BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 981609-WS and 980992-WS

DIRECT TESTIMONY OF JAMES C. BOYD, P.E.
ON BEHALF OF D.R. HORTON CUSTOM HOMES, INC.

Q. Please state your name and professional address for the record.

A. My name is James Boyd. My professional address is Boyd Environmental Engineering, Inc., 166 Lookout Place, Suite 200, Maitland, Florida 32751.

Q. Have you been retained by D.R. Horton Custom Homes, Inc. to provide testimony and assist in the preparation of exhibits in this proceeding?

A. Yes.

Q. Please provide a brief resume of your training and experience as it relates to this proceeding.

A. I have attached hereto as **Exhibit JCB-27** a recent resume outlining my professional background, training, and experience related to water and sewer engineering. A great deal of my experience is related to private water and sewer systems regulated by the Florida Public Service Commission.

Q. What is the purpose of your testimony here today?

A. To respond to some of the assertions made and positions taken by the witnesses for Southlake Utilities, as outlined in their prefiled testimony and exhibits.

Q. What is the first area you would like to address with your testimony?

A. The first issue I would like to address is the use of the cost estimates prepared by CPH - Engineers, Inc.

In Exhibit JFG-2, Schedules C and C.2 of Mr. John F. Guastella's testimony, cost estimates prepared by CPH-Engineers, Inc. ("CPH") are used for determining required water treatment plant expansion costs. These costs were originally derived in a report entitled "Southlake Utilities, Water Facilities Plan, November 1998" as authored by CPH (Exhibit JFG-7, the "CPH Report"). As summarized in Table 7-2 of the CPH Report, CPH recommended the following expansion phases and associated costs:

DOCUMENT NUMBER-DATE
02510 FEB 22 a
FPSC-RECORDS/REPORTING

Phase 2 - $3,297,500

Phase 3 - $2,130,500

Phase 4 - $642,500

Phase 5 - $355,000

A Phase 1 expansion is also discussed by CPH in the report. However, since the Phase 1 expansion was intended to be financed by Southlake Utilities, CPH did not provide a cost estimate for the Phase 1 improvements.

As stated in Section 7.2 of the CPH Report, "The selected plan is the most cost effective and will meet the water service demands through the year 2020." In Table 5-4 of the CPH Report, the maximum daily demand in the year 2020 is projected to be 14,180,063 gallons per day (gpd). Hence, it is clear that the expansion recommendations contained in the CPH Report are intended to meet a maximum daily flow (MDF) of 14,180,063 gpd.

The following construction phasing schedule was recommended by CPH in Table 7-1:

Phase	Construction Date
2	2000
3	2005
4	2010
5	2015

A particular construction phase must be capable of providing adequate service until the next phase of construction is completed. For example, CPH estimates a Phase 3 construction date of 2005. This means that Phase 2 construction must be sufficient to accommodate MDF through the year 2005, thus enabling the MDF to be met while the plant is undergoing construction. Applying this logic, plant capacities associated with each phase are derived as follows:

Phase	Accommodate Flow Through Year	Derived Plant Capacity, gpd, Equivalent to Projected MDF (Table 5-4)
2	2005	5,358,375
3	2010	8,098,313
4	2015	11,133,000
5	2020	14,180,063

This capacity derivation can be confirmed by considering high service pump capacities, which are presented in Table 6-9 of the CPH Report. In Section 6.1.6 of the report, CPH states that "The pumps should be sized to deliver the max daily flow and fire flow with one pump off-line." The sum of MDF and fire flow is presented in Table 5-8 of the report (the sum of MDF and fire flow is typically referred to as "coincident draft"). Assuming the largest high service pump off-line, a comparison of coincident draft requirements and high service pumping capacity is presented as follows:

Phase (Capacity Year)	Sum of Fire Flow and MDF, gpd (Table 5-8)	Total High Service Pump Capacity, gpd (Table 6-9)	Total High Service Pump Capacity, gpd (Less Largest Unit)
2 (2005)	9,475,200	11,664,000	9,720,000
3 (2010)	12,713,760	17,928,000	13,608,000
4 (2015)	16,365,600	22,248,000	17,928,000
5 (2020)	19,980,000	26,568,000	22,248,000

As indicated in the above table, the proposed high service pumping capacity for each phase (largest unit off-line) equals or exceeds the projected coincident draft requirement. This confirms the derived design capacity for each phase, which is summarized below along with the estimated cost as projected by CPH:

Phase	Construction Date (Table 7-1)	Estimated Cost (Table 7-2)	Adequate Through Year	Derived Plant Capacity, gpd, Equivalent to Projected MDF (Table 5-4)
2	2000	$3,297,500	2005	5,358,375
3	2005	$2,130,500	2010	8,098,313
4	2010	$642,500	2015	11,133,000
5	2015	$355,000	2020	14,180,063

It should be noted that it is necessary to determine a "derived plant capacity," since the CPH report did not specifically state the design capacity associated with each phase. However, the derived plant capacity is believed to be consistent with the information included in the report, as documented by the preceding analysis. Furthermore, as stated in Section 7.2 of the CPH Report:

> "In order to provide potable water and adequate fire protection for the service area, the Phase 1 through Phase 5 improvements have been proposed. These improvements have been phased to allow for the installation of the improvements as the demand of the service area increases. These Phases will be scheduled according to demands of the service area. The selected plan is the most cost effective and will meet the water service demands through the year 2020. The proposed upgrades are consistent with the existing system and are the most feasible."

In Table 5-4 of the CPH Report, the maximum daily demand in the year 2020 is projected to be 14,180,063 gpd. Hence, it is clear that the improvements are designed to provide a maximum daily flow capacity of 14,180,063 gpd.

The preceding analysis should not be considered an endorsement of the evaluations or conclusions of the CPH Report. Rather, the sole purpose for examining the CPH Report, and deriving the plant capacity associated with each phase, is to contrast this information to the information included in Schedules C and C.2 of Exhibit JFG-2. This comparison is presented in the following table:

Date of Construction		Expanded Plant Capacity (gpd)*		Plant Expansion Cost
JFG Schedules	CPH (Phase)	JFG Schedules	CPH **	
2002	2000 (Phase 2)	3,456,000	5,358,375	$3,297,500
2005	2005 (Phase 3)	5,184,000	8,098,313	$2,130,500
2007	2010 (Phase 4)	6,912,000	11,133,000	$642,500
2008	2015 (Phase 5)	8,640,000	14,180,063	$355,000
			Total Plant Expansion Cost	$6,425,500

* Maximum daily flow basis.

** Plant capacity derived from CPH Report as detailed herein.

As evident by review of the above table, the plant capacity information used in the Exhibit JFG-2 schedules does not match the plant capacity information derived from the CPH Report. Simply stated, CPH projected a total plant expansion cost (Phases 2 through 5) of $6,425,500, which was claimed to be adequate to meet the water service area demands through the year 2020 (MDF of 14,180,063 gpd). In the Exhibit JFG-2 schedules, the same total cost ($6,425,500) is associated with a total plant capacity of 8,640,000 gpd (MDF basis). The difference in capacity, in percentage terms, is 164 percent. This very significant inconsistency brings into question the validity of the plant expansion costs used in Exhibit JFG-2, which reportedly rely upon the findings of the CPH Report.

It should also be noted that the plant expansion scheduled for year 2001 in Schedule C of Exhibit JFG-2 is shown to have a capacity of 2.448 mgd (MDF basis). However, the associated FDEP permit for this expansion calls for a permitted capacity of 2.916 mgd (MDF basis). A copy of the applicable FDEP permit is attached as Exhibit JCB-1. This difference in capacity is equivalent to 594 ERCs, using the FDEP mandated conversion factor of 787.5 gpd per ERC (MDF basis).

I would summarize my opinion relative to this issue by stating that the plant expansion costs

contained in Exhibit JFG-2 do not accurately reflect the basis for such costs, which is the CPH Report. The costs and associated capacities do not match. In addition, the capacity associated with the proposed year 2001 expansion does not match the capacity specified in the corresponding FDEP permit.

Q. What is the next area you would like to address?

A. The testimony of Mr. Robert L. Chapman concerning the date on which properties were first devoted to public service.

The testimony offered by Mr. Robert L. Chapman lists a chronology of events associated with the water and wastewater treatment plant properties. At issue is when these properties were devoted to public use. In his testimony, Mr. John F. Guastella provided the following synopsis of Mr. Chapman's testimony concerning this matter (beginning with Line 14 of Page 6):

> "The land for the utility treatment plant site should be considered to be devoted to public use in 1993. As Mr. Chapman describes, it was not established that the water and sewer utility service would be provided by an investor-owned utility until 1993. In 1990 one of the options was for the establishment of an investor-owned utility, for which an agreement (valid for one year) to lease a 10 acre site for a wastewater treatment plant was made in the event the investor-owned option was selected. The investor-owned option, however, was not selected at that time, but, instead, a municipal operation was pursued. It was not until 1993, after rejecting the option to have Polk County provide these utility services, did the investor-owned option become established. Accordingly, in August of 1993 a new lease was entered into for the water and wastewater sites. Thus, the investor-owned utility devoted the land to public use in 1993."

The above chronology of events would appear to be inconsistent with the permitting history of the Southlake water and wastewater facilities. The following exhibits are attached:

Exhibit JCB-2: Individual Consumptive Use Permit Application, Southlake Utilities, Inc. as applicant, dated December 4, 1991.

Exhibit JCB-3: Consumptive Use Permit No. 2-069-0010NM, issued to Southlake Utilities, Inc. by the St. Johns River Water Management District, February 11, 1992.

Exhibit JCB-4: Water Well Construction Permit Application, Southlake Utilities, Inc. as applicant,

January 24, 1992.

Exhibit JCB-5: Well Construction Permit Number 3-069-3119P, issued to Southlake Utilities, Inc. by the St. Johns River Management District, March 24 1992.

Exhibit JCB-6: Correspondence from William A. Mattick, President, KRM Properties, dated August 13, 1992, concerning septic tank relocation adjacent to the water plant site.

Exhibit JCB-7: Application to Construct a Public Drinking Water System, Robert L. Chapman as applicant, March 25, 1992.

Exhibit JCB-8: Permit Number WC35-210970 for construction of the Southlake Water Treatment Plant, issued to Southlake Utilities, Inc. by the Florida Department of Environmental Regulation, September 25, 1992.

Exhibit JCB-9: Request for Letter of Release to Place Water Supply System into Service, Permit Number WC35-210970, submitted by R.H. Wilson & Associates to the Florida Department of Environmental Protection, March 18, 1994.

Exhibit JCB-10: Application to Construct a Domestic Wastewater Facility, Robert L. Chapman as applicant, February 19, 1992.

Exhibit JCB-11: Application to Construct a Reuse/Land Application System, Robert L. Chapman as applicant, February 19, 1992.

Exhibit JCB-12: Correspondence from Christianne C. Ferraro, Florida Department of Environmental Regulation, dated August 18, 1992.

Exhibit JCB-13: Correspondence for Robert L. Chapman, President, Southlake Development Group, dated August 18, 1992.

Exhibit JCB-14: Correspondence from R.W. Makemson Jr., P.E., Matrix Systems, Inc., dated August 20, 1992.

Exhibit JCB-15: Permit Number DC35-210971 for construction of the Southlake WWTP, issued

to Southlake Development Group by the Florida Department of Environmental Regulation, September 28, 1992.

Exhibit JCB-16: Notification that a Domestic Wastewater Facility Will Be Placed Into Operation, Construction Permit Number DC35-210971, submitted by R.H. Wilson & Associates to the Florida Department of Environmental Protection, March 18, 1994.

The permitting activity represented by the above exhibits certainly indicates an intention to construct water and wastewater facilities on the properties in question well before August 1993. It is assumed that the applicant had adequate legal ownership authority to permit the subject properties for utility use upon submittal of the initial permit applications. In the case of the water treatment plant site, the initial application submittal date was December 4, 1991 (Exhibit JCB-2). In the case of the wastewater treatment facility site, the initial application submittal date was February 19, 1992 (Exhibits JCB-10 and JCB-11).

Q. What is the next area of concern that you have with the testimony of witnesses for Southlake Utilities?

A. I am also concerned with the ERC calculations based on wastewater treatment plant capacity as contained within the testimony of Mr. Guastella.

On Page 12 of his testimony (beginning with Line 9), Mr. John F. Guastella states:

> "Schedules C and D show, by year, the projected plant capacity in gallons per day and the capacity in terms of ERC's using the design factors of 787.5 GPD for water and 300 GPD for wastewater, consistent with FDEP requirements."

In Permit Number WC35-0080599-010 (Exhibit JCB-1), FDEP clearly establishes an ERC conversion factor of 787.5 gpd per ERC, since the 2.916 mgd permitted plant capacity (MDF basis) is stated to be equivalent to 3,702 ERCs. However, concerning wastewater treatment plant capacity, FDEP will allow utility's to establish a design flow per ERC based on historical flow and connection data. This understanding was confirmed by Mr. H. Lee Miller, Section Supervisor, Domestic Waste Permitting, FDEP Central District Office (see Exhibit JCB-17 for confirmation

letter).

