
Make	Peerless	C.Deming	C.Deming
Model	--	--	--
Capacity (gpm)	600	300	2,000
Motor HP	15	30	100
Date Installed	1988	1988	1990
Maintenance			

Comments Has two Hsps for the ION excahange.

PWS ID 3480149
Date 2/24/97

OTHER TASTE/ODOR CONTROL PROCESSES
Explain: _____

AMMONIATION
Make _____ Capacity _____
Injection Points _____
Comments _____

COAGULATION (Turbidity Removal)
Chemicals Used _____
Condition of Floc _____
Is settling OK? _____
Comments _____

SOFTENING (Ca/Mg Hardness Removal)

Chemical Precipitation Process:
Chemicals Used _____
Nature of Floc _____
Sludge Blanket Appearance _____
Is settling OK? _____
Excessive carry-over? _____
Secondary Precipitation _____
Effluent Stability _____
Recarbonation Type _____
Sludge Recirculation Used _____
Comments _____

Ion Exchange Process:
Make Culligan,HI-FLO Model HB-2800
Capacity 400gpm
Grade of Salt for Regeneration No.2 Rock Salt
Backwash Effluent Destination Drain
Comments The Stabilization treatment have discontinued.

STABILIZATION
Effluent S.I. _____ Is pH control done? ___
Chemical Used _____
Injection Point _____
pH Range of Effluent _____

FILTRATION (Suspended Solids Removal)
Type _____
Size _____ No. of Units _____
Length of Filter Runs _____
Type of Filter Media _____
Is media visible? _____ Clean after BW? ___
Filter Rate _____ BW Rate _____
Filter Capacity _____
Cracks/Cementation/Channeling _____
Effluent Stability _____ Algae Growth _____
Turbidity in clearwell?
Head Loss Gauge _____
Comments _____

REVERSE OSMOSIS (Dissolved Solids Removal)
Make _____ Pressure _____
No. of Modules _____ Permeate Cap. _____
Blend Rate (GPM) _____
Chemicals Used _____
Waste-to-product Ratio _____
Pre-treatment _____
Effluent Quality: TDS (mg/L) _____
Waste Disposal Site _____
IW Permit # & Expir. Date _____
Comments _____

FLUORIDATION
Chemical Used _____ Strength _____
Corrosion Noted _____ Plugging Noted _____
Feeder Make/Model _____
High Level Ventilation (acid) _____
Acid carboys/day tank vented outside _____
Designated Electrical Outlet (acid) _____
Analytical Testing Equipment _____
Anti-siphon Valves _____
Residual Range _____
Point of Application _____
Emergency Eyewash _____
Comments _____

ADDITIVES
Meets NSF 60 & 61 _____

Date 2/24/97

COMPLIANCE MONITORING
COMMUNITY PUBLIC WATER SYSTEMS

CONTAMINANT	PWS Screen	# Samples Required	Sampling Location	C > 3300			C ≤ 3300		
				Frequency	Sample Date	Due Date	Frequency	Sample Date	Due Date
Microbiological (Bacte)	024	1	Each well	monthly			monthly	01/01/97	monthly
		2	Distribution						
Volatile Organics	028	*(Note A)*	*(Note H)*	*(Notes A, 1)*			*(Notes A, 2)*	1st.ann. 9/26/96	2nd.ann. 1997
Pesticides & PCBs	029	*(Notes B, E)*	*(Note H)*	3 years *(Note 1)*			3 years *(Note 2)*	2/5/90	1st.Qtr. 1997
Nitrate & Nitrite (as N)	030	1	POE	annually			annually	2/28/96	1997
Inorganics	030	1	POE	3 years *(Note 1)*			3 years *(Note 2)*	5/5/95	1997
Asbestos	030	1 *(Note F)*	Distribution	9 years *(Note 7)*			9 years *(Note 8)*	9/15/93	2002
Secondaries	031	1	POE	3 years *(Note 1)*			3 years *(Note 2)*	5/10/95	1997
Radionuclides	033	*(Note C)*	POE	3 years *(Note 1)*			3 years *(Note 2)*	12/21/94	1997
Group I UOCs	035	*(Notes B, E, G)*	POE	*(Note 4)*			*(Note 5)*	2/28/96	1998
Group II UOCs	034	1 *(Notes E,G)*	POE	3 years *(Note 1)*			3 years *(Note 2)*	5/5/95	1997
Group III UOCs	036, 037	1 *(Note G)*	POE	*(Note 4)*			*(Note 5)*	1/1/93 1/1/93	Waiver
Lead and Copper	047	*(Note D)*	---	---			---		
TTHM (≥ 10,000 persons)	027	4/plant	Distribution	Quarterly			N/A	N/A	N/A

POE = Point of Entry (Samples shall be taken at each entry point to the distribution system that is representative of each source after treatment.)

See Page 5 for description of italicized notes.

Exhibit TLB-3
Docket No. 991437-WU

TABULATION ENTITLED "COMPARISON OF ANNUAL REPORTS FOR WATER PLANT IN SERVICE"

ECON UTILITY CORPORATION/WEDGEFIELD UTILITIES									
COMPARISON OF ANNUAL REPORTS FOR WATER PLANT IN SERVICE									
	1981	Change	1985	Change	1986	Change	1987	Change	1988
Land and Land Rights			3,122	0	3,122	0	3,122	0	3,122
Structures and Improvements	288,333		46,819	0	46,819	0	46,819	0	46,819
Wells and Springs			70,355	0	70,355	6,288	76,643	0	76,643
Supply Mains			11,461	0	11,461	0	11,461	0	11,461
Power Generation Equipment			43,309	0	43,309	36,500	79,809	0	79,809
Pumping Equipment			1,473	0	1,473	0	1,473	358	1,831
Water Treatment Equipment			30,834	30,999	61,833	8,759	70,592	0	70,592
Transmission & Distribution Mains			642,892	0	642,892	0	642,892	0	642,892
Services			71,009	1,201	72,210	565	72,775	2,339	75,114
Meters & Meter Installations			8,845	8,956	17,801	14,818	32,619	11,027	43,646
Hydrants			19,389	4,951	24,340	7,243	31,583	10,157	41,740
Other Plant & Misc. Equipment			8,160	0	8,160	0	8,160	0	8,160
Office Furniture & Equipment	6,577		7,099	262	7,361	0	7,361	0	7,361
Transportation Equipment			0	8,108	8,108	0	8,108	5,815	13,923
Stores Equipment			0	0	0	0	0	0	0
Tools, Shop & Garage Equipment			1,202	0	1,202	0	1,203	186	1,389
Laboratory Equipment			50	492	542	0	542	87	629
Power Operated Equipment			0	0	0	0	0	0	0
Communications Equipment			0	0	0	538	538	275	813
Miscellaneous Equipment			0	165	165	0	165	309	474
Utility Plant & Lines	1,175,839								
TOTALS	1,470,749		966,019	55,134	1,021,153	74,711	1,095,865	30,553	1,126,418

Change	1989	Change	1990	Change	1991	Change	1992	Change	1993	Change	1994
0	3,122	0	3,122	0	3,122	0	3,122	0	3,122	233	3,355
0	46,819	794,579	841,398	25,577	866,975	570	867,545	0	867,545	-39,576	827,969
0	76,643	79,656	156,299	0	156,299	0	156,299	0	156,299	-4,213	152,086
0	11,461	329	11,790	0	11,790	0	11,790	0	11,790	0	11,790
0	79,809	22,941	102,750	0	102,750	0	102,750	0	102,750	0	102,750
0	1,831	657	2,488	0	2,488	0	2,488	5,591	8,079	0	8,079
840	71,432	45,394	116,826	0	116,826	2,165	118,991	0	118,991	58,952	177,943
0	642,892	322,335	965,227	0	965,227	0	965,227	4,125	969,352	0	969,352
0	75,114	20,124	95,238	1,539	96,777	0	96,777	0	96,777	0	96,777
10,847	54,493	22,281	76,774	13,397	90,171	16,145	106,316	19,964	126,280	16,535	142,815
6,396	48,136	9,828	57,964	1,184	59,148	1,906	61,054	0	61,054	0	61,054
0	8,160	14,023	22,183	198	22,381	0	22,381	331	22,712	0	22,712
0	7,361	159	7,520	-4,250	3,270	952	4,222	3,300	7,522	300	7,822
1,060	14,983	0	14,983	0	14,983	0	14,983	0	14,983	0	14,983
1,749	1,749	0	1,749	0	1,749	0	1,749	0	1,749	0	1,749
0	1,389	83	1,472	0	1,472	0	1,472	269	1,741	0	1,741
0	629	435	1,064	0	1,064	0	1,064	0	1,064	0	1,064
0	0	0	0	0	0	0	0	1,198	1,198	0	1,198
189	1,002	0	1,002	0	1,002	0	1,002	0	1,002	0	1,002
0	474	0	474	0	474	0	474	1,675	2,149	0	2,149
21,081	1,147,499	1,332,824	2,480,323	37,645	2,517,968	21,738	2,539,706	36,453	2,576,159	32,231	2,608,390

Change	1995	Change	1996		
-1,348	2,007				
0	827,969				
-2,336	149,752				
0	11,790				
0	102,750				
0	8,079				
3,596	181,539				
0	969,352				
0	96,777				
9,071	151,886				
0	61,054				
443	23,155				
0	7,822				
0	14,983				
0	1,749				
0	1,741				
0	1,064				
0	1,198				
0	1,002				
139	2,288				
9,565	2,617,957		2,602,973		
			per Schedule A-4 of MFRs		

Exhibit TLB-3.1
Docket No. 991437-WU

ECON'S ANNUAL REPORT SHEETS OF WATER PLANT IN SERVICE

EXHIBIT TLB – 3.1

ECON'S ANNUAL REPORT SHEETS FOR PLANT IN SERVICE

Report Date	Sheet No(s).
1981	W-1-D
1985	W-1
1986	W-1
1988	W-1
1989	W-1
1990	W-1
1991	W-1
1992	W-1(a) & W-1(b)
1993	W-1(a) & W-1(b)
1994	W-1(b)
1995	W-1(a) & W-1(b)

WATER AND/OR SEWER UTILITIES

WITH

GROSS REVENUE OF LESS THAN $50,000 EACH

ANNUAL REPORT

OF

ECOX UTILITIES CORPORATION

Exact Legal Name Of Respondent

(Application in Process)

Certificate Number(s)

TO THE

FLORIDA
PUBLIC SERVICE COMMISSION

FOR THE

YEAR ENDED DECEMBER 31, 19 81

WATER UTILITY PLANT

	Balance First of Year	Additions	Retirements	Balance End of Year
Intangible Plant (301-303)				
Land (310,320,330,340,370)				
Source of Supply Plant (311-317)				
Structures and Improvements (321,331)	290,931	717	3,315	288,333
Electric Pumping Equipment (325)				
Other Pumping Equipment (320,322,323,324,326,327,328)				
Water Treatment Equipment (332)				
Distribution Reservoirs and Standpipes (342)				
Transmission and Distribution Mains (343)				
Services (345)				
Meters and Meter Installation (346,347)				
Other Transmission and Distribution Plant (specify)				
Office Furniture and Equipment (372)	3,062	3,515		6,577
Transportation Equipment (373)				
Other General Plant (specify) Utility Plant & Lines	1,071,869	103,970		1,175,839
Total Water Plant	1,365,862	108,202	3,315	1,470,749

Revised 11-1-76

CLASS "D"
WATER and/or SEWER UTILITIES
(Gross Revenue of Less Than $50,000 Each)

ANNUAL REPORT
OF

Econ Utility Corporation
P. O. Box 2449
Pompano Bch., FL 33061

404W 341S

TO THE

FLORIDA

PUBLIC SERVICE COMMISSION

YEAR ENDED DECEMBER 31, 1985

V-1

WATER UTILITY PLANT

	Balance First of Year	Additions	Retirements	Balance End of Year
Intangible Plant (301-303)				
Land (310,320,330,340,370)	19,045		15,923	3,122
Source of Supply Plant (311-317)	81,816			81,816
Structures and Improvements (321,331,341)	46,782	37		46,819
Electric Pumping Equipment (325)	42,663	646		43,309
Other Pumping Equipment (322,323,324,326,327,328)	1,473			1,473
Water Treatment Equipment (332)	11,307	19,527		30,834
Distribution Reservoirs and Standpipes (342)				
Transmission and Distribution Mains (343)	637,967	4,925		642,892
Services (345)	69,268	1,741		71,009
Meters and Meter Installation (346,347)	6,157	2,688		8,845
Other Transmission and Distribution Plant (specify)				
Fire Mains, Hydrants	18,977	412		19,389
Other Tran. & Dist. Plant	7,738	422		8,160
Office Furniture and Equipment (372)	4,992	2,107		7,099
Transportation Equipment (373)				
Other General Plant (specify) Structures & Imp.	937		937	-0-
Tools & Laboratory		1,252		1,252
Total Water Plant	949,122	33,757	16,860	966,019

CLASS "C"

WATER and/or SEWER UTILITIES

(Gross Revenue of Less Than $150,000 Each)

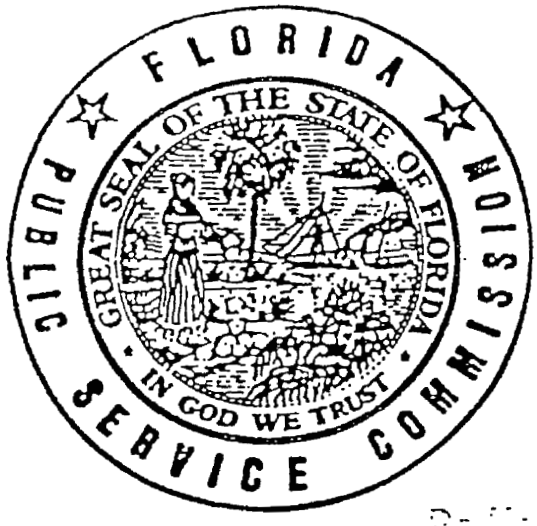
REVISED

ANNUAL REPORT

OF

Econ Utility Corporation
P. O. Box 2449
Pompano Beach, FL 33061

404 341



FOR THE

YEAR ENDED DECEMBER 31, 19 86

Form PSC/WAS 6 (Rev. 12/22/86)

WATER UTILITY PLANT ACCOUNTS

For the Year Ended December 31, 19[illegible]

Acct. No. (a)	Account Name (b)	Previous Year (c)	Additions (d)	Retirements (e)	Current Year (f)
301	Organization	$	$	$	$
302	Franchises				
303	Land and Land Rights	3,122			3,122
304	Structures and Improvements	46,819	-0-		46,819
305	Collecting and Impounding Reservoirs				
306	Lake, River and Other Intakes				
307	Wells and Springs	70,355	-0-		70,355
308	Infiltration Galleries and Tunnels				
309	Supply Mains	11,461			11,461
310	Power Generation Equipment	43,309			43,309
311	Pumping Equipment	1,473			1,473
320	Water Treatment Equipment	30,834	30,999		61,833
330	Distribution Reservoirs and Standpipes				
331	Transmission and Distribution Mains	642,892			642,892
333	Services	71,009	1,201		72,210
334	Meters and Meter Installations	8,845	8,956		17,801
335	Hydrants	19,389	4,951		24,340
339	Other Plant and Miscellaneous Equipment	8,160			8,160
340	Office Furniture and Equipment	7,099	262		7,361
341	Transportation Equipment	-0-	8,108		8,108
342	Stores Equipment				
343	Tools, Shop and Garage Equipment	1,202			1,202
344	Laboratory Equipment	50	492		542
345	Power Operated Equipment				
346	Communication Equipment	-0-			
347	Miscellaneous Equipment		165		165
348	Other Tangible Plant				
	Total Water Plant	$ 966,019	$ 55,134	$	$ 1,021,153

Dockel No 991437-WU
Exhibit TLB-3 1
Page 8

CLASS "C"

WATER and/or SEWER UTILITIES

(Gross Revenue of Less Than $150,000 Each)

ANNUAL REPORT

OF

WS062 [illegible]
LEON UTILITY CORPORATION
P. O. BOX 2449
POMPANO BEACH, FL 33061

404W 341S

Certificate Number(s)

RECEIVED
APR 3 1989
Fla. Public Service Commission
Division of Water and Sewer

FLORIDA PUBLIC SERVICE COMMISSION
GREAT SEAL OF THE STATE OF FLORIDA
IN GOD WE TRUST

FOR THE

YEAR ENDED DECEMBER 31, 19 88

Form PSC/WAS 6 (Rev. 12/22/86)

UTILITY NAME: Econ Utilities Corporation

Docket No. 991437-WU
Exhibit TLB-3.1
Page 9

YEAR OF REPORT
DECEMBER 31, 1988

WATER UTILITY PLANT ACCOUNTS

Acct. No. (a)	Account Name (b)	1987 Previous Year (c)	Additions (d)	Retirements (e)	Current Year (f)
301	Organization	$	$	$	$
302	Franchises				
303	Land and Land Rights	3,122			3,122
304	Structures and Improvements	46,819			46,819
305	Collecting and Impounding Reservoirs				
306	Lake, River and Other Intakes				
307	Wells and Springs	76,643			76,643
308	Infiltration Galleries and Tunnels				
309	Supply Mains	11,461			11,461
310	Power Generation Equipment	79,809			79,809
311	Pumping Equipment	1,473	358		1,831
320	Water Treatment Equipment	70,592			70,592
330	Distribution Reservoirs and Standpipes				
331	Transmission and Distribution Mains	642,892			642,892
333	Services	72,775	2,339		75,114
334	Meters and Meter Installations	32,619	11,027		43,646
335	Hydrants	31,583	10,157		41,740
339	Other Plant and Miscellaneous Equipment	8,160			8,160
340	Office Furniture and Equipment	7,361			7,361
341	Transportation Equipment	8,108	5,815		13,923
342	Stores Equipment				
343	Tools, Shop and Garage Equipment	1,203	186		1,389
344	Laboratory Equipment	542	87		629
345	Power Operated Equipment				
346	Communication Equipment	538	275		813
347	Miscellaneous Equipment	165	309		474
348	Other Tangible Plant				
	Total Water Plant	$ 1,095,865	$ 30,553	$	$ 1,126,418

79,809
- 43,309
$ 36,500
DIESEL GENERATOR

CLASS "C"

WATER and/or SEWER UTILITIES

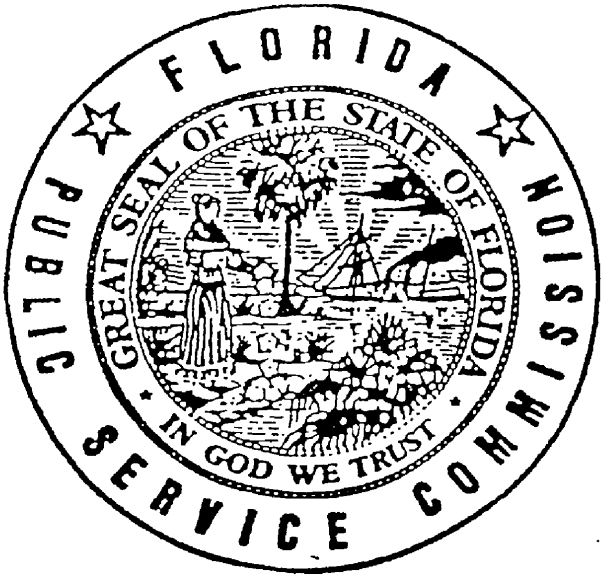
(Gross Revenue of Less Than $150,000 Each)

ANNUAL REPORT

OF

[illegible]

Certificate Number(s)



FOR THE

YEAR ENDED DECEMBER 31, 19 89

Form PSC/WAS 6 (Rev. 12/22/86)

UTILITY NAME: ECON UTILITIES CORPORATION

Docket No. 991437-WU
Exhibit TLB-3.1
Page 11

YEAR OF REPORT

WATER UTILITY PLANT ACCOUNTS

Acct. No. (a)	Account Name (b)	Previous Year (c)	Additions (d)	Retirements (e)	Current Year (f)
301	Organization	$	$	$	$
302	Franchises				
303	Land and Land Rights	3,122			3,122
304	Structures and Improvements	46,819			46,819
305	Collecting and Impounding Reservoirs				
306	Lake, River and Other Intakes				
307	Wells and Springs	76,643			76,643
308	Infiltration Galleries and Tunnels				
309	Supply Mains	11,461			11,461
310	Power Generation Equipment	79,809			79,309
311	Pumping Equipment	1,831			1,831
320	Water Treatment Equipment	70,592	840		71,432
330	Distribution Reservoirs and Standpipes				
331	Transmission and Distribution Mains	642,892			642,892
333	Services	75,114			75,114
334	Meters and Meter Installations	43,646	10,847		54,493
335	Hydrants	41,740	6,396		48,136
339	Other Plant and Miscellaneous Equipment	8,160			8,160
340	Office Furniture and Equipment	7,361			7,361
341	Transportation Equipment	13,923	1,060		14,983
342	Stores Equipment		1,749		1,749
343	Tools, Shop and Garage Equipment	1,389			1,389
344	Laboratory Equipment	629			629
345	Power Operated Equipment				
346	Communication Equipment	813	189		1,002
347	Miscellaneous Equipment	474			474
348	Other Tangible Plant				
	Total Water Plant	$ 1,126,418	$ 21,081	$	$1,147,499

CLASS "C"

WATER and/or SEWER UTILITIES

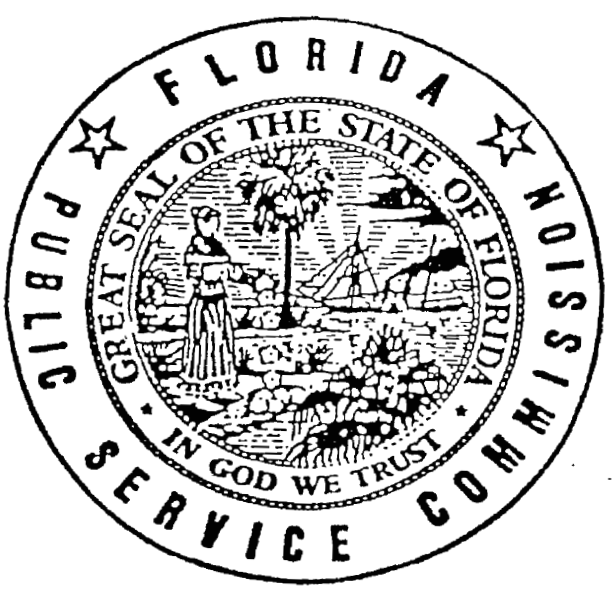
(Gross Revenue of Less Than $150,000 Each)

ANNUAL REPORT

OF

WS062 US 48
ECON UTILITY CORPORATION
P. O. BOX 2449
POMPANO BEACH, FL 33061-2449

404-W/341-S
Certificate Number(s)



FOR THE

YEAR ENDED DECEMBER 31, 19 90

Form PSC/WAS 6 (Rev. 12/22/86)

UTILITY NAME: ECON UTILITIES CORPORATION

YEAR OF REPORT
DECEMBER 31, 19 90

WATER UTILITY PLANT ACCOUNTS

Acct. No. (a)	Account Name (b)	Previous Year (c)	Additions (d)	Retirements (e)	Current Year (f)
301	Organization	$	$	$	$
302	Franchises				
303	Land and Land Rights	3,122			3,122
304	Structures and Improvements	46,819	794,579		841,398
305	Collecting and Impounding Reservoirs				
306	Lake, River and Other Intakes				
307	Wells and Springs	76,643	79,656		156,299
308	Infiltration Galleries and Tunnels				
309	Supply Mains	11,461	329		11,790
310	Power Generation Equipment	79,809	22,941		102,750
311	Pumping Equipment	1,831	657		2,488
320	Water Treatment Equipment	71,432	45,394		116,826
330	Distribution Reservoirs and Standpipes				
331	Transmission and Distribution Mains	642,892	322,335		965,227
333	Services	75,114	20,124		95,238
334	Meters and Meter Installations	54,493	22,281		76,774
335	Hydrants	48,136	9,828		57,964
339	Other Plant and Miscellaneous Equipment	8,160	14,023		22,183
340	Office Furniture and Equipment	7,361	159		7,520
341	Transportation Equipment	14,983			14,983
342	Stores Equipment	1,749			1,749
343	Tools, Shop and Garage Equipment	1,389	83		1,472
344	Laboratory Equipment	629	435		1,064
345	Power Operated Equipment				
346	Communication Equipment	1,002			1,002
347	Miscellaneous Equipment	474			474
348	Other Tangible Plant				
	Total Water Plant	$ 1,147,499	$ 1,332,824	$	$ 2,480,323