The existing wastewater treatment plant would be over-capacity if each ERC was actually generating 300 gpd. In Schedule D.1 of Exhibit JFG-2, 1999 year end sewer ERCs are shown to be 1,102. Applying an ERC conversion factor of 300 GPD per ERC would result in a flow of 330,600 gpd, which would have exceeded the 300,000 gpd permitted plant capacity. In contrast, the annual average daily flow during 1999 was approximately 146,000 gpd, or roughly one-half of the 300 gpd per ERC factor.

The use of a 300 gpd per ERC conversion factor clearly understates the capacity of the wastewater plant in terms of ERCs. This was pointed-out by Southlake Utilities in its response to the Staff's Second Data Request, dated July 15, 1999. In the fourth paragraph of the utility's response to Question 1(a), the utility makes the following observations:

> "The use of the 300 GPD/ERC ratio has greatly understated the capacity of the wastewater plant in terms of ERCs. Southlake Utilities had an annual average daily flow for 1998 of 89,003 GPD (32,486,000 gallons ÷ 365 days = 89,002.7 GPD) and 541.25 average meter equivalents (Start of Year (520.0) + End of Year (562.5) ÷ 2 = 541.25 – see page S-3), resulting in a 164 GPD/ERC ratio (89,003 GPD ÷ 541.25 ERCs = 164.4 GPD/ERC). This ratio is based on actual flow data and is approximately ½ of the ratio used in the Order to restate the remaining capacity into ERCs (164 ÷ 300 = 0.55). If the 300 GPD/ERC ration was accurate, Southlake Utilities would have exceeded its 549 ERC plant capacity at the end of 1998 with its 562.50 meter equivalents (164,750 GPD ÷ 300 GPD/ERC = 549 ERCs). Instead, Southlake Utilities was at approximately 64% of its wastewater plant capacity in December of 1998 (106,000 GPD ÷ 164,750 GPD = 64.3%).

In the above analysis, Southlake calculated a wastewater flow per ERC of 164 gpd. On page 11, Line 19 of Mr. John F. Guastella's testimony, a figure of 130 gpd per ERC is noted for year 2000. Finally, in Order No. PSC-00-0917-SC-WS, the Florida Public Service Commission (PSC) stipulated a wastewater treatment demand of 217 gpd per ERC. Obviously, there is an opportunity for Southlake Utilities to determine a realistic wastewater ERC conversion factor for consideration and approval by FDEP and PSC. This exercise would increase available wastewater plant capacity on an ERC basis. It would also require a re-evaluation of the capacity and demand factors used in

Schedule D of Exhibit JFG-2.

Q. Please provide us your thoughts concerning Mr. Guastella's testimony and exhibits on wastewater treatment plant capacity and the expansion projections related thereto.

A. Schedules D, D.1, D.2 and D.3 in Exhibit JFG-2 of Mr. John F. Guastella's testimony deal with sewer system projections, while Exhibit JFG-8 presents a summary of plant expansion cost estimates. The plant expansion cost estimates were prepared by R.H. Wilson & Associates Engineers.

The following table uses plant expansion projections for years 2000 and 2001 as included in Schedule D of Exhibit JFG-2. For purposes of this analysis, only costs in the "treatment/disposal" category are considered:

Year	Total Treatment/Disposal Account Balance / Increase in Account Balance From Prior Year (From Schedule D)	Total Treatment Plant Capacity / Increase in Capacity From Prior Year (gallons) (From Schedule D)	Derived Cost per Gallon of Total Capacity ($/gal)	Derived Cost per Gallon of Increased Capacity ($/gal)
2001	$1,633,536 / $659,760	755,000 / 455,000	2.16	1.45
2002	$3,669,338 / $2,035,802	1,000,000 / 245,000	3.67	8.31

As indicated in the above table, the proposed year 2002 expansion has an associated cost per gallon that is much higher than the prior year cost. Much of this cost increase is apparently attributable to proposed upgrades associated with the production of reclaimed water, i.e., implementation of a reuse system. The following items and costs are assumed attributable to the proposed reuse system:

Item (Exhibit JFG-8)	Estimated Cost (Exhibit JFG-8)
Primary Filters, 3 @0.5 mgd (Eff. Fac.)	$585,000

Backup Filters, 1 @0.5 mgd (Eff. Fac.)	$225,000
Primary Filters Piping	$90,000
Filter Backwash System Yard Piping	$66,400
Electrical Service Panel, Reuse	$32,400
Treatment Structure, Foundation	$130,500
Reuse Hydro-Tank(s), 15,000 gal.	$43,700
Reuse Eff. Pump Station & Equipment	$74,000
Site Work, Reuse System	$11,250
Engineering & Permits, Reuse System	$5,000
Total Assumed Cost Attributable to Reuse System	$1,263,250

The total assumed cost attributable to the reuse system ($1,263,250) represents approximately 62% of the total year 2002 expansion cost of $2,035,802. Based on this information, the utility is apparently committed to providing reclaimed water service to its territory, and this commitment will require a sharp increase in the cost per gallon of capacity. However, this apparent commitment is inconsistent with the utility's recent consumptive use permitting history with St. Johns River Water Management District (SJRWMD). As detailed below, the utility's commitment to provide reclaimed water service is apparently contingent upon future economic evaluations.

In correspondence dated May 6, 1998 from the utility's consultant (Yovaish Engineering Sciences, Inc.), the utility responded to a SJRWMD inquiry concerning the provision of reclaimed water to its service area. (See response to Question No. 11 in Exhibit JCB-18.)

> "It is our contention that the most efficient use of the reclaimed water is to facilitate recharge to the surficial and Floridan aquifers via the percolation ponds. The deep, permeable sands and relatively deep water table provide for an environment in which the water recharged in the ponds is less susceptible to evaporation/evapotranspiration than if the reclaimed water is applied for irrigation of common areas, etc."

However, in spite of the utility's stated position, the SJRWMD continued to press for an evaluation of reuse potential in subsequent correspondence (See Exhibit JCB-19, Comment No. 7 and Exhibit JCB-20, Comment No. 1). In correspondence dated July 29, 1999 from Yovaish Engineering

Sciences, the utility made the following statement (see Exhibit JCB-21, Attachment C, Proposed Water Conservation Plan, Item C.2, Re-Use Feasibility):

> "The utility currently plans to increase the level of treatment for the wastewater plant within the next three years. The net result will be that reclaimed water will be available for those projects where it is economically feasible to provide the transmission facilities."

In a technical staff report dated March 30, 2000 (see Exhibit JCB-22), the SJRWMD staff required the utility to formally evaluate reuse feasibility via the inclusion of Special Condition No. 12:

> "Reclaimed water from the Southlake WRF must be used as irrigation water whenever an irrigation demand exists and such reuse is feasible pursuant to District rules. Ground water resources may not be used for green space or common area irrigation. The permittee must conduct a comprehensive reuse feasibility study to evaluate all potential reuse alternatives within two years of permit issuance. A report detailing the results of the comprehensive reuse feasibility study must be submitted to the District for approval at least six months prior to the permit expiration date."

The consumptive use permit was issued to the utility by the SJRWMD on April 11, 2000. The permit expires three years from the date of issuance, or April 11, 2003. Therefore, the utility has until October 11, 2002 to submit the reuse feasibility report to the SJRWMD.

It would appear that findings of this future feasibility study are crucial to utility's proposed wastewater expansion program as summarized in Exhibit JFG-8. The future feasibility study will presumably address the following issues:

1. At what locations within the service area is it economically feasible to extend reclaimed water transmission facilities? (This issue has apparently not yet been addressed by the utility, since the line item costs in Exhibit JFG-8 do not include any funds for reclaimed water transmission piping.)

2. Which specific <u>existing</u> projects within the service area are already equipped with internal reclaimed water distribution piping? In addition, which specific <u>future</u> projects within the service area will be required to install reclaimed water distribution piping? This will have a significant impact on the economic feasibility of the reuse program, since it is more expensive to retrofit reclaimed water distribution piping within existing developed areas than it is to install piping concurrent with development.

3. Based on an evaluation of Items 1 and 2 above, what is the estimated amount of reclaimed water demand within areas to be served by the reuse system? This will help establish the capacity of reclaimed water unit processes at the wastewater treatment facility. If only a fraction of the wastewater treatment plant capacity is required to meet the projected reclaimed water demand, then it may not make economic sense to size the reclaimed water unit processes (such as filtration) for the entire plant capacity. The expansion program summarized in Exhibit JFG-8 appears to assume that reclaimed water unit processes will be installed to handle the entire plant capacity.

4. How will the utility pay for the cost of providing reclaimed water service? Will separate capacity and usage charges be established?

It is also assumed that the reuse feasibility study will help address the following significant issues:

1. Effect of reclaimed water supply on potable water demand. If reclaimed water is used to augment customer irrigation requirements, then there should be a corresponding decrease in potable water capacity requirements. This would have an effect on the projections included in Schedules C, C.1, C.2 and C.3 of Exhibit JFG-2. The irrigation component of potable water demand is very high. For example, the average daily potable water demand in year 2000 was approximately 714,000 gpd, while the corresponding wastewater flow was approximately 202,000 gpd. This indicates that approximately 70% of the potable water demand in year 2000 was attributable to outdoor uses such as irrigation.

2. The cost-effectiveness and practicality of expanding the wastewater plant capacity every year from year 2000 through 2008 (as indicated in Schedule D of Exhibit JFG-2). This constant state of construction activity for a nine-year period would presumably be difficult to administer and could be disruptive to plant operations.

I would summarize my opinion concerning this issue by stating that the wastewater plant expansion costs contained in Exhibit JFG-8, and used as a basis for projections in Exhibit JFG-2, apparently assume the implementation of a full-scale reclaimed water program. However, based on the SJRWMD permitting history, the Utility apparently has not yet committed to a full-scale program, and has not provided reasonable assurance that such a program is economically justified. Such assurance will not be available until the Utility completes an approved, comprehensive reuse feasibility study as mandated by the SJRWMD. Furthermore, assuming the implementation of a reuse program, the Utility has not considered the impact of such a program on potable water demand and associated plant expansion costs.

Q. Mr. Guastella also provides some testimony concerning unit growth within the year 2000. Please

provide us with your comments and concerns regarding this testimony and its conclusions.

A. In testimony provided by Mr. John F. Guastella, unit growth within the year 2000 was reported to be 794 units, and the total number of units as of December 31, 2000 was reported to be 2,619.

A breakdown of these 2,619 total units in terms of single-family, multi-family and commercial land uses was not provided in Mr. Guastella's testimony. However, in Southlake's response to the commission staff's first set of interrogatories (see Exhibit JCB-23), the utility provided "Schedule B" that presents a unit breakdown as of November 17, 2000. The total number of units shown in Schedule B is 2,587. The 32-unit difference between the total units reported by Mr. Guastella (2,619) and the total units shown in Schedule B (2,587) is presumably due to construction activity from November 18, 2000 through December 31, 2000.

Of the 2,587 total units shown in Schedule B of Exhibit JCB-23, 313 are attributable to Raintree Apartments, within the Sunrise Lakes PUD. (The Sunrise Lakes PUD was formerly referred to as Walker Heights as noted by Mr. Robert L. Chapman on page 7 of his testimony.)

Within Schedule B, these 313 units are noted as "construction in progress, meters set." Although the utility is claiming Raintree Apartments for inclusion in year 2000 growth, it should be noted that the apartments were not near a state of completion in year 2000. Exhibit JCB-24 contains several photographs of the Raintree Apartments as of February 14, 2001. As indicated in the photographs, the apartments are still under construction, and were not near a state of occupancy as of February 14, 2001. In addition, the project access road to Highway 27 has not yet been completed.

Given this preliminary state of development, it may be more appropriate to include Raintree Apartments in year 2001 unit counts. This would be consistent with the Capacity Analysis Report (CAR) prepared by the utility's engineer (R.H. Wilson & Associates Engineers) received by FDEP on November 21, 2000. (The CAR is attached as Exhibit JCB-25.) Within Section 2.3 of the CAR

(Future Flow Projections), unit growth within Walker Heights (now known as Sunrise Lakes PUD containing Raintree Apartments) is shown to occur in year 2001.

If Raintree Apartments (and the associated clubhouse) were shifted to year 2001, the following unit growth would have occurred in year 2000 (through November 17), based on the information contained in Schedule B of Exhibit JCB-23:

Single Family Residential	111 units
Multi-Family Residential	330 units
Commercial	7 units
Total	448 units

This number of units can be converted to ERCs by use of the formula contained in Appendix A of Exhibit JFG-2:

Single Family Residential ERCs =	(111 units)(1 ERCs/unit) = 111 ERCs
Multi-Family Residential ERCs =	(330 units)(0.643 ERCs/unit) = 212 ERCs
Commercial ERCs =	(7 units)(4 ERCs/unit) = 28 ERCs
Total ERCs =	351 ERCs (growth in year 2000, through November 17)

I would conclude my observations concerning this issue by stating that the reported growth rate for year 2000 (794 units) includes a sizable project (313 units) that perhaps should not be counted in year 2000. In fact, this specific project was not counted in year 2000 growth figures supplied by the Utility in the Capacity Analysis Report (Exhibit JCB-25). Therefore, inclusion of the 313-project (Raintree Apartments) may overstate actual growth in year 2000.