CLASS "C"

WATER and/or SEWER UTILITIES

(Gross Revenue of Less Than $150,000 Each)

ANNUAL REPORT

OF

WS062 WS 48
Econ Utility Corporation
P. O. Box 2449
Pompano Beach, FL 33061-2449

404-W ; 341-S
Certificate Number(s)

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Fla. Public Service Commission
Division of Water and Sewer

FLORIDA PUBLIC SERVICE COMMISSION
GREAT SEAL OF THE STATE OF FLORIDA
IN GOD WE TRUST

FOR THE

YEAR ENDED DECEMBER 31, 19 91

Form PSC/WAS 6 (Rev. 12/22/86)

UTILITY NAME: ECON UTILITIES CORPORATION

YEAR OF REPORT
DECEMBER 31, 1991

WATER UTILITY PLANT ACCOUNTS

Acct. No. (a)	Account Name (b)	Previous Year (c)	Additions (d)	Retirements (e)	Current Year (f)
301	Organization	$	$	$	$
302	Franchises				
303	Land and Land Rights	3,122			3,122
304	Structures and Improvements	841,398	25,577		866,975
305	Collecting and Impounding Reservoirs				
306	Lake, River and Other Intakes				
307	Wells and Springs	156,299			156,299
308	Infiltration Galleries and Tunnels				
309	Supply Mains	11,790			11,790
310	Power Generation Equipment	102,750			102,750
311	Pumping Equipment	2,488			2,488
320	Water Treatment Equipment	116,826			116,826
330	Distribution Reservoirs and Standpipes				
331	Transmission and Distribution Mains	965,227			965,227
333	Services	95,238	1,539		96,777
334	Meters and Meter Installations	76,774	13,397		90,171
335	Hydrants	57,964	1,184		59,148
339	Other Plant and Miscellaneous Equipment	22,183	198		22,381
340	Office Furniture and Equipment	7,520		4,250	3,270
341	Transportation Equipment	14,983			14,983
342	Stores Equipment	1,749			1,749
343	Tools, Shop and Garage Equipment	1,472			1,472
344	Laboratory Equipment	1,064			1,064
345	Power Operated Equipment				
346	Communication Equipment	1,002			1,002
347	Miscellaneous Equipment	474			474
348	Other Tangible Plant				
	Total Water Plant	$2,480,323	$ 41,895	$ 4,250	$2,517,968

CLASS "B"

WATER and/or SEWER UTILITIES

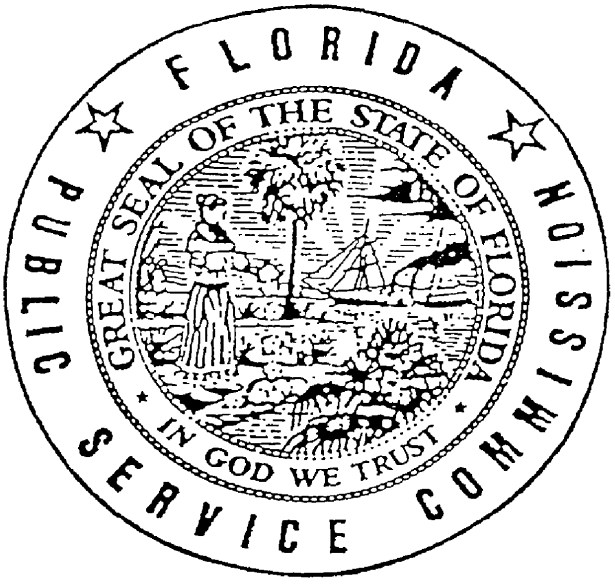
(Gross Revenue of $150,000 or More but Less Than $750,000 Each)

ANNUAL REPORT

OF

RECEIVED
MAY 05 1993
Florida Public Service Commission
Division of Water and Wastewater

WU 345
Certificate Number(s)



FOR THE

YEAR ENDED DECEMBER 31, 19 92

Form PSC/WAS 5 (Rev. 12/22/86)

UTILITY NAME: Econ Utilities Corporation

YEAR OF REPORT
DECEMBER 31, 19 92

WATER UTILITY PLANT ACCOUNTS

ACCT. NO. (a)	ACCOUNT NAME (b)	PREVIOUS YEAR (c)	ADDITIONS (d)	RETIREMENTS (e)
301	Organization	$	$	$
302	Franchises			
303	Land and Land Rights	3,122		
304	Structures and Improvements	866,975	570	
305	Collecting and Impounding Reservoirs			
306	Lake, River and Other Intakes			
307	Wells and Springs	156,299		
308	Infiltration Galleries and Tunnels			
309	Supply Mains	11,790		
310	Power Generation Equipment	102,750		
311	Pumping Equipment	2,488		
320	Water Treatment Equipment	116,826	2,165	
330	Distribution Reservoirs and Standpipes			
331	Transmission and Distribution Mains	965,227		
333	Services	96,777		
334	Meters and Meter Installations	90,171	16,145	
335	Hydrants	59,148	1,906	
339	Other Plant and Miscellaneous Equipment	22,381		
340	Office Furniture and Equip.	3,270	952	
341	Transportation Equipment	14,983		
342	Stores Equipment	1,749		
343	Tools, Shop and Garage Equip.	1,472		
344	Laboratory Equipment	1,064		
345	Power Operated Equipment			
346	Communication Equipment	1,002		
347	Miscellaneous Equipment	474		
348	Other Tangible Plant			
	Total Water Plant	$ 2,517,968	$ 21,738	$

NOTE: Any adjustments made to reclassify property from one account to another must be footnoted.

WATER UTILITY PLANT MATRIX

CURRENT YEAR (f)	.1 INTANGIBLE PLANT (g)	.2 SOURCE OF SUPPLY AND PUMPING PLANT (h)	.3 WATER TREATMENT PLANT (i)	.4 TRANSMISSION AND DISTRIBUTION PLANT (j)	.5 GENERAL PLANT (k)
$	$	$XXXXXXXXXXXXX	$XXXXXXXXXXXXX	$XXXXXXXXXXXXX	$XXXXXXXXXXX
		XXXXXXXXXXXXX	XXXXXXXXXXXXX	XXXXXXXXXXXXX	XXXXXXXXXXX
3,122	XXXXXXXXXXXXX		3,122		
867,545	XXXXXXXXXXXXX		867,545	XXXXXXXXXXXXX	XXXXXXXXXXX
	XXXXXXXXXXXXX		XXXXXXXXXXXXX	XXXXXXXXXXXXX	XXXXXXXXXXX
	XXXXXXXXXXXXX		XXXXXXXXXXXXX	XXXXXXXXXXXXX	XXXXXXXXXXX
	XXXXXXXXXXXXX		XXXXXXXXXXXXX	XXXXXXXXXXXXX	XXXXXXXXXXX
156,299	XXXXXXXXXXXXX	156,299	XXXXXXXXXXXXX	XXXXXXXXXXXXX	XXXXXXXXXXX
	XXXXXXXXXXXXX		XXXXXXXXXXXXX	XXXXXXXXXXXXX	XXXXXXXXXXX
	XXXXXXXXXXXXX		XXXXXXXXXXXXX	XXXXXXXXXXXXX	XXXXXXXXXXX
11,790	XXXXXXXXXXXXX	11,790	XXXXXXXXXXXXX	XXXXXXXXXXXXX	XXXXXXXXXXX
102,750	XXXXXXXXXXXXX	102,750	XXXXXXXXXXXXX	XXXXXXXXXXXXX	XXXXXXXXXXX
2,488	XXXXXXXXXXXXX	2,488	XXXXXXXXXXXXX	XXXXXXXXXXXXX	XXXXXXXXXXX
118,991	XXXXXXXXXXXXX	XXXXXXXXXXXXX	118,991	XXXXXXXXXXXXX	XXXXXXXXXXX
	XXXXXXXXXXXXX	XXXXXXXXXXXXX	XXXXXXXXXXXXX		XXXXXXXXXXX
	XXXXXXXXXXXXX	XXXXXXXXXXXXX	XXXXXXXXXXXXX		XXXXXXXXXXX
	XXXXXXXXXXXXX	XXXXXXXXXXXXX	XXXXXXXXXXXXX		XXXXXXXXXXX
965,227	XXXXXXXXXXXXX	XXXXXXXXXXXXX	XXXXXXXXXXXXX	965,227	XXXXXXXXXXX
96,777	XXXXXXXXXXXXX	XXXXXXXXXXXXX	XXXXXXXXXXXXX	96,777	XXXXXXXXXXX
106,316	XXXXXXXXXXXXX	XXXXXXXXXXXXX	XXXXXXXXXXXXX	106,316	XXXXXXXXXXX
61,054	XXXXXXXXXXXXX	XXXXXXXXXXXXX	XXXXXXXXXXXXX	61,054	XXXXXXXXXXX
					XXXXXXXXXXX
22,381				22,381	
4,222	XXXXXXXXXXXXX	XXXXXXXXXXXXX	XXXXXXXXXXXXX	XXXXXXXXXXXXX	4,222
14,983	XXXXXXXXXXXXX	XXXXXXXXXXXXX	XXXXXXXXXXXXX	XXXXXXXXXXXXX	14,983
1,749	XXXXXXXXXXXXX	XXXXXXXXXXXXX	XXXXXXXXXXXXX	XXXXXXXXXXXXX	1,749
1,472	XXXXXXXXXXXXX	XXXXXXXXXXXXX	XXXXXXXXXXXXX	XXXXXXXXXXXXX	1,472
1,064	XXXXXXXXXXXXX	XXXXXXXXXXXXX	XXXXXXXXXXXXX	XXXXXXXXXXXXX	1,064
	XXXXXXXXXXXXX	XXXXXXXXXXXXX	XXXXXXXXXXXXX	XXXXXXXXXXXXX	
1,002	XXXXXXXXXXXXX	XXXXXXXXXXXXX	XXXXXXXXXXXXX	XXXXXXXXXXXXX	1,002
474	XXXXXXXXXXXXX	XXXXXXXXXXXXX	XXXXXXXXXXXXX	XXXXXXXXXXXXX	474
$ 2,539,706	$	$ 273,327	$ 989,658	$ 1,251,755	$ 24,966

CLASS "B"

WATER and/or SEWER UTILITIES

(Gross Revenue of $150,000 or More but Less Than $750,000 Each)

ANNUAL REPORT

OF

RECEIVED
MAY 2 1994
Florida Public Service Commission
Division of Water and Wastewater

ECON UTILITIES CORPORATION

Exact Legal Name of Respondent

404W 341S

Certificate Number(s)

FOR THE

YEAR ENDED DECEMBER 31, 19 93

Form PSC/WAS 5 (Rev. 12/22/86)

UTILITY NAME: Econ Utilities Corporation

YEAR OF REPORT
DECEMBER 31, 1993

WATER UTILITY PLANT ACCOUNTS

ACCT. NO. (a)	ACCOUNT NAME (b)	PREVIOUS YEAR (c)	ADDITIONS (d)	RETIREMENTS (e)
301	Organization	$	$	$
302	Franchises			
303	Land and Land Rights	3,122		
304	Structures and Improvements	867,545		
305	Collecting and Impounding Reservoirs			
306	Lake, River and Other Intakes			
307	Wells and Springs	156,299		
308	Infiltration Galleries and Tunnels			
309	Supply Mains	11,790		
310	Power Generation Equipment	102,750		
311	Pumping Equipment	2,488	5,591	
320	Water Treatment Equipment	118,991		
330	Distribution Reservoirs and Standpipes			
331	Transmission and Distribution Mains	965,227	4,125	
333	Services	96,777		
334	Meters and Meter Installations	106,316	19,964	
335	Hydrants	61,054		
339	Other Plant and Miscellaneous Equipment	22,381	331	
340	Office Furniture and Equip.	4,222	3,300	
341	Transportation Equipment	14,983		
342	Stores Equipment	1,749		
343	Tools, Shop and Garage Equip.	1,472	269	
344	Laboratory Equipment	1,064		
345	Power Operated Equipment		1,198	
346	Communication Equipment	1,002		
347	Miscellaneous Equipment	474	1,675	
348	Other Tangible Plant			
	Total Water Plant	$ 2,539,706	$ 36,453	$

NOTE: Any adjustments made to reclassify property from one account to another must be footnoted.