Q. As to growth projections, do you have any comments or testimony about the information provided by the Utility?

A. Yes. Growth projections for the Southlake service area are provided in the testimony of Mr. Patrick L. Phillips, President, Economics Research Associates (specifically in Exhibit PLP-2). As summarized in Exhibit PLP-2, the following data sources form the basis of the growth projections:

1. Unit absorption figures as projected by the Citrus Ridge Planning Council.
2. Building permit data for the Southlake area.
3. Projected development data in the Southlake area ("developer projections").

Projections provided by the following data sources were determined by Economics Research Associates ("ERA") to underestimate growth potential, and therefore were removed from further consideration:

1. Projections prepared by the University of Florida Bureau of Business and Employment Research.
2. Projections provided by CACI Information Systems, Inc.

Projections based on the number of telephone lines were considered by ERA to overestimate growth, and hence were also removed from further consideration.

In Table 4 of Exhibit PLP-2, the average annual growth rate for the Southlake area was calculated to be 21.5% for the years 2000 - 2005. This represents an averaging of the aforementioned three included data sources. According to the information presented in Table 3 of Exhibit PLP-2, a 10.6% annual growth rate is predicted by the Citrus Ridge Planning Council, while a 24% annual growth rate is predicted via developer projections. For building permit data, a 30% annual growth rate was determined based on the following historical information:

Building Permit Data in Southlake Area (From Table 3 of Exhibit PLP-2)

Year	Permits Issued
1995	116
1996	190
1997	267
1998	434
1999	398
2000	430

Annual Growth Rate = $(430/116)^{1/5} - 1 = 0.3 = 30\%$

As stated in Item No. 4 on Page 2 of Exhibit PLP-2:

"In 2000, 430 units are expected to be permitted."

As indicated by the above statement, the number of building permits in year 2000 was based on ERA's expectations, since the ERA report was prepared before year-end (report date August 8, 2000). In order to verify this estimate based on actual historical data, the number of building permits issued in year 2000 was obtained from Lake County Building Services. A copy of the raw data provided by Lake County is attached as Exhibit JCB-26.

The geographical area included in the Lake County building permit data covers Sections 25, 26, 27, 35, and 36 of Township 24 South, Range 26 East. This corresponds to the Southlake service area as depicted in Exhibit RLC-2 of Mr. Robert Chapman's testimony. In fact, this geographical area is actually larger than the Southlake service area, since the service area includes only portions of Sections 25, 26, 27, and 35. A very small portion of Section 34 is shown within the Southlake service area, however, Lake County reports that no permits were issued within Section 34 in the year 2000.

The following table presents a summary of the number of building permits issued in year 2000 within each Section:

Section	No Permits
25	96
26	126
27	3
35	16
36	8
Total	249

Included within the above total are the following types of permits. These types of permits are included because they are assumed to represent new habitable structures:

AR Amusement/Social/Recreation

CD Nonresidential & Nonhousekeeping

FF Five or More Family Building

HM Hotel/Motel Accommodation

NR Other Nonresidential Building

PW Public Works/Utilities

SB Structures Other Buildings

SF Single Family Residence

SR Stores/Customer Services

Excluded from the above total are the following types of permits that were also issued within the aforementioned geographic area in the year 2000. These types of permits are excluded because they are not assumed to represent new habitable structures:

AL Alarm Systems

CC Concrete, Driveway/Patio

CP Commercial Pool

DM Demolition - Structure

EL Electrical Services

FS Fire Sprinklers

FT Fuel Tanks

GA Residential Additions Garages/Carports

MC Mechanical

PL Plumbing

RD Residential Additions/Alterations

RP Residential Pool

SN Signs

Based on the above analysis and supporting assumptions, it does not appear that a total of 430 "growth-type" building permits were actually issued within the Southlake area in the year 2000.

Rather, the data analysis indicates that only 249 "growth-type" building permits were issued in the year 2000. This circumstance could significantly reduce the 30% building permit growth rate as calculated by ERA. In fact, building permit issuance may actually be declining compared to 1998 data. However, it must be emphasized that the methodology used by ERA to quantify building permits in Table 3 of Exhibit PLP-2 may differ from the methodology stated herein. (No explanatory methodology was offered by ERA in its report relative to identifying included or excluded building permit types). Therefore, it is not possible to accurately compare the year 2000 data derived herein with the building permit data presented in Table 3 of the ERA report. However, the year 2000 building permit analysis does indicate that the 30% annual growth rate calculation requires further verification based on actual year 2000 historical data.

As previously discussed, the remaining two data sources used by ERA to calculate the 21.5% annual average growth rate included projections by the Citrus Ridge Planning Council (10.6%) and developer projections (24%). However, reliance on developer projections has proven to be a poor indicator of actual growth conditions within the Southlake area, as pointed out by Southlake in Section 2.1 (Wastewater Treatment Plant Flow Comparisons) of the Capacity Analysis Report (Exhibit JCB-25):

> "Wastewater flow projections from 1995 indicated a 2000 influent flow of 1.5 mgd. The 1995 flow projections were based on a developer survey in October 1995 and a copy is provided at the APPENDIX. The peak monthly flow for August 2000 was 0.245 mgd, one sixth of the projected flow. The major factor impacting flow projections has been the land developer completes a Land Zoning Change for a new Planned Unit Development (PUD) within this PSC Franchised Area. The actual sales of the internal land uses, i.e., multifamily units, single family units and commercial/tourist oriented development were much slower than the projections of the developers. The start of the permitting/construction also lagged. Today, actual construction is about 35% of 1995 projections."

Given the apparent uncertainty of the developer projections, it may be more prudent to base unit growth projections on historical data, adjusted as appropriate to reflect other reasonable growth indicators.

I would conclude my observations concerning this issue by stating that the ERA growth

projections partially rely upon an assumed number of building permits (430) issued during year 2000. My independent research, based on actual historical data supplied by Lake County, did not corroborate the 430 assumed figure. Rather, my research indicated a much smaller number (249). Furthermore, the ERA growth projections partially rely upon developer projections which, by the Utility's own admission, have historically proven to be a poor indicator of actual growth in the Southlake area.

Exhibit JCB-1

Water Treatment Plant Permit
FDEP Permit No. WC35-0080599-010
Issued 1/29/99

Department of Environmental Protection

Jeb Bush
Governor

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

David B. Struhs
Secretary

NOTICE OF PERMIT ISSUANCE

CERTIFIED MAIL
Z 461 765 944

PERMITTEE/ENGINEER/UTILITY
READ AND HEED THE SPECIFIC
CONDITIONS OF THIS PERMIT.

Southlake Utilities, Inc.
800 U.S. Highway 27
Clermont, FL 34711

Attention: Robert L. Chapman, III
President

Lake County - PW
Southlake Utilities
Water Treatment Plant Modification

Dear Mr. Chapman:

Enclosed is Permit Number WC35-0080599-010 to modify a water treatment plant issued pursuant to Section 403.861(9), Florida Statutes.

The Department's proposed agency action shall become final unless a timely petition for an administrative hearing is filed under sections 120.569 and 120.57 of the Florida Statutes before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received by the clerk) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000.

Petitions by the applicant or any of the parties listed below must be filed within fourteen days of receipt of this written notice. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the notice or within fourteen days of receipt of the written notice, whichever occurs first.

Under section 120.60(3) of the Florida Statutes, however, any person who has asked the Department for notice of agency action may file a petition within fourteen days of receipt of such notice, regardless of the date of publication.

The petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 of the Florida Statutes. Any subsequent intervention (in a proceeding initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information:

EXHIBIT A
Water

(a) The name, address, and telephone number of each petitioner; the name, address, and telephone number of the petitioner's representative, if any; the Department permit identification number and the county in which the subject matter or activity is located;
(b) A statement of how and when each petitioner received notice of the Department action;
(c) A statement of how each petitioner's substantial interests are affected by the Department action;
(d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
(e) A statement of facts that the petitioner contends warrant reversal or modification of the Department action;
(f) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief; and
(g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the Department to take.

A petition that does not dispute the material facts on which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by rule 28-106.301.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that 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 such final decision of the Department have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation under section 120.573 of the Florida Statutes is not available for this proceeding.

This action is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above. 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 under section 120.68 of the Florida Statutes, by the filing of a notice of appeal under rule 9.110 of the Florida Rules of Appellate Procedure with the Clerk of the Department in the Office of General Counsel, Mail Station 35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000; 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 when the final order is filed with the Clerk of the Department.

Executed in Orlando, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

Christianne C. Ferraro

Christianne C. Ferraro, P.E.
Program Administrator
Water Facilities

DATE: Jan 29, 1999

CCF:fh:pp

Copies furnished to:
Ron Wilson, P.E. [R.H. Wilson & Associates, Inc.]

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certified that this NOTICE OF PERMIT ISSUANCE and all copies were mailed by Certified Mail before the close of business on FEB 1 1 1999 to the listed persons.

FILING AND ACKNOWLEDGMENT

FILED, on this date, under Section 120.52(7), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Theresa Bacci 1/29/99

Clerk Date

Department of Environmental Protection

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Jeb Bush
Governor

David B. Struhs
Secretary

Permittee:
Southlake Utilities, Inc.
800 U.S. Highway 27
Clermont, FL 34711

Attention: Robert L. Chapman, III
President

Permit Number: WC35-0080599-010
Date of Issue:
Expiration Date: 01/27/00
County: Lake
Utility: Southlake Utilities
Project: Water Treatment Plant Modification

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule 62-555, (F.A.C.). The above named permittee is hereby authorized to perform the work 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:

This project consists of modifying the South Lake Utilities Water Plant by upgrading the capacity of the ten-inch Well "B" and adding ground storage and high service pumping facilities, as well as auxiliary power with automatic startup capability. Included are:

- upgrading the ten-inch Well "B" pump capacity from 500 gpm to 1,500 gpm
- installing a 108,000-gallon ground storage tank
- additional raw water piping to reroute the water from Well "B" and "D" to the new ground storage tank, including a new 6-inch turbine raw water flow meter rated up to 1800 gpm
- installing three 75 hp variable speed high service pumps rated at 1,350 gpm @ 160 feet TDH each, and piping for a future fourth 75 hp variable speed high service pump
- installing a new chlorine injection point on the raw water piping from Well "B" prior to the new ground storage tank
- installing a new 175 kw LP Gas auxiliary generator with automatic startup capability to operate Well "B" (1,500 gpm) plus two of the three high service pumps (2,700 gpm). An auxiliary propane gas engine is provided for Well "D" (1500 gpm).
- associated valves, piping, and appurtenances

The new limiting factor will become the three high service pumps, which must be able to satisfy the max. hour demand, which is projected as two times the max. day demand. The max. day rating following expansion will be **2.916 mgd** (one-half the total high service pumping capacity).This is equivalent to **3,702 ERU's.** This requires a minimum Class C or higher certified water plant operator on-site for five visits per week and one weekend visit.

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

GENERAL CONDITIONS

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violations of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control(and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:

   (a) Have access to and copy any records that must be kept under conditions of the permit;

   (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and

   (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

   Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any conditions or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

   (a) A description of and cause of noncompliance; and

   (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

   The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Section 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

GENERAL CONDITIONS:

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Rule 62-4.120 and 62-30.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

( ) Determination of Best Available Control Technology (BACT)
( ) Determination of Prevention of Significant Deterioration (PSD)
( ) Certification of compliance with state Water Quality Standards (Section 401, PL 92-500)
( ) Compliance with New Source Performance Standards

14. The permittee shall comply with the following:

(a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

(b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date the sample, measurement, report, or application unless otherwise specified by Department rule.

(c) Records of monitoring information shall include:

1. the date, exact place, and time of sampling or measurements;
2. the person responsible for performing the sampling or measurements;
3. the dates analyses were performed;
4. the person responsible for performing the analyses;
5. the analytical techniques or methods used;
6. the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

DEP Form 62-1.201(5)
Effective November 30, 1982

[1]Chapter 62-30 was transferred to Chapter 62-730.

Permittee:
Southlake Utilities, Inc.
800 U.S. Highway 27
Clermont, FL 34711

Attention: Robert L. Chapman, III
President

Permit Number: WC35-0080599-010
Date of Issue:
Expiration Date: 01/27/00
County: Lake
Utility: Southlake Utilities
Project: Water Treatment Plant Modification

SPECIFIC CONDITIONS:

1. General condition number 13 does not apply.
2. A LETTER OF CLEARANCE MUST BE ISSUED BY THE DEPARTMENT PRIOR TO PLACEMENT OF THIS PROJECT INTO SERVICE. FAILURE TO DO SO WILL RESULT IN THE PERMITTEE BEING SUBJECT TO APPROPRIATE ENFORCEMENT ACTION. To obtain clearance of the facilities for service, the engineer of record shall submit the enclosed "Request for Letter of Release to Place Water Supply System into Service" [DEP Form 62-555.900(9)] to the Department, a copy of this permit, and a copy of satisfactory bacteriological sample results taken on two consecutive days from the new raw water piping, the new ground storage tank, the discharge side of the new high service pumps, and from Well "B" following pump upgrading.
3. Where water and sewer mains cross with less than 18" vertical clearance, the sewer will be 20' of either ductile iron pipe or concrete encased vitrified clay or PVC pipe, centered on the point of crossing. When a water main parallels a sewer main a separation, measured edge to edge, of at least 10' should be maintained where practical.
4. This permit does not pertain to any wastewater, stormwater or dredge and fill aspects of this project.
5. The permittee will promptly notify the Department upon sale or legal transfer of the permitted facility. In accordance with General Condition #11 of this permit, this permit is transferable only upon Department approval. The new owner must apply, by letter, for a transfer of permit within 30 days.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

Christianne C. Ferraro

Christianne C. Ferraro, P.E.
Program Administrator
Water Facilities

ISSUED Jan. 29, 1999

Exhibit JCB-2

Consumptive Use Permit Application
Dated 12/4/91

MAKEMSON & ASSOCIATES

ENGINEERING ▪ LAND PLANNING

December 4, 1991

Mr. Jay Lawrence, Hydrologist
7775 Baymeadows Way
Suite 102
Jacksonville, Florida 32256

Re: SOUTHLAKE
CONSUMPTIVE USE PERMIT

Dear Mr. Lawrence:

Attached you will find three (3) copies of the "Consumptive Use Individual Permit Application," together with a check in the amount of $200.00.

If you have any questions or should require additional information, please do not hesitate to contact us at your earliest convenience.

Cordially,

R. W. Makemson

R. W. Makemson, Jr., P. E.

RWM/lg

cpu: 9127wm

RECEIVED
DEC 04 1991
JACKSONVILLE

(904) 448-0197 ▪ 6060-1 CHESTER CIRCLE ▪ JACKSONVILLE, FLORIDA 32217

SECTION II

INDIVIDUAL CONSUMPTIVE USE PERMIT APPLICATION

ST. JOHNS RIVER
WATER MANAGEMENT DISTRICT
RESOURCE MANAGEMENT DEPARTMENT
RECORDS DIVISION
P.O. BOX 1429
PALATKA, FLORIDA 32178-1429

OFFICIAL USE ONLY
APPLICATION NO. 2-069-0010ANM
DATE RECEIVED 12/4/91
COUNTY Lake
ASSIGNED REVIEWER Ext 10
DATE COMPLETE
PROJECTED BOARD DATE
PRE APP WITH Jay Lawrence (Hydrologist) DATE 11/20/91

Please type or print in ink. Complete necessary data sheets attached.
Submit 3 copies of all forms and attachments.

Application is for: New use ☒ Existing use ☐ Modification of existing permit ☐ Renewal ☐

OWNER

LAST FIRST
NAME Chapman, Robert L. III, President Southlake Utilities, Inc.
ADDRESS 800 U.S. Highway 27
CITY Clermont
STATE Florida ZIP CODE 34711
BUS. TELEPHONE NO. 904 394-8898
HOME TELEPHONE NO. 813 956-4146

APPLICANT

LAST FIRST
NAME Southlake Utilities, Inc.
ADDRESS 800 U.S. Highway 27
CITY Clermont
STATE Florida ZIP CODE 34711
TELEPHONE NO. 904 394-8898

AGENT OR CONSULTANT OR ENGINEER (IF APPLICABLE)

LAST FIRST
NAME Makemson Robert W. (Engineer)
ADDRESS 6060-1 Chester Circle
CITY Jacksonville
STATE Florida ZIP CODE 32217
TELEPHONE NO. 904 448-0197

SITE LOCATION

U.S.G.S. TOPO QUAD MAP "Lake Louisa", Florida
COUNTY Lake TOTAL ACREAGE OWNED 617 +/-
SECTION 35 TOWNSHIP 24 S RANGE 26E
PROJECT NAME Southlake PROJECT ACREAGE 617 +/-

In compliance with the provisions of Chapter 373, Florida Statutes, 1973, and applicable rules and regulations of St. Johns River Water Management District, application is hereby made for a permit as identified above, and in accordance with support data and incidental information filed with this application and made a part thereof.

Robert L. Chapman, III — Robert L Chapman III — 12/3/91
APPLICANT'S NAME (Please print) APPLICANT'S SIGNATURE DATE

If person other than applicant has completed this form, that person certifies by his signature below that he is acting as an authorized agent of the applicant and his signature will be certification that he is in fact the authorized agent.

Robert W. Makemson, Jr. P. E. — Robert W. Makemson — 12/4/91
AGENT'S NAME (Please print) AGENT'S SIGNATURE DATE

REQUESTED WATER USE

TYPE OF USE (Refer to paage 4)

AESTHETIC _____ % AGRICULTURAL _____ % ACUACULTURAL _____ %

COOLING AND AIR CONDITIONING _____ %

DEWATERING _____ % COMMERCIAL AND INDUSTRIAL 1.03 %

ESSENTIAL _____ % FREEZE PROTECTION _____ % GOLF COURSE _____ % RECREATION AREA _____ %

HOUSEHOLD TYPE 98.97 % LIVESTOCK _____ % NURSERY _____ %

URBAN LANDSCAPE IRRIGATION _____ % WATER BASED RECREATION _____ %

UNACCOUNTED FOR WATER _____ % OTHER _____ %

AMOUNT JCY

INCHES PER YEAR _____ MILLIONS GALLONS PER YEAR 91.25

MILLIONS GALLONS PER DAY (AVERAGE) 0.250 MILLIONS GALLONS PER DAY (MAXIMUM) 0.438

MODIFICATION OR RENEWAL

PLEASE PROVIDE INFORMATION IF APPLICATION IS FOR MODIFICATION OR RENEWAL OF AN EXISTING PERMIT:

PERMIT NO. _____ PERMITEE: _____

DESCRIBE IN DETAIL REASONS FOR REQUEST FOR ADDITIONAL WATER AND/OR SOURCES _____

If application is for an initial permit, state the date upon which the use commenced or is planned to commence. January 15, 1992

WATER USE MONITORING

All permittees are required to measure their water usage on a continuous basis. All new users must install totalizing flow meters on all wells and pumps. Meters must be 95% accurate, verifiable and installed according to manufacturers' specifications.

Permitted wells and pumps may be fitted with totalizing flow meters, or alternate methods for measuring water use may be employed. Alternative methods must be 90% accurate and verifiable. All alternative methods must be approved in advance in writing by District staff.

If you have permitted wells or pumps and plan to use an alternate method for measuring water usage, please describe in detail how you plan to measure flows. Provide any diagrams, calculations, sketch maps, cross-sections etc. necessary to evaluate the methodology and its accuracy over time. Please refer to Appendix L, Applicant's Handbook, Consumptive Uses of Water, for further information on alternate methods for measuring water usage.

EXISTING SOURCES

SUMMARY DATA SHEET

TABLE 1

Complete applicable sections only. Type or print legibly. Attach additional sheets if space provided below is not sufficient. (Include information for ALL wells and pumps on property).

See Attachment " A" and Maps " H-1 " , " W-1 ". *

EXISTING GROUND WATER SOURCE(S)

Well Number PN	Casing Diameter (in)	Casing Depth (ft)	Total Depth (ft)	Maximum Pump Capacity or Flow Rate* (gpm)	Pumped or Flowing (specify pump type and manufacturer)	In Use Yes or No (If no, attach explanation)	Source Aquifer (if known)	Type of Use
2-069-00 10A	12	168	240	2500	Unknown	No *	Floridan	
Well "B"	10	"	"	1500	Unknown	No *	"	
Well "C"	6	"	"		Private Use	Yes	"	

Attach additional sheets if necessary

*Flowing wells must be equipped with a working valve, per Chapter 373.206, F.S.

EXISTING SURFACE WATER SOURCE(S)

Pump Number	Maximum Pump Capacity (gpm)	Acreage of Lake, Pond, etc.	Surface Water Source Wholly Owned Yes or No	Name of Water Source	Type of Use

NOTE: PROVIDE ALL HISTORIC WATER QUALITY INFORMATION WITH APPLICATION

4

PROPOSED SOURCES

SUMMARY DATA SHEET

TABLE 2

Complete applicable sections only. Type or print legibly. Attach additional sheets if space provided below is not sufficient. (Include information for ALL wells and pumps on property).

See Attachments "A", "B", "C" and Maps "H-1", "W-1". *

PROPOSED GROUND WATER SOURCE(S)

Well Number	Casing Diameter (in)	Casing Depth (ft)	Total Depth (ft)	Maximum Pump Capacity or Flow Rate* (gpm)	Pumped or Flowing (specify pump type and manufacturer)	In Use Yes or No (If no, attach explanation)	Source Aquifer (if known)	Type of Use
D"	12 & RWM	180	300	1500	Vertical Turbine	No*	Floridan	P
C	12/17/91				"Peerless"			

Attach additional sheets if necessary

*Flowing wells must be equipped with a working valve, per Chapter 373.206, F.S.

PROPOSED SURFACE WATER SOURCE(S)

Pump Number	Maximum Pump Capacity (gpm)	Acreage of Lake, Pond, etc.	Surface Water Source Wholly Owned Yes or No	Name of Water Source	Type of Use

PROPERTY CONTROL, LOCATION, AND ADJACENT OWNER'S PROPERTY

I. PROPERTY CONTROL

1. Property Ownership - Provide a certified copy of the deed indicating the current owner of the property which is the subject of this application.

2. Leased Property - Provide a copy of the current lease, or a letter signed by the property owner describing the lease arrangement and the duration of the lease.

II. LOCATION MAPS : See Attached: Map "A", "B", "C", "H-1", "W-1", and Attachment "G".

Provide a recent map (preferably a USGS topographic quadrangle, map from a county plat directory, or survey map) indicating the following:

(a) property boundaries (include approximate lengths of boundaries in feet);
(b) ALL withdrawal point locations. Indicate well number and casing size for groundwater withdrawals, and pump number and maximum pump capacity for surface water withdrawals (refer to Pages 6 and 7 of the Application);
(c) a north arrow;
(d) a scale designation - all maps should have a minimum scale of 1" = 2,000'; and
(e) landmarks such as roads and political boundaries.

III. ADJACENT PROPERTY OWNERS : See Map "W-1"

Provide a complete list of adjacent property owners and mailing address as prescribed in Tables 3 and 4. Attach additional sheets if space provided below is not sufficient.

NAME	ADDRESS	CITY	STATE	ZIP CODE
Condev Properties	Post Office Box 5050	Maitland, FL		32751
KRM Properties	Post Office Box 1257	Leesburg, FL		34749
Olin R. Fischer	1139 Windemere Rd.	Windermere, FL		34786

Have you obtained or are you in the process of obtaining any of the following permits for this project (Yes or No):

Development of regional impact	Alternative "DRI" or "FQD" approved Yes. See attached Florida DCA approval lett
County Permits	~~Yes~~
EPA Ordered Environmental Impact Statements	No
Agricultural Discharge	No

If yes to any of above, please list permit type, permit number, project name, and issuing agency below:

Lake County Permits: Plat approval, Zoning and Board of County Commissioners approval, Development Review approval have been obtained. Building Permits for Phases 1A & 1B are being obtained.

DER approvals for Sewage Treatment & Water Treatment facilities will be obtained as soon as possible.

USE OF LOWEST ACCEPTABLE QUALITY WATER SOURCE

1. Are you proposing to use the lowest acceptable quality of water as a water source? Yes.

2. Is reclaimed water readily available as a source of water? Not in the initial phase of construction.

WATER CONSERVATION PLAN

A water conservation plan must be submitted with this application. Please refer to Section 12.0 and Appendix K, Applicant's Handbook, Consumptive Uses of Water, for information on plan components.

This is a new system for which no historic data is available. The initial phases of development will return the wastewater to the aquifer via percolation ponds. Once a sufficient quantity of treated effluent becomes available, it will be used as the primary source of irrigation water.

Initially, innovative strom water treatment techniques will be the source for irrigation of landscape and recreational areas. Water saving plumbing fixtures, and xeriscaping will be used as economizers.

Twice a year in accordance with the best conservation management practices as mandated by Florida Statutes, a public education flyer will be circulated with a meeting held to inform the occupants of the benefits of water conservation.

PUBLIC SUPPLY AND/OR ESSENTIAL TYPE USES

(Submit 3 copies of application, supplemental information, drawings, calculations, etc.)

I. YEAR-ROUND PUBLIC SUPPLY

A. POTABLE WATER SUPPLY

1. Please submit a map (USGS quad) showing the service area served by the Utility or water supplier. See Vicinity Map "C"

2. Please submit any of the following which apply:

   (a) A copy of the Public Service Commission (PSC) Certification describing the service area; See attached (PSC) certificates. The area franchised is shown on Map "C" and described in Attachment "G".