WATER UTILITY PLANT MATRIX

CURRENT YEAR (f)	.1 INTANGIBLE PLANT (g)	.2 SOURCE OF SUPPLY AND PUMPING PLANT (h)	.3 WATER TREATMENT PLANT (i)	.4 TRANSMISSION AND DISTRIBUTION PLANT (j)	.5 GENERAL PLANT (k)
$	$	$XXXXXXXXXXXX	$XXXXXXXXXXXX	$XXXXXXXXXXXX	$XXXXXXXXXX
		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXX
3,122	XXXXXXXXXXXX		3,122		
867,545	XXXXXXXXXXXX		867,545		
	XXXXXXXXXXXX		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXX
	XXXXXXXXXXXX		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXX
	XXXXXXXXXXXX		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXX
156,299	XXXXXXXXXXXX	156,299	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXX
	XXXXXXXXXXXX		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXX
	XXXXXXXXXXXX		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXX
11,790	XXXXXXXXXXXX	11,790	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXX
102,750	XXXXXXXXXXXX	102,750	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXX
8,079	XXXXXXXXXXXX	8,079	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXX
118,991	XXXXXXXXXXXX	XXXXXXXXXXXX	118,991	XXXXXXXXXXXX	XXXXXXXXXX
	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX		XXXXXXXXXX
	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX		XXXXXXXXXX
	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX		XXXXXXXXXX
969,352	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	969,352	XXXXXXXXXX
96,777	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	96,777	XXXXXXXXXX
126,280	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	126,280	XXXXXXXXXX
61,054	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	61,054	XXXXXXXXXX
					XXXXXXXXXX
22,712				22,712	XXXXXXXXXX
7,522	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	7,522
14,983	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	14,983
1,749	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	1,749
1,741	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	1,741
1,064	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	1,064
1,198	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	1,198
1,002	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	1,002
2,149	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	2,149
$ 2,576,159	$	$ 278,918	$ 989,658	$ 1,276,175	$ 31,408

CLASS "B"

WATER and/or SEWER UTILITIES

(Gross Revenue of $150,000 or More but Less Than $750,000 Each)

ANNUAL REPORT

WS062 WS 48
Econ Utilities Corporation
664 South Military Trail
Deerfield Beach, FL 33442-3023

404W & 341S
Certificate Number(s)

FOR THE

YEAR ENDED DECEMBER 31, 19 94

Form PSC/WAS 5 (Rev. 12/22/86)

WATER UTILITY PLANT MATRIX

CURRENT YEAR (f)	.1 INTANGIBLE PLANT (g)	.2 SOURCE OF SUPPLY AND PUMPING PLANT (h)	.3 WATER TREATMENT PLANT (i)	.4 TRANSMISSION AND DISTRIBUTION PLANT (j)	.5 GENERAL PLANT (k)
$	$	$XXXXXXXXXXXX	$XXXXXXXXXXXX	$XXXXXXXXXXXX	$XXXXXXXXXX
		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXX
3,355	XXXXXXXXXXXX		3,355		
827,969	XXXXXXXXXXXX		827,969		
	XXXXXXXXXXXX		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXX
	XXXXXXXXXXXX		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXX
	XXXXXXXXXXXX		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXX
152,086	XXXXXXXXXXXX	152,086	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXX
	XXXXXXXXXXXX		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXX
	XXXXXXXXXXXX		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXX
11,790	XXXXXXXXXXXX	11,790	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXX
102,750	XXXXXXXXXXXX	102,750	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXX
8,079	XXXXXXXXXXXX	8,079	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXX
177,943	XXXXXXXXXXXX	XXXXXXXXXXXX	177,943	XXXXXXXXXXXX	XXXXXXXXXX
	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX		XXXXXXXXXX
	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX		XXXXXXXXXX
	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX		XXXXXXXXXX
969,352	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	969,352	XXXXXXXXXX
96,777	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	96,777	XXXXXXXXXX
142,815	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	142,815	XXXXXXXXXX
61,054	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	61,054	XXXXXXXXXX
					XXXXXXXXXX
22,712				- 22,712	XXXXXXXXXX
7,822	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	7,822
14,983	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	14,983
1,749	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	1,749
1,741	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	1,741
1,064	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	1,064
1,198	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	1,198
1,002	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	1,002
2,149	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	2,149
$ 2,608,390	$	$ 274,705	$ 1,009,267	$ 1,292,710	$ 31,708

CLASS "B"

WATER and/or SEWER UTILITIES

(Gross Revenue of $150,000 or More but Less Than $750,000 Each)

ANNUAL REPORT

OF

WS062
Econ Utilities Corporation
664 South Military Trail
Deerfield Beach, FL 33442-3023

404-W 341-S
Certificate Number(s)

FOR THE

YEAR ENDED DECEMBER 31, 19 95

Form PSC/WAS 5 (Rev. 12/22/86)

NAME: Econ Utilities Corporation

YEAR OF REPORT
DECEMBER 31, 19 95

WATER UTILITY PLANT ACCOUNTS

	ACCOUNT NAME (b)	PREVIOUS YEAR (c)	ADDITIONS (d)	RETIREMENTS (e)
	Organization	$	$	$
	Franchises			1,348
	Land and Land Rights	3,355		
	Structures and Improvements	827,969		
	Collecting and Impounding Reservoirs			
	Lake, River and Other Intakes			2,336
	Wells and Springs	152,086		
	Infiltration Galleries and Tunnels			
	Supply Mains	11,790		
	Power Generation Equipment	102,750		
	Pumping Equipment	8,079		
	Water Treatment Equipment	177,943	3,596	
	Distribution Reservoirs and Standpipes			
	Transmission and Distribution Mains	969,352		
	Services	96,777		
	Meters and Meter Installations	142,815	9,071	
	Hydrants	61,054		
	Other Plant and Miscellaneous Equipment			
	Office Furniture and Equip.	22,712	443	
	Transportation Equipment	7,822		
	Stores Equipment	14,983		
	Tools, Shop and Garage Equip.	1,749		
	Laboratory Equipment	1,741		
	Power Operated Equipment	1,064		
	Communication Equipment	1,198		
	Miscellaneous Equipment	1,002		
	Other Tangible Plant	2,149	139	
	Total Water Plant	$ 2,608,390	$ 13,249	$ 3,684

NOTE: Any adjustments made to reclassify property from one account to another must be footnoted.

WATER UTILITY PLANT MATRIX

CURRENT YEAR (f)	.1 INTANGIBLE PLANT (g)	.2 SOURCE OF SUPPLY AND PUMPING PLANT (h)	.3 WATER TREATMENT PLANT (i)	.4 TRANSMISSION AND DISTRIBUTION PLANT (j)	.5 GENERAL PLANT (k)
	$	$XXXXXXXXXXXX	$XXXXXXXXXXXX	$XXXXXXXXXXXX	$XXXXXXXXXXXX
	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX
	XXXXXXXXXXXX		2,007		
2,007	XXXXXXXXXXXX		827,969	XXXXXXXXXXXX	XXXXXXXXXXXX
827,969	XXXXXXXXXXXX		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX
	XXXXXXXXXXXX		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX
	XXXXXXXXXXXX		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX
	XXXXXXXXXXXX	149,752	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX
149,752	XXXXXXXXXXXX		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX
	XXXXXXXXXXXX		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX
	XXXXXXXXXXXX	11,790	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX
11,790	XXXXXXXXXXXX	102,750	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX
102,750	XXXXXXXXXXXX	8,079	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX
8,079	XXXXXXXXXXXX	XXXXXXXXXXXX	181,539	XXXXXXXXXXXX	XXXXXXXXXXXX
181,539	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX
	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX		XXXXXXXXXXXX
	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	969,352	XXXXXXXXXXXX
969,352	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	96,777	XXXXXXXXXXXX
96,777	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	151,886	XXXXXXXXXXXX
151,886	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	61,054	XXXXXXXXXXXX
61,054	XXXXXXXXXXXX				XXXXXXXXXXXX
				23,155	7,822
23,155	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	14,983
7,822	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	1,749
14,983	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	1,741
1,749	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	1,064
1,741	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	1,198
1,064	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	1,002
1,198	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	2,288
1,002	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	
2,288	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	
$ 2,617,957	$	$ 272,371	$ 1,011,515	$ 1,302,224	$ 31,847

Exhibit TLB-4
Docket No. 991437-WU

TRANSMISSION & DISTRIBUTION SYSTEM INVENTORY

FROM ECON'S 1981 ANNUAL REPORT TO PSC

EXHIBIT TLB – 4

WATER TRANSMISSION & DISTRIBUTION SYSTEM INVENTORY FROM ECON'S 1981 ANNUAL REPORT

WATER TRANSMISSIONS AND DISTRIBUTION MAINS

Size (Inches)	2	4	4	6	6	8	8
Type of Main (CI, PVC, etc.)	PVC	PVC	C.A.	PVC	C.A.	PVC	C.A.
Length of Pipe (Nearest Foot)	3,825	3,620	5,495	13,761	10,565	19,181	3,085
Beginning of Year	3,825	3,620	5,495	13,761	10,565	19,181	3,085
Added During Year	--	--	--	--	--	--	--
Retired During Year	--	--	--	--	--	--	--
Close of Year	3,825	3,620	5,495	13,761	10,565	19,181	3,085

Size (Inches)	10	12	14
Type of Main (C.I., PVC, etc.)	PVC	PVC	D.I.
Length of Pipe (Nearest Foot)	14,878	4,578	5,509
Beginning of Year	14,878	4,578	5,509
Added During Year	--	--	--
Retired During Year	--	--	--
Close of Year	14,878	4,578	5,509

WELL DISCHARGE PIPE

Size (Inches	6
Type of Main (C.I., PVC, etc.)	D.I.
Length of Pipe	323
Beginning of Year	323
Added During Year	--
Retired During Year	--
Close of Year	323

Exhibit TLB-4.1
Docket No. 991437-WU

TRANSMISSION & DISTRIBUTION SYSTEM INVENTORY

FROM ECON'S 1995 ANNUAL REPORT TO PSC

EXHIBIT TLB – 4.1

WATER TRANSMISSION & DISTRIBUTION SYSTEM INVENTORY FROM ECON'S 1995 ANNUAL REPORT

TY NAME: Econ Utilities Corporation

TY SYSTEM:

DECEMBER 31, --

Docket No. 991437-WU
Exhibit TLB-4.1
Page 1

WATER TREATMENT PLANT INFORMATION

e of treatment (reverse osmosis, etc.):

nods used (sedimentation, chemical, aerated, etc.):

LIME TREATMENT

t rating (GPM): Manufacturer:

FILTRATION

pe and area: ☐ Pressure ⟶ Square Feet:

☐ Gravity ⟶ GPM/Square Feet:

MAINS

TYPE OF PIPE (Galvanized, Cast Iron, PVC, Etc.)	DIAMETER OF PIPE (in inches)	MAINS BEGINNING OF YEAR (in feet)	ADDITIONS	RETIREMENTS	MAINS END OF YEAR (in feet)
PVC	2	3,825			3,825
PVC	4	3,620			3,620
CA	4	5,495			5,495
PVC	6	13,761			13,761
CA	6	10,565			10,565
PVC	8	19,181			19,181
CA	8	3,085			3,085
PVC	10	14,878			14,878
PVC	12	4,578			4,578
DI	14	5,509			5,509
Total feet of mains		84,497			84,497

SERVICES AND METERS

METERS IN SERVICE		METERS BEGINNING OF YEAR	ADDITIONS	RETIREMENTS	METERS END OF YEAR
	5/8" - 3/4"	685	47		732
	1"	8			8
	2"	5			5
	3"				
	4"				
	6"				
	8"				
Other (Specify):	3/4"	1			1
	1 1/2"	2			2
Total meters in service		701	47		748
Total meters in stock		44	1		45
Number of services in use		700	25		725

Exhibit TLB-4.2
Docket No. 991437-WU

TRANSMISSION & DISTRIBUTION SYSTEM INVENTORY

FROM WEDGEFIELD'S 1996 ANNUAL REPORT TO PSC

EXHIBIT TLB – 4.2

WATER TRANSMISSION & DISTRIBUTION SYSTEM INVENTORY FROM WEDGEFIELD'S 1996 ANNUAL REPORT

UTILITY NAME: WEDGEFIELD UTILITIES, INC.

SYSTEM NAME: WEDGEFIELD UTILITIES, INC.

YEAR OF REPORT
DECEMBER 31, 1996

Docket No. 991437-WU
Exhibit TLB-4 2
Page 1

WATER TREATMENT PLANT INFORMATION

Type of treatment (reverse osmosis, etc.): _____

Methods used (sedimentation, chemical, aerated, etc.): _____

LIME TREATMENT

Unit rating (GPM): N/A Manufacturer: _____

FILTRATION

Type and area: |__| Pressure ---> Square Feet: _____

|__| Gravity ---> GPM/Square Feet: _____

MAINS

TYPE OF PIPE (Galvanized, Cast Iron, PVC, Etc.)	DIAMETER OF PIPE (in inches)	MAINS BEGINNING OF YEAR (in feet)	ADDITIONS	RETIREMENTS	MAINS END OF YEAR (in feet)
P.V.C.	2"	3825	_	_	3825
P.V.C.	4"	3620	_	_	3620
C.A.	4"	5495	_	_	5495
P.V.C.	6"	13761	_	_	13761
C.A.	6"	10565	_	_	10565
P.V.C.	8"	19181	_	_	19181
C.A.	8"	3085	_	_	3085
P.V.C.	10"	14878	_	_	14878
P.V.C.	12"	4578	_	_	4578
D.I.	14"	5509	_	_	5509
Total feet of mains		84497			84497

SERVICES AND METERS

METERS IN SERVICE	METERS BEGINNING OF YEAR	ADDITIONS	RETIREMENTS	METERS END OF YEAR
5/8" - 3/4"	741	17	_	758
1"-1.5	1		_	1
2"-3	2	_	_	2
3"	_	_	_	_
4"	_	_	_	_
6"	_	_	_	_
8"	_	_	_	_
Other (Specify): _ 3/4" +1.5	1	_	_	1
_ 1-1/2" +5	2			2
Total meters in service _ _ _ _ _	747	17		764
Total meters in stock _ _ _ _ _ _				
Number of services in use _ _ _ _	747	17		764
	747			764

Exhibit TLB-4.3
Docket No. 991437-WU

TRANSMISSION & DISTRIBUTION SYSTEM INVENTORY FROM JUNE, 1995 ORANGE CO. ACQUISITION FEASIBILITY ANALYSIS

EXHIBIT TLB – 4.3

WATER TRANSMISSION & DISTRIBUTION SYSTEM INVENTORY FROM JUNE, 1995 ORANGE COUNTY ACQUISITION FEASIBILITY ANALYSIS (TABLE 2-1)

TABLE 2-1

ECON UTILITIES
WATER MAIN PIPE INVENTORY

PIPE MATERIAL	DIAMETER (inches)	LINEAR FEET
PVC	2	3,825
PVC	4	3,620
AC	4	5,495
PVC	6	13,761
AC	6	10,565
PVC	8	19,181
AC	8	3,085
PVC	10	14,878
PVC	12	4,578
DI	14	5,509
	TOTAL	**84,497**

PVC - Polyvinyl Chloride
AC - Asbestos - Cement
DI - Ductile Iron

Exhibit TLB-5
Docket No. 991437-WU

ORIGINAL COST ESTIMATE FOR PLANT IN SERVICE ITEMS FOR PERMITTED FACILITIES

COST ESTIMATE OF PLANT IN SERVICE FOR WEDGEFIELD UTILITIES AS OF JANUARY 6, 1996

(FOR FACILITIES PERMITTED UNDER FDEP AND PREDECESSOR DEPARTMENTS)

PERMIT DATE	ITEM	WATER PLANT IN SERVICE AS OF 1/1/96 AS SHOWN BY WEDGEFIELD IN SCHEDULE A-4 OF MFR's	UTILITY'S ORIG. COST AMOUNTS SHOWN ON PERMIT APPLICATIONS	ESTIMATED COST AMOUNTS OF FACILITIES ACTUALLY INSTALLED	ESTIMATED ORIGINAL COST OF REPLACED FACILITIES	ESTIMATED ORIGINAL NET COST OF FACILITIES REMAINING AFTER REPLACEMENTS	COMMENTS
9/12//90	Well No. 3, 10", 600 gpm		$52,000	$52,000	$0	$52,000	Replaced Well No. 1
########	3 New Ion Exchange Softeners 3 High Service Pumps Associated Piping, Chem. Feed		$762,850	$254,282	$0	$254,282	Only 1/3 of permitted facilities installed
1994	Add 2nd New Ion Exchange Softener			$58,952		$58,952	2nd unit added in 1994
########	350,000 gal. Ground Tank 2,000 gpm Aerator		$160,000	$160,000	$0	$160,000	
########	Ion Exchange Soft., Lime Add.		$30,000	$30,000	$30,000	0	Replaced by new ion exchange unit
########	Well No. 2, 8", 250 gpm		$25,000	$25,000	$0	$25,000	Original second well
########	Distribution System Extension		$660,000	$660,000	$0	$660,000	
########	12,000 gal. Ground Tank Chlorination System 600 gpm Service Pumping 600 L.F. 6" PVC Main		$30,000	$30,000	$0	$30,000	
########	New 12" Well at Remote Site		$9,800	$0	$0	0	Abandoned
########	Distribution System Extension		$32,000	$32,000	$0	$32,000	
########	Well No. 1, 6", 250 gpm Aeration, Sedimentation, Chlor. 5,000 gal. Storage Tank 250 gpm Degasifier Aerator 10,000 gal. Clear Well Hypochlorinator 250 gpm High Lift Pump Gasoline Engine Drive		$15,000	$15,000	$15,000	0	Replaced
########	Distribution System		$60,000	$60,000	$20,000	$40,000	Some replacement in 1978

	TOTALS	$2,602,973	$1,836,650	$1,377,234	$65,000	$1,312,234	

Exhibit TLB-5.1
Docket No. 991437-WU

ORIGINAL COST STUDY OF WATER PLANT IN SERVICE FOR WEDGEFIELD UTILITIES AS OF January 6, 1996

ORIGINAL COST STUDY OF WATER PLANT IN SERVICE FOR WEDGEFIELD UTILITIES
AS OF JANUARY 6, 1996

ESTIMATED ORIGINAL NET COST OF PERMITTED FACILITIES REMAINING ON 1/6/96	$1,312,234

PLANT IN SERVICE ADDITIONS SHOWN BY UTILITY IN ANNUAL REPORT FOR ITEMS NOT REQUIRING FDEP PERMITS, AS OF JANUARY, 1996

Land & Land Rights	2,207
Power Generation Equipment	102,750
Meters & Meter Installations	151,886
Other Plant & Misc. Equipment	23,155
Office Furniture & Equipment	7,822
Transportation Equipment	14,983
Stores Equipment	1,749
Tools, Shop & Garage Equipment	1,741
Laboratory Equipment	1,064
Power Operated Equipment	1,198
Communications Equipment	1,002
Miscellaneous Equipment	2,288
TOTAL	$1,624,079

Exhibit TLB-6
Docket No. 991437-WU

ANALYSIS OF REPLACED DISTRIBUTION SYSTEM LINES

EXHIBIT TLB-6

ANALYSIS OF WATER TRANSMISSION & DISTRIBUTION SYSTEMS MAINS INCLUDED IN 1995 PIPE INVENTORY FOR REPLACED PIPE

Pipe Lengths per Original Permits

1963:

6" A.C. (Transite) = 10,565 L.F.
4" A.C. (Transite) = 10,000 L.F.
8" A.C. (Transite) = 750 L.F.
10" A.C. (transite) = 600 L.F.

1964:

8" A.C. (Transite) = 4,170 L.F.
6" A.C. (Transite) = 1,760 L.F.

1977:

6" PVC = 600 L.F.

1978:

14" Ductile Iron = 5,500 L.F.
12" PVC = 4,580 L.F.
10" PVC = 14,850 L.F.
8" PVC = 19,040 L.F.
6" PVC = 12,820 L.F.
4" PVC Not Listed
2" PVC Not Listed

SUMMARY TOTALS:	REPLACED PIPE	1996 PIPE INVENTORY
14" D. I = 5,500 L.F.	—	5,509 L.F.
12" PVC = 4,580 L.F.	—	4,578 L.F.
10" PVC = 14,850 L.F	—	14,878 L.F.
8" PVC = 19,040 L.F.	—	19,181 L.F.
6" PVC = 13,420 L.F	—	13,761 L.F.
4" PVC = 0		3,620 L.F.
2" PVC = 0		3,825 L.F.
10" A.C. = 600 L.F.	(600 L.F.)	0
8" A.C. = 4,920 L.F.	(1,835 L.F.)	3,085 L.F.
6" A.C. = 12,325 L.F.	(1,760 L.F.)	10,565 L.F.
4" A.C. = 10,000 L.F.	(4,505 L.F.)	5,495 L.F.
85,235 L.F.	8,700 L.F.	84,497 L.F.

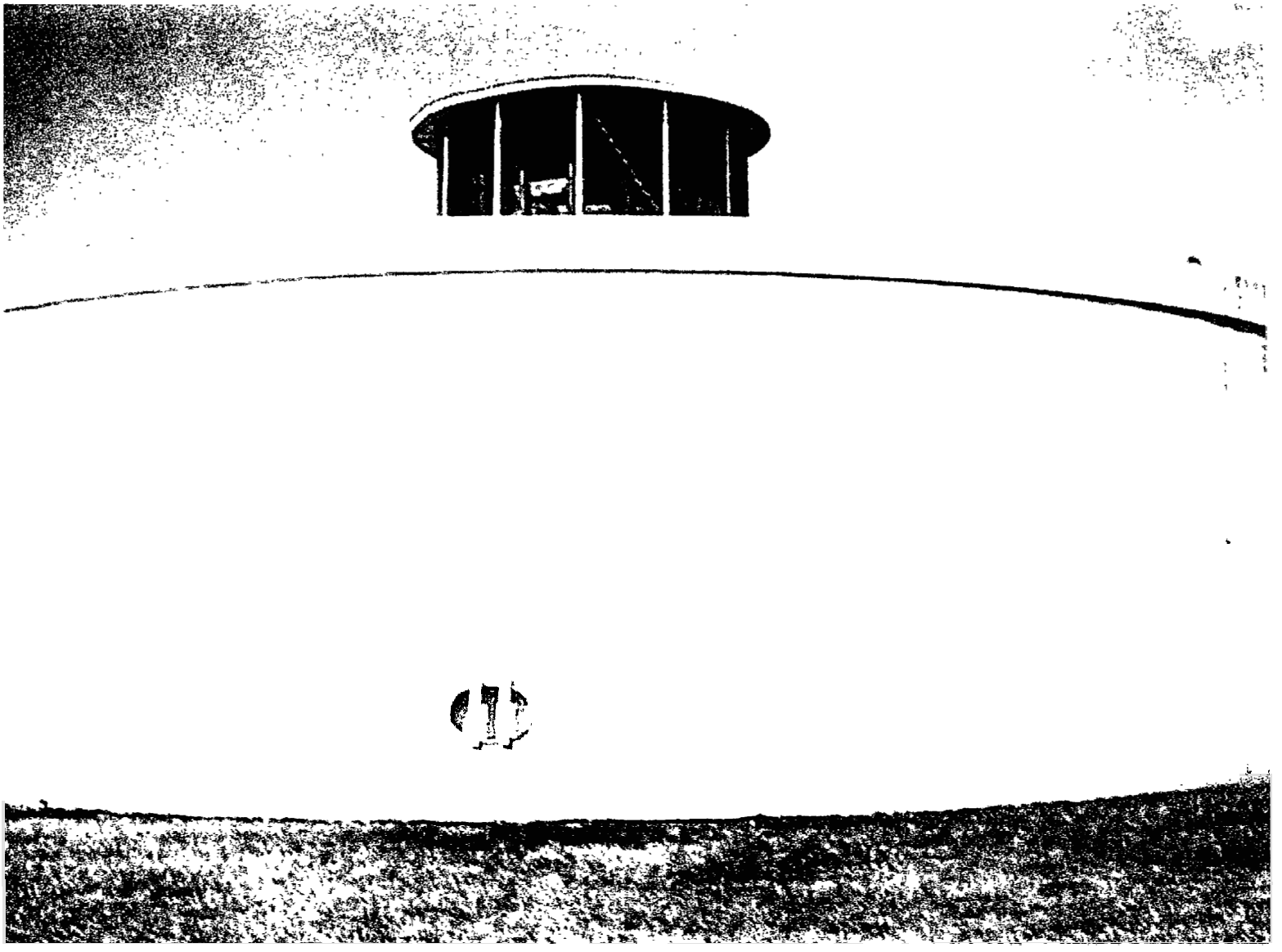
For Agreement, add 2" & 4" unlisted pipe to permitted length and then subtract replaced pipe: 85,235 + 3,620 + 3,825 – 8,700 = 83,980 L.F. (within 500 L.F.) O.K.