   (b) A copy of a local government franchise agreement; or

   (c) Documentation that the utility or water supplier is not regulated by the PSC or local government.

3. Complete Table 1- Historic Water Use, and Table 2 - Projected Water Use as a basis for the requested allocations. In addition:

   (a) Provide the past 12 months of Daily Operation Summary Sheets (MOB's) required by DER and calculate historic average daily and maximum daily per capita use;

   (b) Use these calculations to provide projected average daily and maximum daily per capita use for input on Tables 1 and 2.

   (c) Explain the method of projecting population growth: _____

   Developers projected scheduling is used to predict Population growth. See attachments "A","B", "C" and Map "H-1".

B. WASTEWATER DISPOSAL

1. Specify the present and projected amounts of wastewater:

	PRESENT (mgd)* *	PROJECTED (7 YEARS)
Average daily disposal	0.250	2.10
Treatment plant maximum capacity	0.500	2.10

* Present usage is insignificant. Quantities shown are for Phase I of development.

*mgd = million gallons per day

2. Specify the percentage for each type of disposal (total 100%) * Present means proposed Phase I.

	PRESENT % *	PROJECTED % (7 YRS)
Reuse		
Offsite Discharge		
Individual Septic Tanks		
On-site Percolation Ponds	100	
On-site Spray Fields		100
Other		

C. REUSE OF RECLAIMED WATER

1. Describe the method of reuse by completing (a) - (c) below:
   (a) Type of site (golf course, commercial landscape, etc.) Residential & commercial landscapec -areas.
   (b) Name of facility accepting reclaimed water Southlake
   (c) Acreage of site 213

2. What is the quantity of reclaimed water used?

	PRESENT (mgd)*	PROJECTED (7 yrs) (mgd)
Average daily flow	None	1.58
Maximum daily flow	None	2.77

*mgd - million gallons per day

3. Describe future reuse plans Effluent will be disposed of by spray irrigation to onsite landscaped open areas in addition to manmade lakes constructed to serve as both Stormwater Retention Ponds and Wastewater holding ponds for treated effluent and for aesthetic purposes. Sludge will be dried, then disposed of, at least ~~partially, onsite as a soil conditioner around landscaped areas.~~

4. List all potential users within a 5 mile radius of the wastewater treatment plant. Include a map locating potential users in reference to the wastewater treatment plant.

Franchise does not currently extend beyond the limits of the planned development.

D. WATER CONSERVATION PLAN

Please submit a water conservation plan prepared in accordance with Section 12.4.5, Applicant's Handbook, Consumptive Uses of Water.

See Page 11

E. ESSENTIAL USE

1. Are you requesting an allocation for fire protection? Yes. But ground storage will augment it.
   (a) Specify the number and location of well(s) or pump(s) that will be used
   (b) Calculate the amount of water requested based on the pump's maximum capacity (gpm) pumping continually for a 24 hour period 1.843 mgd. for Phase I

well "D"
1500 GPM

TABLE 1
HISTORIC WATER USE

N/A

Last 7 Years	Past Population	Number of Units	Per Capita Usage (gpcd)	Household Avg. day (mgal)	Household Max day (mgal)	Commercial/Industrial Avg. day (mgal)	Commercial/Industrial Max day (mgal)	Irrigation (urban landscape, recreation or common areas) (mgal)	Water Utility (mgal)	Total Annual Avg day (mgal)	Total Annual Max day (mgal)	Installed Wellfield capacity (mgal)
19												
19												
19												
19												
19												
19												
19												

Maximum SJRWMD Allocations

Household Type Use	Average daily per capita use: 150 gallons. Maximum daily per capita use: 300 gallons. These numbers are based on national averages for 1/4 acre lot, and include combined indoor and outdoor use by a household.
Commercial/Industrial Type Use	Varies by use. Use industry standards.
Irrigation Type Uses	Varies by irrigation system and soils. Contact District for allocation determination.
Water Utility Use	Water lost due to leaks in distribution system, priming pump and flushing lines. Usually 5% - 10% of total water pumped.

TABLE 2
FUTURE WATER USE

PS + C/I

Next 7 Years	Projected Population (CUM)	Number of Units	Per Capita Usage (gpcd)	Household Avg. day (mgal)	Household Max day (mgal) (CUM)	Commercial/Industrial Avg. day (mgal)	Commercial/Industrial Max day (mgal) (CUM)	Irrigation (urban landscape, recreation or common areas) (mgal)	Size Water Utility (mgal) Per Day	Total Annual Avg. day (mgal)	Total Annual Max day (mgal)	Installed Wellfield capacity (mgal) Per Day
19 92	2010	804	100	0.201	0.352	0.0025	0.0044	-	0.25	74.28	130.1	1.44
19 93	6560	2624	100	0.656	1.148	0.005	0.00875	-	0.75	241.3	422.2	2.88
19 94	9840	3936	100	0.984	1.722	0.025	0.0438	-	1.00	368.3	644.5	4.32
19 95	13228	5291	100	1.323	2.315	0.0275	0.0481	-	1.50	492.9	862.6	4.32
19 96	16615	6646	100	1.662	2.909	0.030	0.0525	-	1.75	617.6	1081	5.76
19 97	20000	8000	100	2.00	3.50	0.050	0.0875	-	2.10	748.3	1309	7.20
19 98	20000	8000	100	2.00	3.50	0.050	0.0875	-	2.10	748.3	1309	7.20

PS-4

Commercial is based upon tentative development usage of 0.25 GPD/SF of Building area. Water Treatment and Wellfield capacity is modularly incremental, and tentative in scheduling.

RECEIVED
DEC 26 1991
JACKSONVILLE

COMMERCIAL/INDUSTRIAL TYPE USES

(Submit 3 copies of application, supplemental information drawings, calculations, etc.)

I. PROJECT DESCRIPTION

1. Type of business and/or operation, please describe: Development dedicated and Public Commercial Shopping Center.
2. Project acreage: 617 +/- Bldg. Area = 200,000 S.F. ultimate, 10,000 SF Phase IA & IB This application
3. Average daily use last service year None (mgd)*
4. Maximum daily use last service year None (mgd)
5. Number of days per week when maximum used 6
6. Months per year used 12
7. Proposed average daily and maximum daily use for each of next 7 years (complete chart):

YEAR	PROPOSED AVERAGE DAILY USE (mgd)	PROPOSED MAXIMUM DAILY USE (mgd)
19 92	0.0025	0.0044
19 93	0.0050	0.00875
19 94	0.0250	0.0438
19 95	0.0275	0.0481
19 96	0.0300	0.0525
19 97	0.0500	0.0875
19 98	0.0500	0.0875

*mgd = million gallons per day

8. Explain method used to calculate ground water or surface water withdrawals.

9. Describe the flow of wastewater from the plant and its ultimate disposal. Please provide name of any receiving water body into which effluent is discharged. Also, provide the applicable Florida Department of Environmental Regulations/Environmental Protection Agency permit numbers (FDER, EPA) issued for discharge to surface waters. Attach daily flow amounts for effluent discharged to surface waters for the last 12 months. Initial disposal is to Percolation Ponds. Future development will provide ultimate disposal by Spray Irrigation and/or discharge to Storm Water Retention Ponds.

II. WELL HISTORY

1. Provide all historic water quality data collected for each well over the last 7 years. None

2. Provide a chronology for each well describing any alterations, casing changes, backplugging or repairs that may have been conducted over the life span of the well.

3. If available, provide water level readings (National Geodetic Vertical Data) for any wells for which data has been collected over the last 7 years.
Include any predictive tools (modeling) that may have been used to evaluate the wellfields' long term impacts on ground water quantity and quality.

III. REUSE

1. Provide water quality data for effluent discharged during the last 12 months. N/A

2. Provide the level of treatment required to facilitate reuse of effluent for *each* individual manufacturing and cooling process. Provide supporting documentation as to water quality and quantity limitation of reuse for each component of the process.

IV. WATER CONSERVATION PLAN

Please submit a water conservation plan prepared in accordance with Section 12.5.2, Applicant's Handbook, Consumptive Uses of Water.

See Page PS-2, Section 3.

ATTACHMENT "A"

There are three wells existing on the project site: one 6 inch, one 10 inch, and one 12 inch diameter well. These wells are shown on Map H-1 as Well Numbers A, B, and C, respectively. Well "A" is 12 inches in diameter and was used for citris irrigation, pumping 2500 gpm. Well "B" is 10 inches in diameter and was used for grove irrigation, delivering 1500 gpm. Well "C" is a 6 inch diameter well supplying existing buildings on the property. These wells are presently permitted by SJRWMD under Consumptive Use Permit No. 2-069-0010 A.

Four wells are proposed to support the project upon buildout. Currently, it is necessary to obtain Consumptive Use permits for the requested capacity prior to January 15, 1992 in order to construct Phases 1A & 1B as shown in Attachment "B". For this purpose an 8 inch diameter well is proposed. Future wells will accommodate the Development Program as defined on pages 12-14, 12-15, and 12-16 of the Southlake Quality Development report as prepared for the State of Florida Department of Community Affairs, Board of County Commissioners, Lake County, Florida, and the East Central Florida Regional Planning Council. See Attachment "C". It should be noted that the project phase 1, based upon working drawings, does not exactly agree with the above referenced Attachment "C", but rather is a refinement of it.

ATTACHMENT "B"

SOUTHLAKE COMMUNITY

LEGEND:

KNOWN BUILDING TYPES AS OF 10/10/91:

CY-A = COURTYARD "A"	10 PLACES
CY-C = COURTYARD "C"	16 PLACES
TH-A = TOWNHOUSE "A"	28 PLACES
TH-B = TOWNHOUSE "B"	24 PLACES

NOTE:
NEIGHBORHOOD CENTER CONSISTS OF APARTMENTS OVER RETAIL SPACE. UNIT TYPES ARE SHOWN ON DRAWING.

PROJECT AREA:

PHASE 1A	25.94 ACRES
PHASE 1B	20.64 ACRES
TOTAL PHASE 1	46.58 ACRES

UNIT COUNT:

PHASE 1A

A. EFFICIENCY	100
B. 1BR+1BA FLAT	88
C. 2BR+2BA FLAT	180
D. 3BR+2BA FLAT	20
E. SMALL 1BR+1BA FLAT	10
F. PIGGYBACK 2BR+2.5BA STACK	10
G. 2BR+2.5BA STACK	50
H. 1BR+1BA STACK	10
TOTAL	468 UNITS

PHASE 1B

E. SMALL 1BR+1BA FLAT	70
F. PIGGYBACK 2BR+2.5BA STACK	70
G. 2BR+2.5BA STACK	182
H. 1BR+1BA STACK	14
TOTAL	336 UNITS

Development Program

The *Southlake* development program includes 8,000 multi-family units, at an average gross density of 12.96 units per acre, 200,000 square feet of commercial space (to meet the resident's typical retail needs) and 46 acres of parks and recreational uses. *Southlake* will provide "more affordable" apartments and townhomes well within reach for the 65,000 people employed in nearby resorts and theme parks.

The Master Development Plan for *Southlake* (Map H) is based upon the Traditional Neighborhood Development (TND) concept. Residential areas are designed to create distinct neighborhood identities. Map H illustrates four neighborhoods defined by the existing water features and U.S. 27. Neighborhood squares will be provided within the residential areas to serve as focal points and places to gather.

Neighborhood squares are located within walking distance (1350 feet) of the residential units. Six squares are located to meet this maximum walking distance. Each square will include a bus stop, post office, indoor and outdoor gathering places, and retail establishments. A convenience store, coffee shop, local tavern, dry cleaners and sidewalk eatery are examples of the types of establishments compatible with the neighborhood square. These commercial uses will account for approximately fifty percent of the space in the neighborhood squares.

Two town centers are proposed, centrally located on each half of *Southlake*. These centers will provide retail products and services that require a larger population base for economic viability. The west town center (40,000 square feet) will consist primarily of speciality shops, whereas the east town center is larger (100,000 square feet) and will provide community level shopping, such as a grocery store, general store, drug store, etc. The town centers are located near U.S. 27, to meet retail locational needs, yet will be buffered and selectively screened to ensure that each will function internal to the project.

A cultural activity center will be developed adjacent to the east town center to accommodate the social and cultural needs of the community.

All public spaces are being designed with a pedestrian orientation to encourage social interaction and activity in the street setting. On-street parking, street trees, wide walks, landscaping, hardscape, furnishings (such as benches), and night lighting will be provided to create a comfortable environment for residents.

The town centers, cultural activity center, community recreation center, community park, lakeside parks, neighborhood parks, and neighborhood squares will be connected by a system of walkways and bike paths that tie the fabric of *Southlake* together into a living community.

Phasing

Southlake will be developed in two phases, over a six-year period. Phase I infrastructure development and building construction is expected to commence in 1991. The first phase consists of 2,768 units on residential parcels west of U.S. 27, and 1,168 units on 60 acres of the residential areas on the eastern portion of the site. A neighborhood square will be developed each year and will serve the residents of approximately 1,312 dwelling units.

The west town center with 40,000 square feet of gross floor area, is expected to be completed within three years of the start of development. An additional 30,000 square feet of commercial space will be developed in the east town center prior to the end of Phase I. The balance of the project is expected to be completed on the eastern portion of the site within six years. Table 12-1 summarizes the phasing of the project on an annual basis.

ATTACHMENT "C"

Table 12-1
Project Phasing

	Phase I			PhaseII			
Use	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	TOTAL
Residential Units							
L-R Apt.	832	832	832				2496
Condominium	480	480	480	480	480		2400
Retirement				586	586	588	1760
H-R Apt.				289	289	766	1344
SubTotal	1312	1312	1312	1355	1355	1354	8000
Cumulative Total	1312	2624	3936	5291	6646	8000	
Commercial (sq.ft. in thousands)							
West	10	10	40				60
East			40	10	10	80	140
SubTotal	10	10	80	10	10	80	200
Cumulative Total	10	20	100	110	120	200	

L-R = Low-Rise
H-R = High-Rise

ATTACHMENT "G"

Description of Property of Robert L. Chapman, Jr. and Elisabeth T. Chapman, His Wife, in Lake County, Florida.

Description: South Lake Grove: That portion of Section 35, Township 24 South, Range 26 East as recorded in O.R. Book 757, page 1269, public records of Lake County, Florida.

The North 1/2 of the Northwest 1/4 of the Northwest 1/4; the North 1/2 of the Southeast 1/4 of the Northwest 1/4 of the Northwest 1/4; the Northeast 1/4 of the Northwest 1/4; the East 1/2 of the Northeast 1/4 of the Southeast 1/4 of the Northwest 1/4; that part west of Highway 27 of the Northwest 1/4 of the Northeast 1/4; that part west of Highway 27 of the Southwest 1/4 of the Northeast 1/4; that part west of Highway 27 of the Southwest 1/4 of the Southeast 1/4 of the Northeast 1/4; the North 1/2 of the Northwest 1/4 of the Southeast 1/4; the Southeast 1/4 of the Northwest 1/4 of the Southeast 1/4; that part west of Highway 27 of the Northeast 1/4 of the Southeast 1/4.

Less: Property deeded to Paul L. Curtis and Sarah L. Curtis, his wife, in deed recorded in O.R. Book 559, page 240, public records of Lake County, Florida, described as follows:

That part west of Highway 27 of the South 1/2 of the Northeast 1/4 of the Southeast 1/4, Section 35, Township 24 South, Range 26 East, less the Northerly 15 feet, being ten acres, more or less.

Less: Property deeded to Florida Power Corporation by deed in O.R. Book 509, page 68, public records of Lake County, Florida, described as follows:

That part of the Northeast 1/4 of the Southeast 1/4 of Section 35, Township 24 South, Range 26 East, in Lake County, Florida, bounded and described as follows: from the northwest corner of the Southeast 1/4 of the Southeast 1/4 of said Section 35, run North 0° 30′ 21″ East 641.20 feet, more or less, to a concrete monument that is 15 feet South of the north boundary of the South 1/2 of the Northeast 1/4 of the Southeast 1/4 to the point of beginning of this description; from said point of beginning continue North 0° 30′ 21″ East 397.49 feet, thence run South 89° 53′ 12″ East 167.16 feet to a concrete monument that is 213.18 feet west of the westerly right of way line of U.S. Highway No. 27, thence South 20° 8′ 20″ East parallel to and 200 feet westerly of the westerly right of way line of U.S. Highway No. 27 a distance of 359.72 feet to a concrete monument, thence South 89° 53′ 12″ East 213.18 feet to the westerly right of way line of U.S. Highway No. 27, thence South 20° 8′ 20″ East along said right of way line 63.95 feet to a concrete monument that is 15 feet south

of the north boundary of the South 1/2 of the Northeast 1/4 of the Southeast 1/4, thence North 89° 53' 12" West parallel to and 15 feet south of the north boundary of the South 1/2 of the Northeast 1/4 of the Southeast 1/4, a distance of 529.72 feet to the point of beginning.

Description: South Lake Grove: That portion of Section 34, Township 24 South, Range 26 East as recorded in O.R. Book 562, page 24, public records of Lake County, Florida, described as follows:

The North 1/2 of the North 1/2 of the Northeast 1/4 of the Northeast 1/4 of Section 34, Township 24 South, Range 26 East, Lake County, Florida.

Description: Sharp Grove: recorded in O.R. Book 770, page 1232, public records of Lake County, Florida:

The East 3/4 of the South 1/2 of the Southeast 1/4 of the Northwest 1/4; the West 1/2 of the Northeast 1/4 of the Southeast 1/4 of the Northwest 1/4; the East 1/2 of the Northwest 1/4 of the Southeast 1/4 of the Northwest 1/4; the Northwest 1/4 of the Northwest 1/4 of the Southeast 1/4 of the Northwest 1/4; the South 1/2 of the Southeast 1/4 of the Northwest 1/4 of the Northwest 1/4; the North 1/2 of the Northeast 1/4 of the Southwest 1/4 of the Northwest 1/4; also begin at the southwest corner of the East 1/2 of the Northwest 1/4 of the Southeast 1/4 of the Northwest 1/4, run North to the southeast corner of the Northwest 1/4 of the Northwest 1/4 of the Southeast 1/4 of the Northwest 1/4, run thence West to the southwest corner of the Northeast 1/4 of the Northeast 1/4 of the Southwest 1/4 of the Northwest 1/4, run thence Southeasterly to the point of beginning. All in Section 35, Township 24 South, Range 26 East.

Description: That portion of Section 35, Township 24 South, Range 26 East as described in O.R. Book 406, page 315, public records of Lake County, Florida, described as follows:

That part lying East of U.S. Highway No. 27 of the Northeast 1/4, the North 1/2 of the Northeast 1/4 of the Southeast 1/4 of aforesaid Section 35, otherwise known as Chapman Grove.

Less: The property described in O.R. Book 455, page 670, public records of Lake County, Florida, being described as follows:

From a point where the southerly boundary line of the North 1/2 of the Northeast 1/4 of the Southeast 1/4 of Section 35, Township 24 South, Range 26 East, Lake County, Florida, intersects the easterly right of way line of U.S. Highway No. 27 (S.R. 25) run in a northerly direction along said right of

way 60 feet to the point of beginning; thence run 200 feet due East to a point; thence run 175 feet parallel in a northerly direction parallel to the said right of way to a point; thence run due West 200 feet to a point on said right of way; thence run in a southerly direction 175 feet along the said right of way to the point of beginning.

Also less: The property described in O.R. Book 489, page 518, public records of Lake County, Florida, being described as follows:

Beginning at a point on the north line of Section 35, Township 24 South, Range 26 East, in Lake County, Florida, that is North 89° 41' 50" West 1615.38 feet from the northeast corner of said Section 35, thence along said north section line, North 89° 41' 50" West 200 feet to the northeasterly right of way line of U.S. Highway No. 27; run thence along said northeasterly right of way line South 20° 05' 00" East 158.44 feet; thence North 69° 55' 00" East 7.00 feet; thence South 20° 05' 00" East 144.16 feet; thence South 89° 41' 50" East 200 feet; thence North 89° 41' 50" West 7.47 feet; thence North 20° 05' 00" West for 158.44 feet to the point of beginning.

Description: That portion of Section 36, Township 24 South, Range 26 East as described in O.R. Book 406, page 315, public records of Lake County, Florida, described as follows:

The Northwest 1/4, the West 1/2 of the Northeast 1/4, the North 1/4 of the Southwest 1/4, the North 1/2 of the Northwest 1/4 of the Southeast 1/4, Section 36, Township 24 South, Range 26 East, Lake County, Florida; containing 299.2510 acres, more or less.

Description: That portion of Section 35, Township 24 South, Range 26 East as described in O.R. Book 969, page 1968, public records of Lake County, Florida, described as follows:

The Southwest 1/4 of the Northwest 1/4 of the Southeast 1/4 of Section 35, Township 24 South, Range 26 East, in Lake County, Florida;

Also: An easement over the East 30 feet of the West 1/2 of the Southwest 1/4 of the Southeast 1/4 of Section 35, Township 24 South, Range 26 East, in Lake County, Florida;

Also: An easement over the South 60 feet of that part of the East 3/4 of the Southeast 1/4 of said Section 35, Township 24 South, Range 26 East, in Lake County, Florida.

Also: An easement over a strip of land 20 feet wide, the centerline of which is described as follows:

STATE OF FLORIDA
DEPARTMENT OF COMMUNITY AFFAIRS

2740 CENTERVIEW DRIVE • TALLAHASSEE, FLORIDA 32399-2100

LAWTON CHILES
Governor

WILLIAM E. SADOWSKI
Secretary

July 9, 1991

Mr. Robert L. Chapman, III
Southlake Development Group
800 U.S. Highway 27
Clermont, Florida 34711

Re: Southlake Florida Quality Development

Dear Mr. Chapman:

Congratulations on completing the first designated Lake County Florida Quality Development. On June 27, 1991, the Department executed the development order designating Southlake as a Florida Quality Development. An original development order is enclosed. This date of transmission is the effective date of this development order; transmission is also "rendition" under Rule 9J-28.023(3), F.A.C. Under Section 380.07, Florida Statutes, an appeal may be taken within 45 days after rendition. Any construction activity undertaken prior to expiration of the 45 day statutory period shall be at your own risk. An original development order has also been transmitted to the regional planning council and the local government on this date.

Paragraph III.M. of the development order requires that you record it in the public records of Lake County within ten days of issuance. Please send the Department a notarized copy of the notice of recordation. If you have any questions regarding this matter, please call Jane DeRose at (904) 488-4925.

Very truly yours,

William E. Sadowski

William E. Sadowski,
Secretary

WES/jd

cc: Robert M. Rhodes (with copy of enclosure)

FLORIDA
PUBLIC SERVICE COMMISSION

CERTIFICATE NUMBER

533-W

Upon consideration of the record it is hereby ORDERED that authority be and is hereby granted to

Southlake Utilities, Inc.

Whose principal address is

800 U. S. Highway 27

Clermont, Florida 34711 (Lake)

to provide Water service in accordance with the provisions of Chapter 367, Florida Statutes, the Rules, Regulations and Orders of this Commission in the territory described by the Orders of this Commission.

This Certificate shall remain in force and effect until suspended, cancelled or revoked by Orders of this Commission.