Cost Estimate of Replaced Pipe:

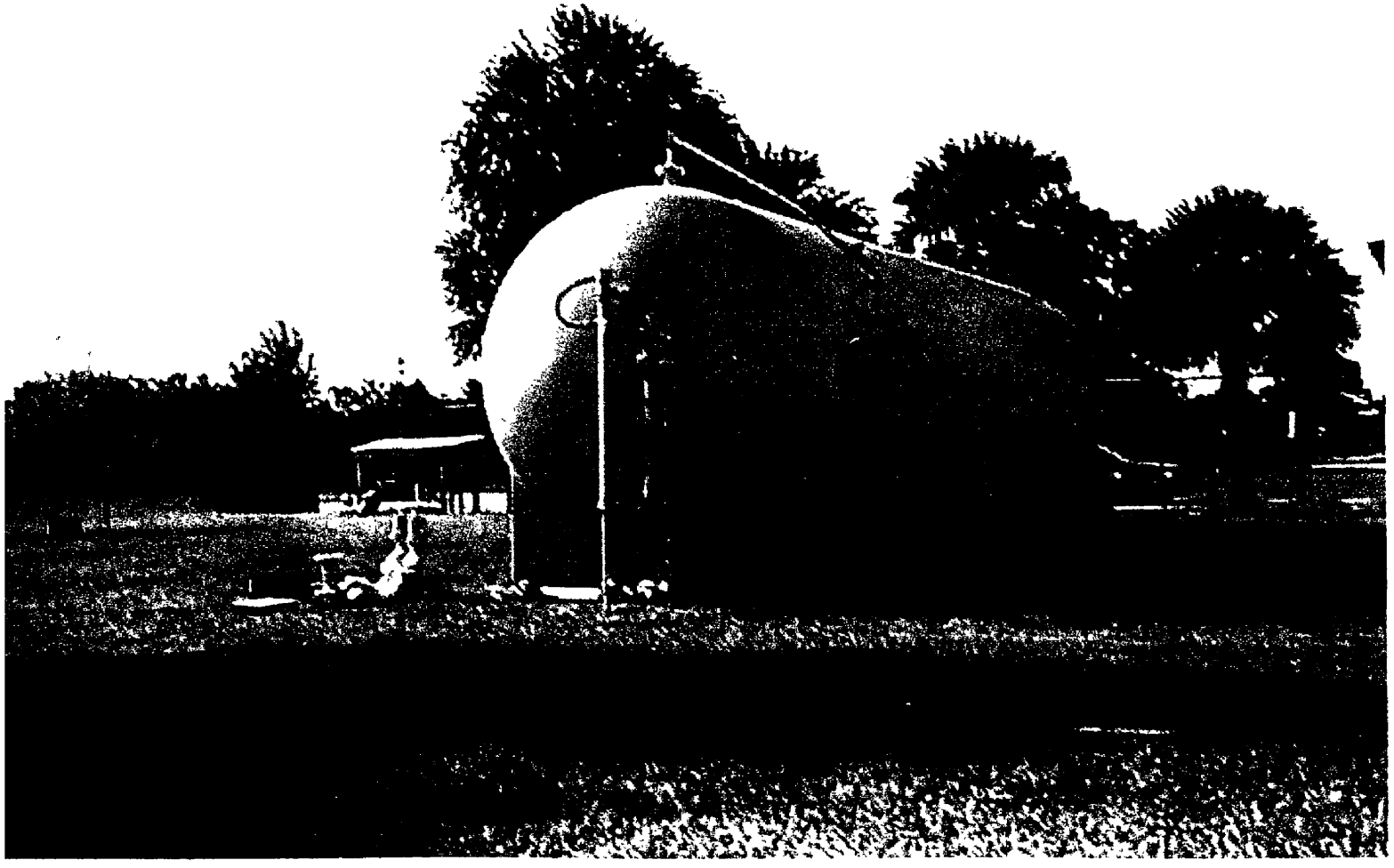
6" A.C.: 1,760 L.F @ $3.00 = $5,280
4" A.C.: 4,505 L.F. @ $2.00 = $9,010
8" A.C. : 1,835 L.F. @ $3.50 = $6,422
10" A.C. 600 L.F. @ $4.00 = $2,400
TOTAL ESTIMATED COST = $23,112