ORDER 23947 DATED 01/02/91 DOCKET 900738-WS

ORDER _____ DATED _____ DOCKET _____

ORDER _____ DATED _____ DOCKET _____

ORDER _____ DATED _____ DOCKET _____

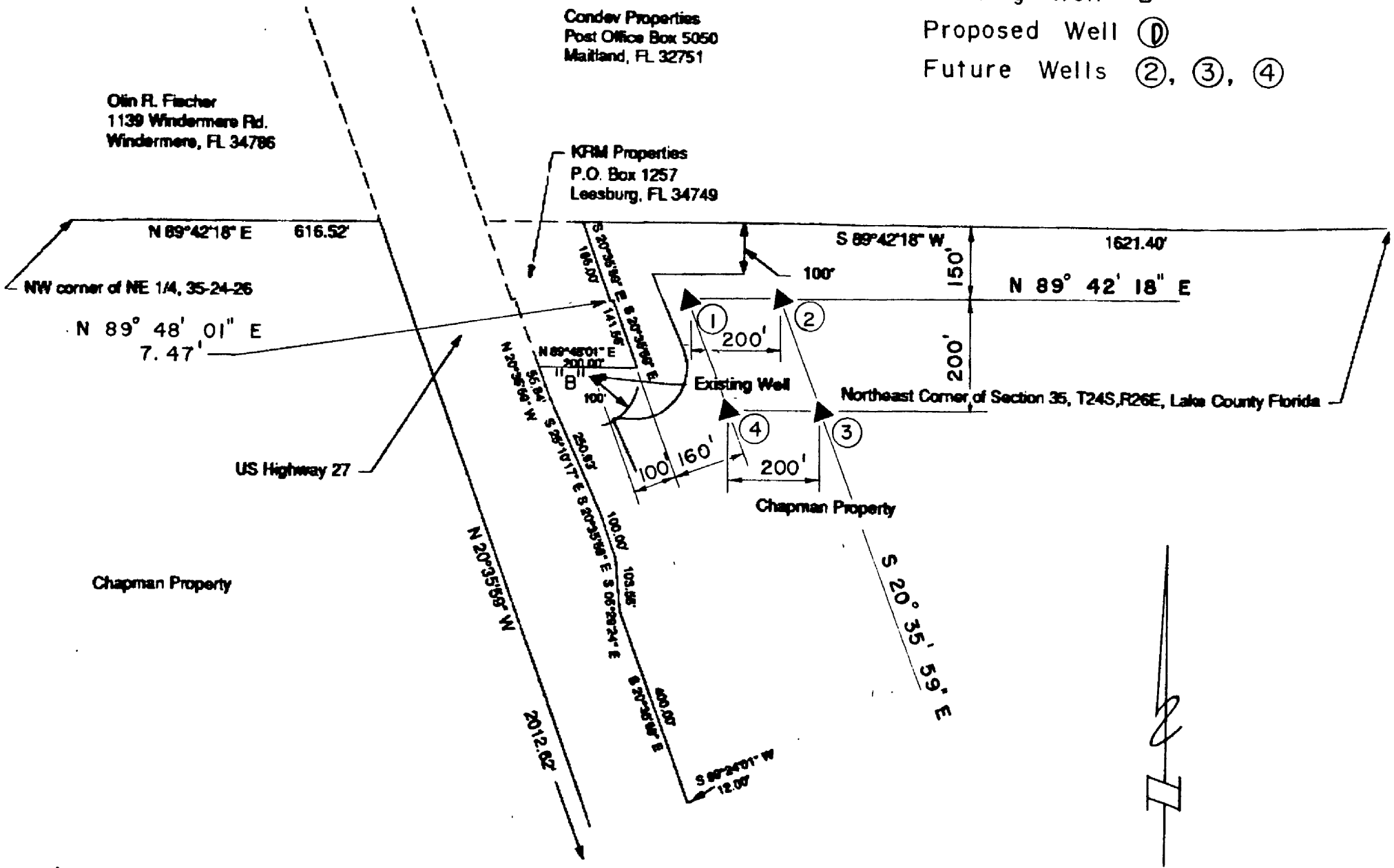
BY ORDER OF THE
FLORIDA PUBLIC SERVICE COMMISSION

Director, Division of Records & Reporting

Executive Director

23

Map WI: Well Locations



MAKEMSON & ASSOCIATES

REC 9.00
DOC 37.50
TF 1.50

88 28194 WARRANTY DEED BOOK 0969 PAGE 1968

The Grantor, HARRY N. PETERSON, for and in consideration of the sum of TEN DOLLARS ($10.00) and other good and valuable consideration received from the Grantees, the receipt and sufficiency of which are hereby acknowledged, hereby grant and convey to the Grantees, ROBERT L. CHAPMAN and ELISABETH T. CHAPMAN, his wife, whose mailing address is P. O. Rt. 5, Box 78, Clermont, Florida 32711, the real property located in Lake County, Florida, and described as follows:

The SW 1/4 of the NW 1/4 of the SE 1/4 of Section 35, Township 24 South, Range 26 East, in Lake County, Florida;

ALSO:

An easement over the East 30 feet of the West 1/2 of the SW 1/4 of the SE 1/4 of Section 35, Township 24 South, Range 26 East, in Lake County, Florida;

ALSO:

An easement over the South 60 feet of that part of the East 3/4 of the SE 1/4 of said Section 35 lying West of U. S. Highway No. 27;

ALSO:

An easement over a strip of land 20 feet wide, the centerline of which is described as follows:

From the Southwest corner of the East 1/2 of the Southwest 1/4 of the Southeast 1/4 of Section 35, Township 24 South, Range 26 East, Lake County, Florida, run N 00°30'11" East along the West line of said East 1/2 of the Southwest 1/4 of the Southeast 1/4, a distance of 630 feet; thence South 89°29'49" East 10.00 feet; run thence N 00°30'11" East 45.90 feet to the point of beginning; continue N 00°30'11" East 627.46 feet; thence South 89°55'32" East 641.75 feet

ALSO:

An easement over a strip of land 20 feet wide, the centerline of which is described as follows:

From the Southwest corner of the East 1/2 of the Southwest 1/4 of the Southeast 1/4 of Section 35, Township 24 South, Range 26 East, Lake County, Florida, run N 00°30'11" East along the West line of said East 1/2 of the Southwest 1/4 of the Southeast 1/4, a distance of 630.00 feet to the point of beginning; thence S. 89°29'49" East 10.00 feet; run thence 00°30'11" East 45.90 feet.

JUN 22 9 05 AM '88

This conveyance includes all and singular the tenements, hereditaments, mineral rights and appurtenances belonging to or in any manner appertaining to the aforedescribed real property.

This conveyance is subject to real estate taxes for 1988 and all subsequent years.

The aforementioned real property is not the homestead of the Grantor nor is it contigous to the homestead of Grantor.

STATE OF FLORIDA
DOCUMENTARY STAMP TAX
DEPT OF REVENUE
JUN 22 88
37.50

Please Return to Kerry M. [illegible]
[illegible], MYERS, CRAIG, CREWS, [illegible] & MANN, P.A.
P.O. Drawer 7608, Winter Haven, FL 33883-7608

25

The Grantor hereby covenants that the aforedescribed real property is free and clear of all liens and encumbrances except as stated above, and that the lawful seisin of and good right to convey the aforedescribed real property is vested in the Grantor; and the Grantor fully warrants the title to the aforedescribed real property and will defend the same against the lawful claims of all persons whomsoever.

DATED this 16th day of June, 1988.

BOOK 0969 PAGE 1969

Signed, sealed and delivered
in the presence of:

HARRY N. PETERSON

STATE OF FLORIDA
COUNTY OF POLK

The foregoing instrument was acknowledged before me on this 16th day of June, 1988, by HARRY N. PETERSON.

(Seal)

Notary Public
My commission expires:
Notary Public, State of Florida
My Commission Expires Dec. 17, 1989
Bonded Thru Troy Fain-Insurance, Inc.

This instrument prepared by:

Kerry M. Wilson, of
PETERSON, MYERS, CRAIG, CREWS
BRANDON & MANN, P. A.
P. O. Drawer 7608
Winter Haven, Florida 33883-7608

CHAR.D

83 6047

This instrument was prepared by

ROBERT D. SUMNER/cfh

of the Law Offices of
DAYTON, SUMNER, LUCKIE
& McKNIGHT, P.A.
P.O. Drawer 1047
DADE CITY, FLORIDA 33525

Warranty Deed

(STATUTORY FORM—SECTION 689.02 F.S.)

This Indenture, Made this 10th day of February, 1983 Between

WADE POWELL and GILBERT POWELL,

of the County of Lake State of Florida , grantor*, and

ROBERT L. CHAPMAN, JR.,

whose post office address is Rt. 1, Box 26 A, Clermont, Florida 32711,

of the County of Lake State of Florida grantee*

Witnesseth, that said grantor for and in consideration of the sum of ---Ten and no/100 ($10.00)-------

---------- Dollars

and other good and valuable considerations to said grantor in hand paid by said grantee the receipt whereof is hereby acknowledged, has granted, bargained and sold to the said grantee, and grantee's heirs and assigns forever the following described land, situate, lying and being in Lake County, Florida, to wit:

ALL THAT REAL PROPERTY DESCRIBED IN EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF.

SUBJECT TO the terms of that certain Mortgage given by WADE POWELL and GILBERT POWELL to PERRY L. PITTS and SHIRLEY E. PITTS, his wife, dated October 4, 1979, filed October 10, 1979, and recorded in Official Record Book 686, pages 1126 through 1129, Public Records of Lake County, Florida, given to secure the sum of $70,645.00, which the Grantees herein assume and agree to pay.

RECORDED AND RECORD VERIFIED
CLERK CIRCUIT COURT
LAKE COUNTY, FLA.

FEB 25 11 00 AM '83

and said grantor does hereby fully warrant the title to said land, and will defend the same against the lawful claims of all persons whomsoever.

* "Grantor" and "grantee" are used for singular or plural, as context requires.

In Witness Whereof, Grantor has hereunto set grantor's hand and seal the day and year first above written.

Signed, sealed and delivered in our presence:

Robert D. Sumner
Connie J. Hazard
Robert D. Sumner
Connie J. Hazard

Wade Powell (Seal)
Wade Powell

(Seal)
Gilbert Powell

(Seal)

(Seal)

STATE OF FLORIDA
COUNTY OF PASCO

I HEREBY CERTIFY that on this day before me, an officer duly qualified to take acknowledgments, personally appeared WADE POWELL and GILBERT POWELL,

to me known to be the persons described in and who executed the foregoing instrument and acknowledged before me that they executed the same.

WITNESS my hand and official seal in the County and State last aforesaid this 10th day of February, A.D. 1983

My commission expires:

Connie J. Hazard
Notary Public

Notary Public, State of Florida
My Commission Expires Sept. 26, 1985
Bonded By American Fire & Casualty Company

PLEASE RETURN TO:
DAYTON, SUMNER, LUCKIE & McKNIGHT, P.A.
P.O. DRAWER 1047
DADE CITY, FLORIDA 33525

27

~~OR 686 PG 1125~~

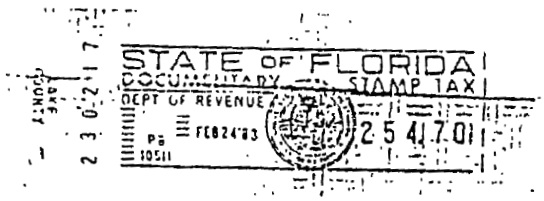
EXHIBIT "A"

The East 3/4 of the South 1/2 of the SE 1/4 of the NW 1/4; the West 1/2 of the NE 1/4 of the SE 1/4 of the NW 1/4; the East 1/2 of the NW 1/4 of the SE 1/4 of the NW 1/4; the NW 1/4 of the NW 1/4 of the SE 1/4 of the NW 1/4; the South 1/2 of the SE 1/4 of the NW 1/4 of the NW 1/4; the North 1/2 of the NE 1/4 of the SW 1/4 of the NW 1/4; Also begin at the Southwest corner of the East 1/2 of the NW 1/4 of the SE 1/4 of the NW 1/4, run North to the Southeast corner of the NW 1/4 of the NW 1/4 of the SE 1/4 of the NW 1/4, run thence West to the Southwest corner of the NE 1/4 of the NE 1/4 of the SW 1/4 of the NW 1/4, run thence Southeasterly to the Point of Beginning; all in Section 35, Township 24 South, Range 26 East.

SUBJECT to reservation of 1/2 interest in all oil, gas and mineral rights together with easements for development thereof as reserved in deed dated March 30, 1956, and recorded in Deed Book 382, Page 103, Public Records of Lake County, Florida.

TOGETHER with an easement from the subject property to Highway 27 described as follows:

A strip of land 20 feet wide, the centerline of which is described as follows: From the Southwest corner of the East 1/2 of the SW 1/4 of the SE 1/4 of Section 35, Township 24 South, Range 26 East, Lake County, Florida, run North 0°30'11" East along the West line of said East 1/2 of the SW 1/4 of the SE 1/4, a distance of 630.00 feet; thence South 89°29'49" East 10.00 feet; run thence North 0°30'11" East 673.36 feet; thence South 89°55'32" East 641.75 feet to the Point of Beginning; thence North 0°30'21" East 661.20 feet; thence South 89°53'12" East 535.96 feet to the Point of termination on the Westerly right of way line of Highway 27, and a strip of land 30 feet wide lying Southerly and Westerly of the following described survey line: Beginning 630 feet North of the Southeast corner of the SW 1/4 of the SW 1/4 of the SE 1/4 of Section 35, Township 24 South, Range 26 East, run North approximately 1350 feet to the Northeast corner of the SW 1/4 of the NW 1/4 of the SE 1/4, thence West along the North line of said SW 1/4 of the NW 1/4 of the SE 1/4 to the Northwest corner thereof, thence North 49°12'40" West 328.10 feet, thence North 0°09'33" West to the East-West 1/4 Section line of said Section 35.



82 23928

Warranty Deed (STATUTORY FORM — SECTION 689.02 F.S.)

This Indenture, Made this * day of * 1982, Between
THOMAS ALSTON CHAPMAN AND JANE M CHAPMAN
HIS WIFE —
, grantors, and

Rec 9.00
Doc .45

Robert Lee Chapman JR. AND WIFE ELISABETH T
5198 38TH ST SO
ST PETERSBURG, FLA 33711 / RT 1 BOX 26A
CLERMONT, FLA 32711, grantee*,

Witnesseth, That said grantor, for and in consideration of the sum of Ten ($10.00) Dollars, and other good and valuable considerations to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, has granted, bargained and sold to the said grantee, and grantee's heirs and assigns forever, the following described land, situate, lying and being in LAKE County, Florida, to-wit

A 3/8 INTEREST IN SOUTH LAKE GROVES
THE —
LEGAL DESCRIPTION IS ATTACHED
HERETO AS EXHIBIT "A"

STATE OF FLORIDA
DOCUMENTARY STAMP TAX
= 00.45

and said grantor does hereby fully warrant the title to said land, and will defend the same against the lawful claims of all persons whomsoever.

* "Grantor" and "grantee" are used for singular or plural, as context requires

In Witness Whereof, Grantor has hereunto set grantor's hand and seal the day and year first above written.
Signed, sealed and delivered in our presence

(Seal)
(Seal)
(Seal)
(Seal)

STATE OF
COUNTY OF
I HEREBY CERTIFY that on this day before me an officer duly qualified to take acknowledgments personally appeared

to me known to be the person described in and who executed the foregoing instrument and acknowledged before me that he executed the same.
WITNESS my hand and official seal in the County and State last aforesaid this 16TH day of SEPTEMBER
19 82

My commission expires

Notary Public

Prepared by R. L. Chapman Jr.
[illegible]
Clermont, Fla.