Exhibit TLB-7
Docket No. 991437-WU

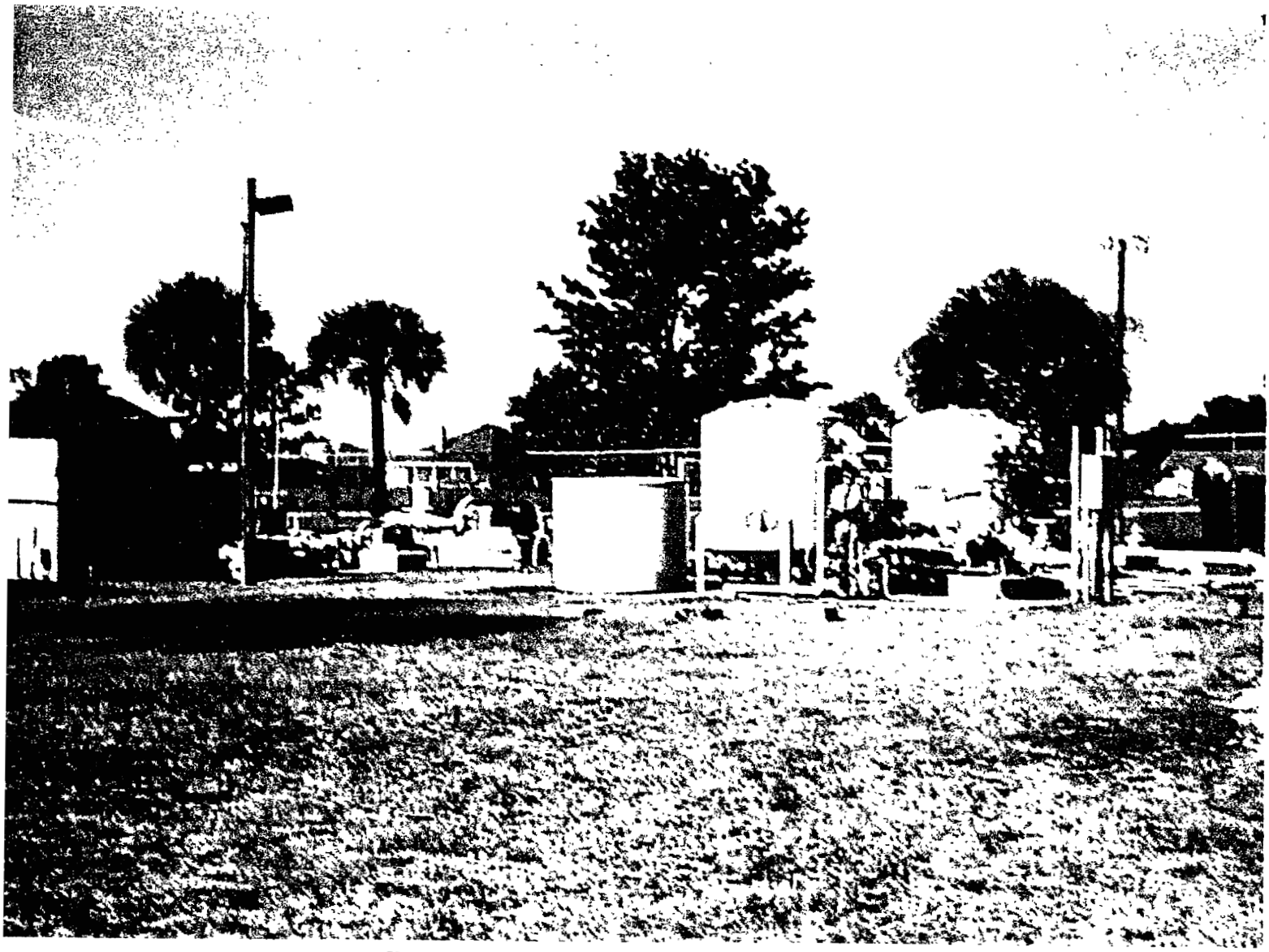
PHOTOGRAPHS OF TREATMENT PLANT FACILITIES MADE DURING INSPECTION OF 4/25/01



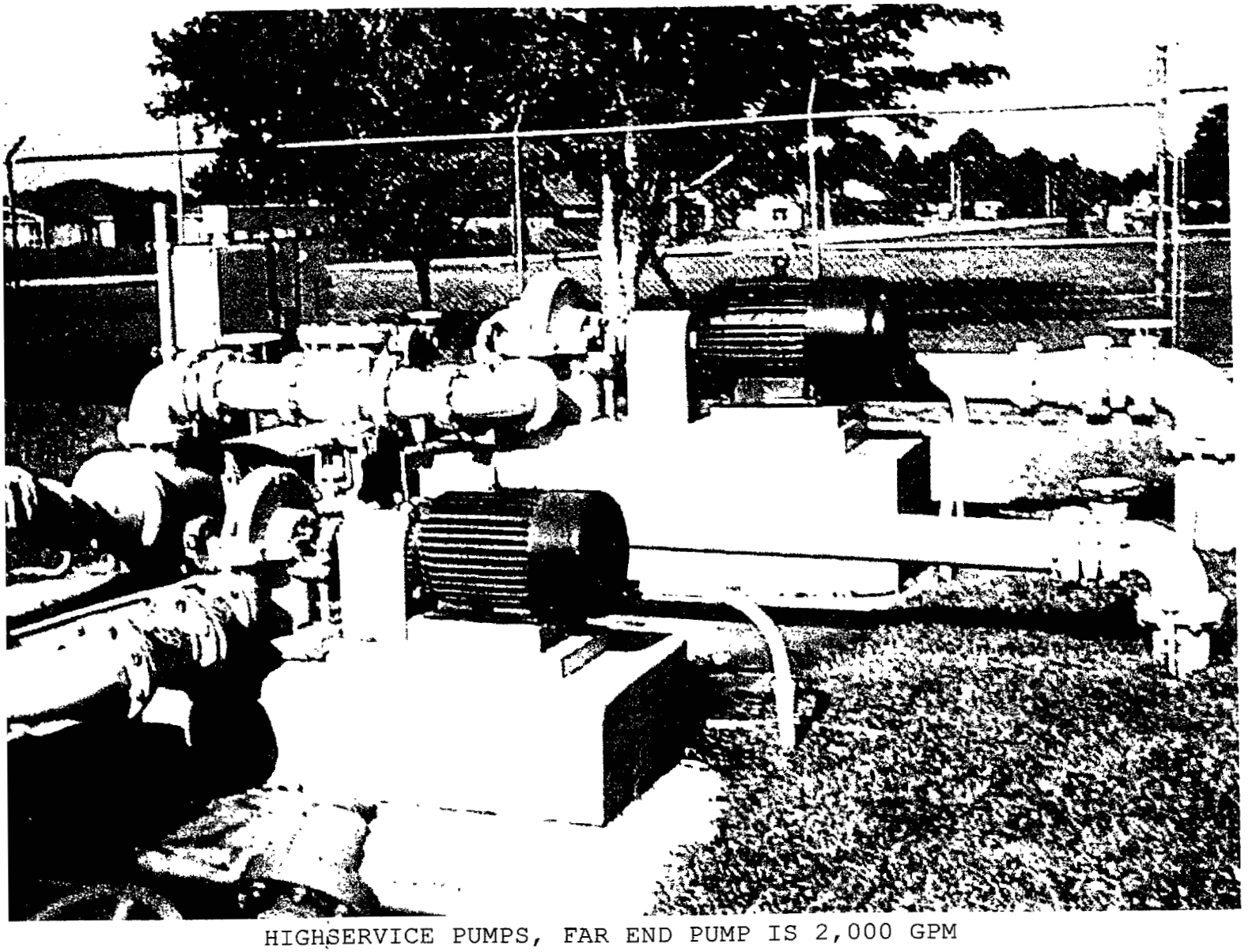
350,000 GAL. TANK W/ROOF MOUNTED AERATOR



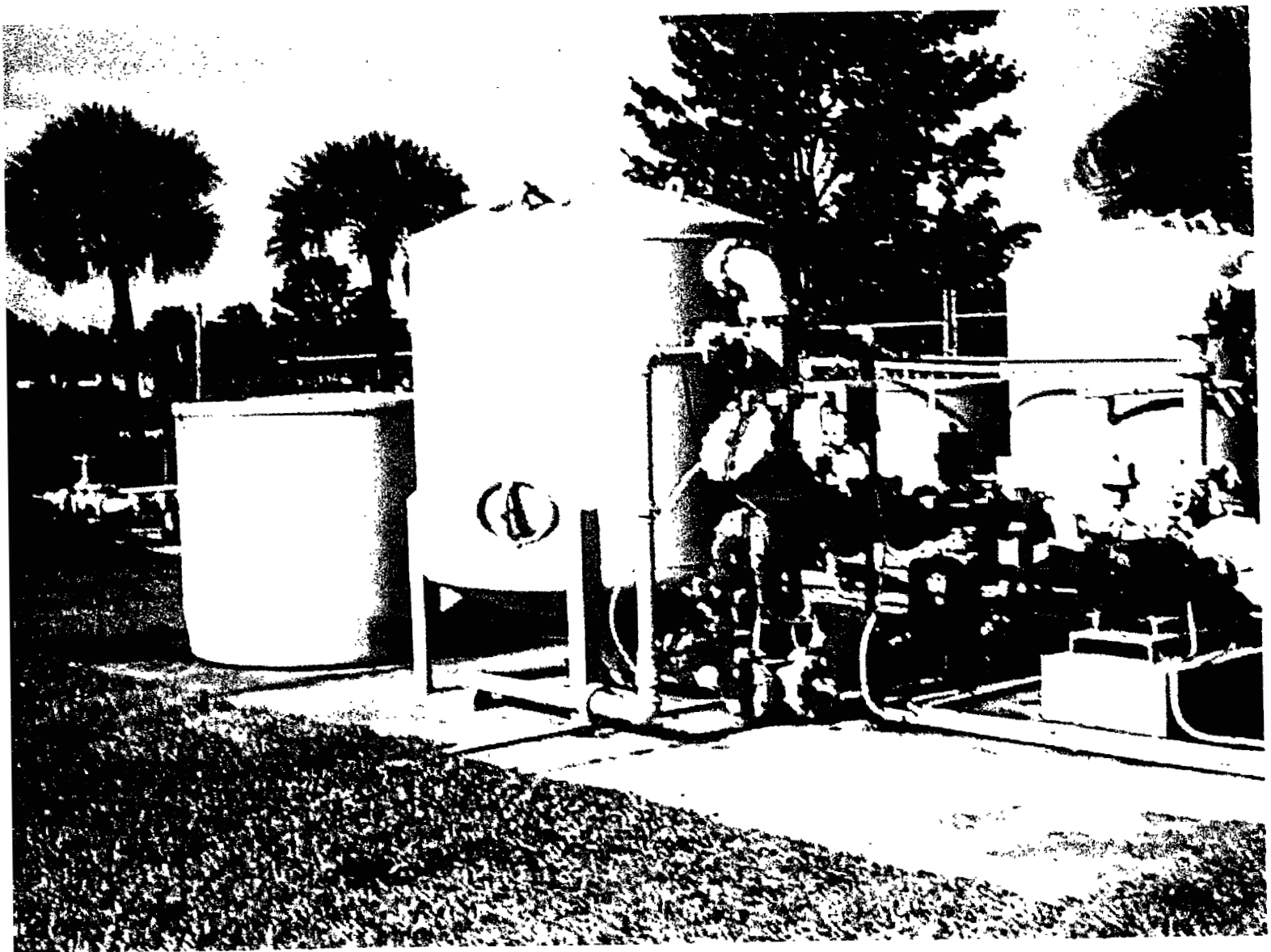
12,000 Hydropneumatic Tank



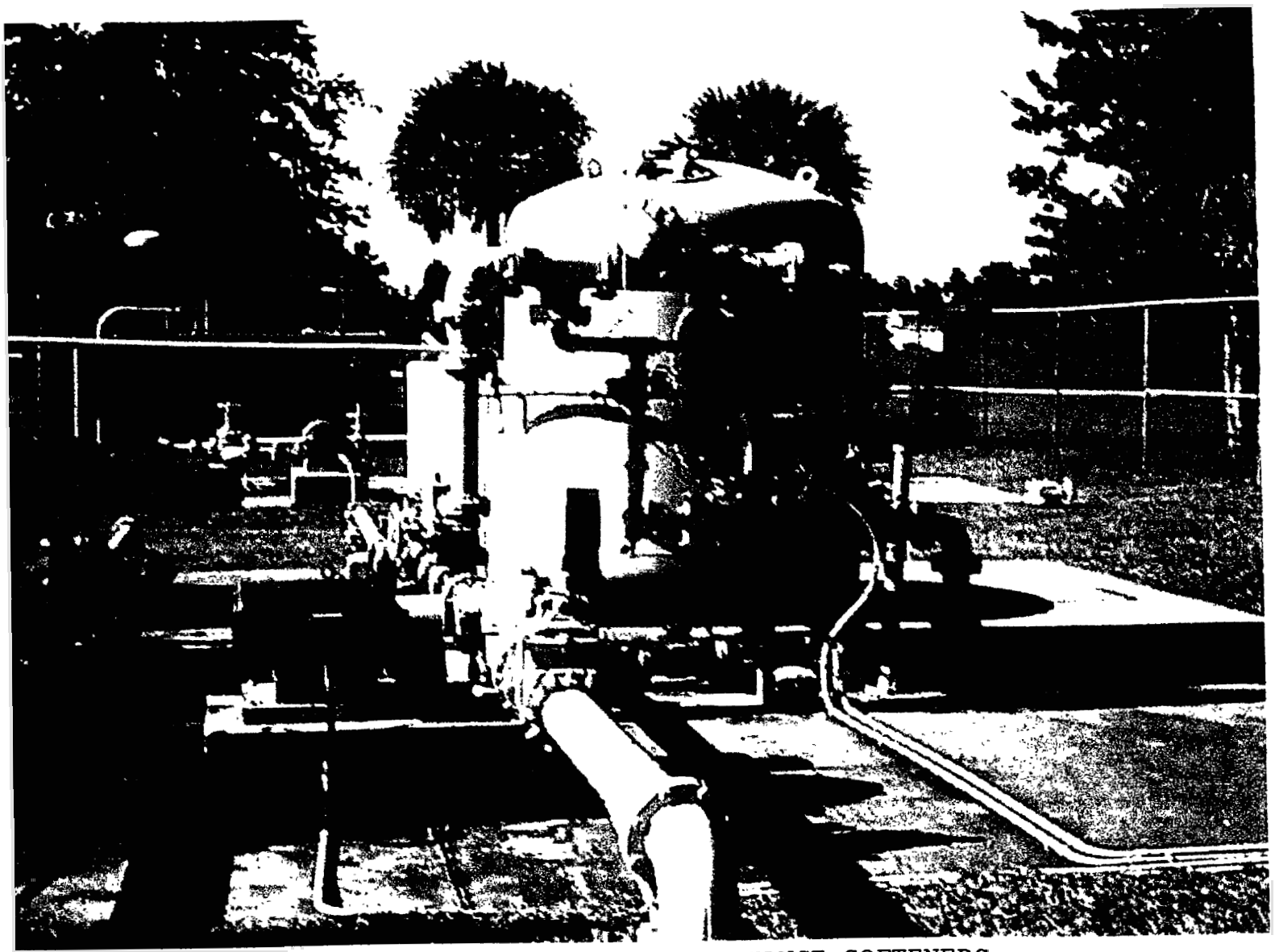
VIEW OF TREATMENT FACILITIES



HIGHSERVICE PUMPS, FAR END PUMP IS 2,000 GPM

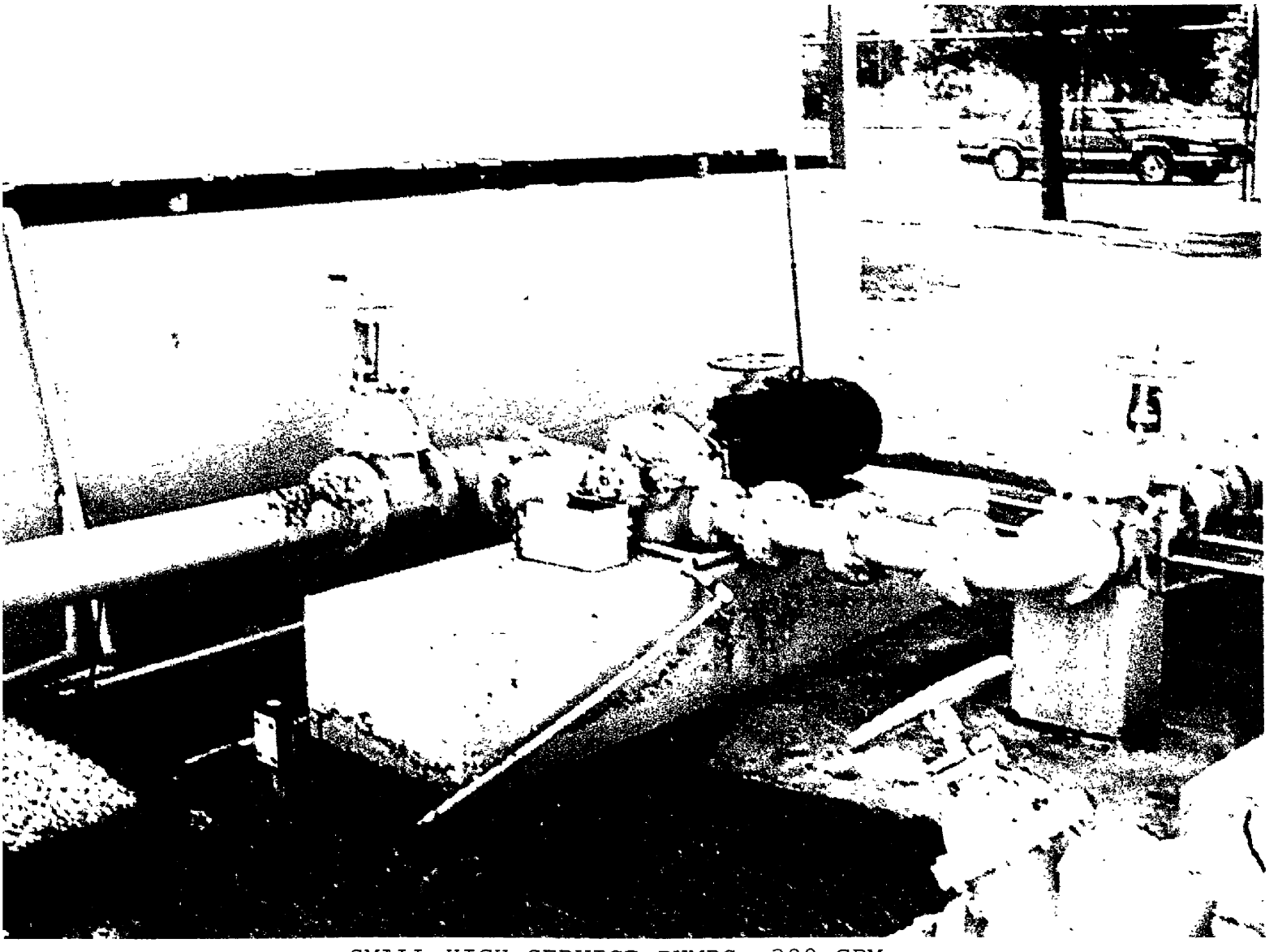


VIEW OF BOTH 400 GPM SOFTENER UNITS

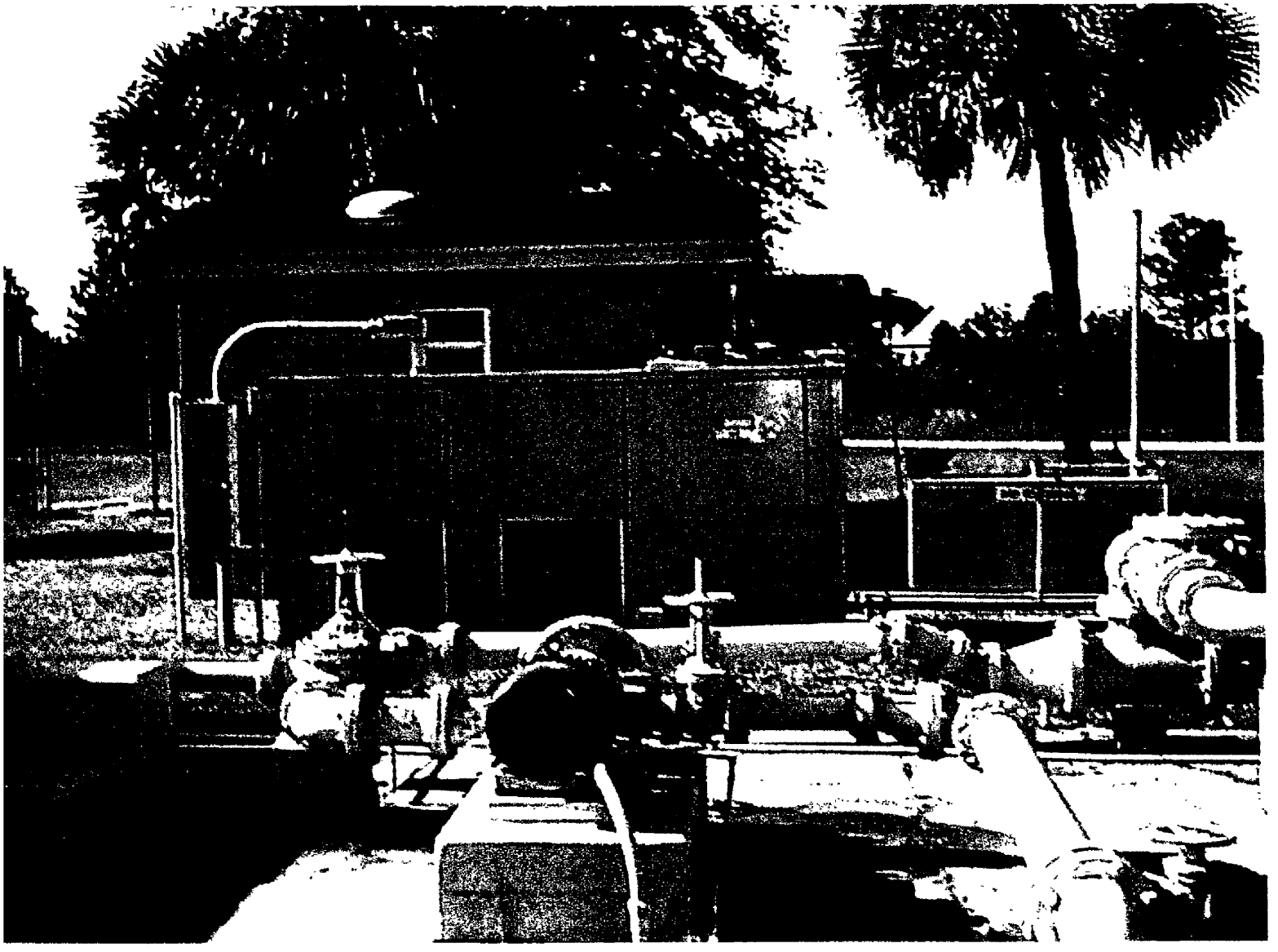


ONE OF THE TWO 400 GPM ION EXCHANGE SOFTENERS

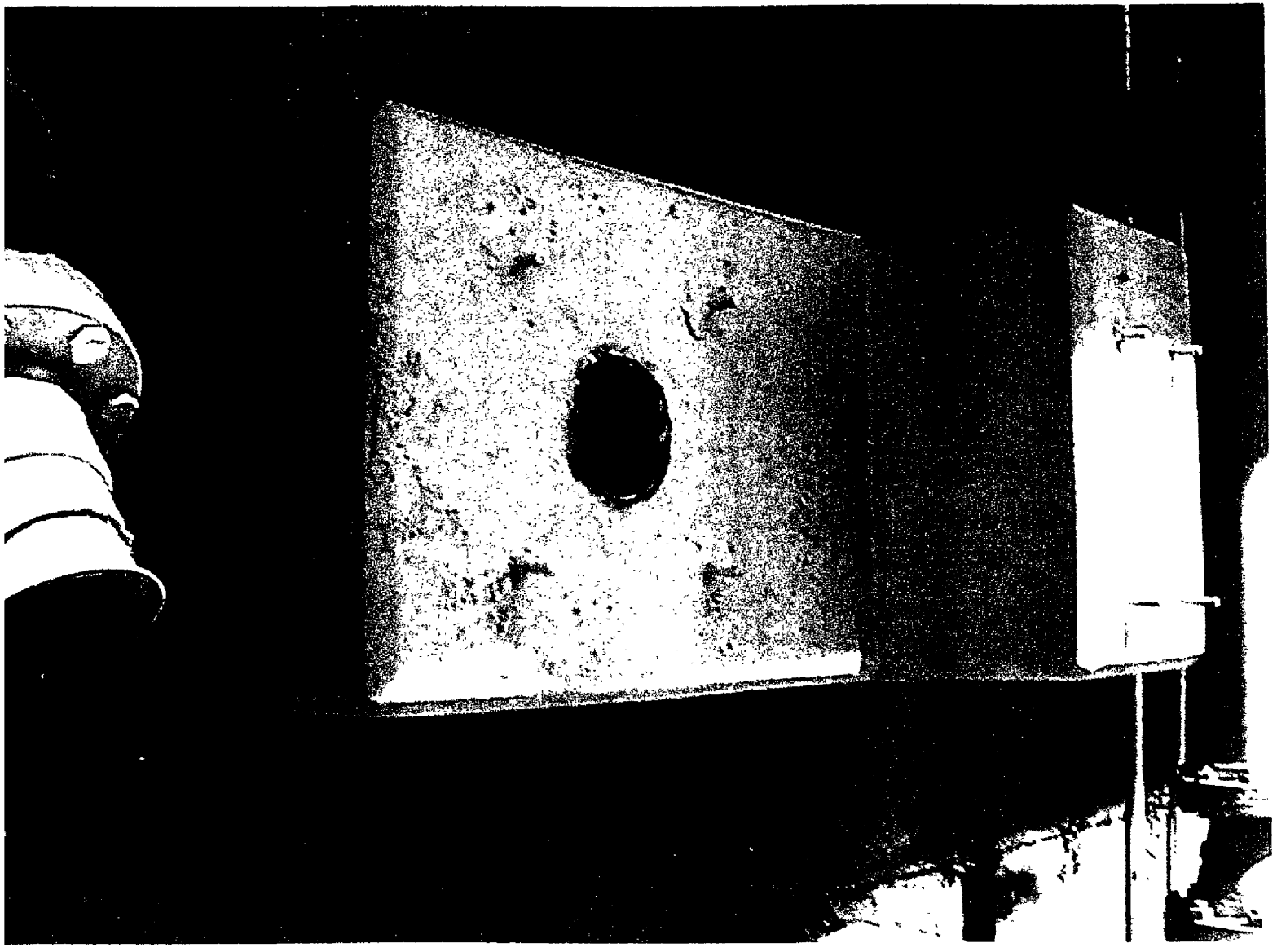
VIEW OF TREATMENT FACILITIES



SMALL HIGH SERVICE PUMPS, 300 GPM



CHLORINATION BUILDING IN BACKGROUND



VIEW OF ABANDONED WELL NO. 1

VIEW OF WELL NO. 2

Exhibit TLB-8
Docket No. 991437-WU

USED AND USEFUL CALCULATIONS

EXHIBIT TLB-8

USED AND USEFUL CALCULATIONS

1. SOURCE OF SUPPLY WELLS AND PUMPING

   A. Total Well Capacity: 400 GPM + 600 GPM = 1,000 GPM
      1,000 GPM = 1,440,000 GPD

   B. FIRM RELIABLE CAPACITY (FRC): 400 GPM WITH THE 600 GPM WELL OUT OF SERVICE.
      FRC = 400 GPM = 576,000 GPD

   C. AVERAGE DAILY FLOW (ADF): FROM SCHEDULE F-3 OF MFRs
      ADF = 286,731 GPD

   D. MAXIMUM DAILY FLOW (MDF): USE AVERAGE OF 5 MAX. DAYS OF MAX. MONTH TO AVOID UNUSUAL HIGH FLOWS DUE TO FIRES, BROKEN MAINS, LARGE LEAKS, ETC.
      MDF = 507,000 GPD

   E. REQUIRED FIRE FLOW (FF): FOR RESIDENTIAL COMMUNITIES LIKE WEDGEFIELD, THE ISO MANUAL SETS FORTH A FIRE FLOW REQUIREMENT OF 750 GPM FOR 2 HRS. DURATION.
      FF = 750 gal/min x 60 mins. X 2 hrs. = 90,000 GPD

   F. FIVE YEAR GROWTH:
      - CUSTOMER GROWTH PER YEAR USING REGRESSION ANALYSIS FOR PAST 5 YEARS = 33 ERCs
      - 5 YEARS GROWTH = 5 X 33 = 165 ERCs
      - TEST YEAR AVERAGE ERCs = 860
      - MAX. DAY FLOW PER ERC = 507,000/860 = 589.5 GPD
      - ADF PER ERC = 286,731/860 = 333.4 GPD
      - FIVE YEAR INCREASE IN MDF
        165 ERCs x 589.5 GPD/ERC = 97,272 GPD
      - FIVE YEAR INCREASE IN ADF
        165 ERCs X 333.4 GPD/ERC = 55,011 GPD

G. UNACCOUNTED FOR WATER (UFW)

TOTAL UFW	=	77,704 GPD (27.1 %)
LESS 10% REASONABLE ALLOWANCE UFW	=	28,673 GPD
EXCESSIVE UFW	=	49,031 GPD

H. USED AND USEFUL RATIONALE:

U/U = (MDF + FF + GROWTH – EXCESS UFW)/TOTAL CAPACITY

U/U = (507,000 + 90,000 + 97,272 – 49,031) / 1,440,000

U/U = 44.78 %

OR

U/U = (ADF + FF + GROWTH – EXCESS UFW) / FRC

U/U = (286,731 + 90,000 + 55,011 – 49,031) / 576,000

U/U = 66.44 %

LARGER PERCENTAGE CONTROLS TO MEET TEN STATES CRITERIA, THEREFORE:

U/U = 66.44 %

2. WATER TREATMENT PLANT

MAX. DAY FLOW = 507,000 GPD (AVG. OF 5 MAX. DAYS OF MAX. MONTH

MAX. DAY CAPACITY:

LIMITED BY THE TWO 400 GPM WATER SOFTENING UNITS WHICH CAN BE RUN 22 HOURS PER DAY, NEEDING 2 HRS. EA./DAY FOR BACKWASHING MEDIA.

MAX. DAY CAPACITY = 800 GPM X 60 MINS. X 22 HRS/DAY
= 1,056,000 GPD

U/U = (MDF + FF + GROWTH – EXCESS UFW) / MAX. CAPACITY

U/U = (507,000 + 90,000 + 97,272 – 49,031) / 1,056,000

U/U = 61.1 %

3. STORAGE FACILITIES:

ADF = 286,731 GPD

5 YRS ADF GROWTH = 55,011 GPD

EXCESS UFW = 49,031 GPD

FF = 90,000 GPD

GROUND STORAGE TANK CAPACITY = 350,000 GPD

DEAD STORAGE = 10 %

U/U = 1/2 (ADF + GROWTH) + FF – EXCESS UFW)/ CAPICITY – DEAD STORAGE

U/U = 1/2 (341,742) + 90,000 – 49,031 / 350,000 – 35,000

U/U = 211,840/315,000 = 67.25 %

4. WATER DISTRIBUTION SYSTEM:

TOTAL CONNECTED ERCs:

RESIDENTIAL LOTS =	804
COMMERCIAL CONNECTIONS =	32.5
THE RESERVE =	18
SUBTOTAL =	854.5
PLUS 5 YEARS GROWTH =	165 ERCs
TOTAL CONNECTED ERCs =	1,019.5 ERCs

TOTAL ERCs AVAILABLE FOR SERVICE:

RESIDENTIAL LOTS =	1,376
COMMERCIAL CONNECTIONS =	32.5
THE RESERVE =	127
TOTAL AVAILABLE CONNECTIONS =	1,535.5 ERCs

U/U = 1,019.5 / 1,535.5 = 66.4 %