33

29

Project Feasibility and Ability to Proceed - Site (Attachment V.B.1. p.5)

EXHIBIT A

OR 757 PG 1269

PROPERTY LOCATED IN LAKE COUNTY, FLORIDA, described as:

The N 1/2 of N 1/2 of NE 1/4 of NE 1/4 of Sec. 34 Tp. 24 S. R. 26 E.; the N 1/2 of the NW 1/4 of the NW 1/4; the N 1/2 of the SE 1/4 of the NW 1/4 of the NW 1/4; the NE 1/4 of the NW 1/4; the E 1/2 of the NE 1/4 of the SE 1/4 of the NW 1/4; that part West of Highway #27 of the NW 1/4 of the NE 1/4, that part West of Highway #27 of the SW 1/4 of the NE 1/4; that part West of Highway #27 of the SW 1/4 of the SE 1/4 of the NE 1/4, the N 1/2 of the NW 1/4 of the SE 1/4; the SE 1/4 of the NW 1/4 of the SE 1/4, that part West of Highway #27 of the NE 1/4 of the SE 1/4, all in Sec. 35 Tp. 24 S, R. 26 E.

LESS: Property deeded to Florida Power Corporation by deed in O.R. Book 509, Page 60, Public Records of Lake County, Florida.

LESS: Property deeded to Paul L. Curtis and Saran L. Curtis, his wife, in deed recorded in O.R. Book 559, Page 240, Public Records of Lake County, Florida.

Subject to easements of record.

Subject to declaration of the State of Florida that some or all of the property herein conveyed is an "Area of Critical State Concern".

34

30

79 696

This Indenture,

This instrument prepared by
CHARLES E. SCHUH, ATTORNEY
MIRROR LAKE DRIVE
ST. PETERSBURG, FLA. 33701

78-21379

O.R. 567 PAGE 155

Rec 7.00
D.S. [illegible]
Sur [illegible]
55
Tot [illegible]

Made this 29th day of December 1978, Between EDWARD V. POLLARD as Trustee

of the County of Pinellas, State of Florida, grantor, and

ROBERT L. CHAPMAN, JR. and ELISABETH T. CHAPMAN, his wife as to a 5/8 undivided interest, and THOMAS A. CHAPMAN, and JANE CHAPMAN, his wife as to a 3/8 undivided interest whose post-office address is 5195 - 39th Street South, St. Petersburg, Florida 33711 of the County of Pinellas, State of Florida, grantee,

Witnesseth, That said grantor, for and in consideration of the sum of Ten ($10.00)------Dollars, and other good and valuable considerations to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, has granted, bargained and sold to the said grantee, and grantee's heirs, successors and assigns forever the following described land, situate, lying and being in Lake County, Florida, to-wit:

LEGAL DESCRIPTION IS ATTACHED HERETO.

The intent of this deed is to convey total interest in the above described property to the Grantees by the Grantor, the Grantees, Robert L. Chapman, Jr. and Elisabeth T. Chapman, his wife, receiving a one-fourth interest in the property deeded as a distribution of their interest as beneficiaries of the trust.

RETURN TO
THOMAS CHAPMAN
ROUTE 1, BOX 26A
CLERMONT, FLORIDA 32711

and said grantor does hereby fully warrant the title to said land, and will defend the same against the lawful claims of all persons whomsoever.

In Witness Whereof, Grantor has hereunto set grantor's hand and seal the day and year first above written.

Signed, sealed and delivered in our presence:

[signature] [signature] (Seal)
Edward V. Pollard Trustee

(Seal)

(Seal)

(Seal)

STATE OF FLORIDA
COUNTY OF PINELLAS

I HEREBY CERTIFY that on this day before me, an officer duly qualified to take acknowledgments, personally appeared

EDWARD V. POLLARD as Trustee

to me known to be the person(s) described in and who executed the foregoing instrument and acknowledged before me the execution of same.

WITNESS my hand and official seal in the County and State last aforesaid this 29th day of December 1978.

[signature]
Notary Public
My commission Expires:

31

PROPERTY LOCATED IN LAKE COUNTY, FLORIDA, described as:

The N 1/2 of N 1/2 of NE 1/4 of NE 1/4 of Sec. 34 Tp. 24 S. R. 26 E.; the N 1/2 of the NW 1/4 of the NW 1/4; the N 1/2 of the SE 1/4 of the NW 1/4 of the NW 1/4; the NE 1/4 of the NW 1/4; the E 1/2 of the NE 1/4 of the SE 1/4 of the NW 1/4; that part West of Highway #27 of the NW 1/4 of the NE 1/4; that part West of Highway #27 of the SW 1/4 of the NE 1/4; that part West of Highway #27 of the SW 1/4 of the SE 1/4 of the NE 1/4, the N 1/2 of the NW 1/4 of the SE 1/4; the SE 1/4 of the NW 1/4 of the SE 1/4; that part West of Highway #27 of the NE 1/4 of the SE 1/4, all in Sec. 35 Tp. 24 S., R. 26 E.

LESS: Property deeded to Florida Power Corporation by deed in O.R. Book 509, Page 68, Public Records of Lake County, Florida.

LESS: Property deeded to Paul L. Curtis and Sarah L. Curtis, his wife, in deed recorded in O.R. Book 559, Page 240, Public Records of Lake County, Florida.

Subject to easements of record.

Subject to declaration of the State of Florida that some or all of the property herein conveyed is an "Area of Critical State Concern".

32

69 4734
Rec 2.25
St .30
Int .55

OR 380 PAGE 200

Prepared by
FIDELITY TITLE COMPANY
INSURANCE ON TITLES TO REAL ESTATE
4134 CENTRAL AVENUE
ST PETERSBURG FLORIDA 33711

Warranty Deed

(STATUTORY FORM—SECTION 689.02 F.S.)

This Indenture, Made this First day of May 1969, **Between** ROBERT L. CHAPMAN and HELEN M. CHAPMAN, his wife of the County of Lake, State of Florida, grantor*, and ROBERT L. CHAPMAN, JR. and ELISABETH T. CHAPMAN, his wife whose post office address is 5198 39th Street South, St. Petersburg of the County of Pinellas, State of Florida, grantee*,

Witnesseth, That said grantor, for and in consideration of the sum of TEN Dollars, and other good and valuable considerations to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, has granted, bargained and sold to the said grantee, and grantee's heirs and assigns forever, the following described land, situate, lying and being in Lake County, Florida, to-wit:

A one sixth (1/6) undivided interest in: the west 3/4 of the north 1/2 and the west 3/4 of the north 1/4 of the south 1/2 Section 36, Township 24S Range 26E and the N.E. 1/4 east of Highway 27, north 1/2 of the N.E. 1/4 of the S.E. 1/4 east of Highway 27, Section 35T24 S.R26E. Now making an undivided one half ownership to each of the parties to and for land described in this Deed.

STATE OF FLORIDA DOCUMENTARY STAMP TAX CANCELED $.55 LAKE COUNTY

STATE OF FLORIDA DOCUMENTARY STAMP TAX APR29'69 0030 COMPTROLLER P.B. 190139

and said grantor does hereby fully warrant the title to said land, and will defend the same against the lawful claims of all persons whomsoever.

* "Grantor" and "grantee" are used for singular or plural, as context requires.

In Witness Whereof, Grantor has hereunto set grantor's hand and seal the day and year first above written.
Signed, sealed and delivered in our presence:

William A. Smith, Jr. — Robert L. Chapman (Seal)

Judy A. Lines — Helen M. Chapman (Seal)

_____ (Seal)

_____ (Seal)

69 APR 29 AM 10:29

STATE OF Florida
COUNTY OF Pinellas

I HEREBY CERTIFY that on this day before me, an officer duly qualified to take acknowledgments, personally appeared Robert L. Chapman and Helen M. Chapman

to me known to be the person s described in and who executed the foregoing instrument and acknowledged before me that they executed the same.

WITNESS my hand and official seal in the County and State last aforesaid this 29th day of April, 1969.

My commission expires:

Notary Public

RECORDED IN OFFICIAL RECORDS BOOK OF LAKE COUNTY, FLORIDA
FRANK E. OWENS
CLERK OF CIRCUIT COURT

33

(V.B.I. p.10)

BOOK 1O1 PAGE 0

WARRANTY DEED STATUTORY F. S. 689.02

This Indenture,

RAMCO FORM 4X

Rec 4.00
St 30
Sur 55

(Wherever used herein the terms "first party" and "second party" shall include singular and plural, heirs, legal representatives, and assigns of individuals, and the successors and assigns of corporations, wherever the context so admits or requires.)

Made this 1st day of May A D 1971
BETWEEN R. L. CHAPMAN and wife, HELEN M. CHAPMAN

of the County of Lake , in the State of Florida , parties of the first part, and
ROBERT LEE CHAPMAN, JR., and wife, ELISABETH T. CHAPMAN

of the County of Pinellas , in the State of Florida , whose post office address is
5198 39th Street South, St. Petersburg, Florida 33711

parties of the second part.

Witnesseth, That the said parties of the first part, for and in consideration of the sum of ----------TEN-------------- Dollars, to them in hand paid by the said parties of the second part, the receipt whereof is hereby acknowledged have granted bargained, and sold to the said parties of the second part, their heirs and assigns forever the following described land, situate, and being in the County of Lake , State of Florida , to-wit: Their remaining interest in the described tract being A (1/2) one half undivided interest in: the West 3/4 of the North 1/2 and the West 3/4 of the North 1/4 of the South 1/2 Section 36, Township 24S. Range 26E and the N.E. 1/4 East of Highway 27, North 1/2 of the N. E. 1/4 of the S.E. 1/4 East of Highway 27, Section 35 T24 S. R26E., less a parcel encompassed by a line beginning at a point on the North section line of Section 35, Township 24, South, Range 26 East, lying N. 89°41'50" W. 1615.38 feet of the NE corner of said Section 35, run thence along said North section line, N.89°41'50" W. 200 feet to the Northeasterly right of way line of U. S. Highway No. 27 run thence along said Northeasterly right of way line S.20°05'00" E. 158.44 feet' thence N. 69°55'00" E. 7.00 feet; thence S.20°05'00" E. 144.16 feet; thence S. 89°41'50" E. 200 feet; thence N. 20°05'00" W. 141.56 feet; thence N. 89°41'50" W. 7.47 feet; thence N. 20°05'00" W. 158.44 feet to the point of beginning, containing 1.2909 acres. Transfer of interest includes interest in all improvements and chattles thereon.

This is a deed of convenience, monetary consideration less than $100.00.

And the said parties of the first part do hereby fully warrant the title to said land, and will defend the same against the lawful claims of all persons whomsoever.

In Witness Whereof, The said parties of the first part have hereunto set hands and seals the day and year first above written.

'71 MAY 5 AM 11:41

Signed, sealed and delivered in the presence of:

Lorraine Clark   R. L. Chapman (L.S.)
Anna M. Miller   Helen M. Chapman (L.S.)
E. V. Kent

DOCUMENTARY STAMP TAX — STATE OF FLORIDA — SUR TAX — 00.55 — 00.30

STATE OF FLORIDA,
COUNTY OF Pinellas

I HEREBY CERTIFY that on this day, before me, an officer duly authorized in the State aforesaid and in the County aforesaid to take acknowledgments, personally appeared R. L. Chapman and Helen M. Chapman

to me known to be the persons described in and who executed the foregoing instrument and they acknowledged before me that they executed the same.

WITNESS my hand and official seal in the County and State last aforesaid this 4th day of May A D 1971

Mabel Waterfield

This Instrument prepared by: R. L. Chapman, Jr.
Address 5198 39th Street South
St. Petersburg, Florida 33711

RECORDED IN OFFICIAL RECORDS BOOK OF LAKE COUNTY, FLORIDA
FRANK E. OWENS
CLERK OF CIRCUIT COURT

34

This Indenture, Made this 20th. day of December A. D. 19 59

between ROBERT LEE CHAPMAN and HELEN MORGAN CHAPMAN, his wife

parties of the first part and ROBERT LEE CHAPMAN, Jr. and ELISABETH T. CHAPMAN, his wife whose address is 1742 Bayou Grande Ave, N. E., St. Petersburg, Florida.

parties of the second part.

Witnesseth, That the said parties of the first part, for and in consideration of the sum of ten dollars and other valuable considerations

to them in hand paid by the said parties of the second part the receipt whereof is hereby acknowledged do by these presents Grant, Bargain, Sell, Remise, Release and Convey unto the said parties of the second part, and to their heirs and assigns, forever, all the following described lot, piece or parcel of land situated in the County of ~~Pinellas~~ LAKE State of Florida and known and described as follows, to wit:

An additional one-sixth (1/6th) interest (now making a one-third (1/3) interest vested in the grantee,) in NW¼, W½ of NE¼, N½ of SW¼, N½ of NW¼ of SE¼, all in Sec 36, Township 24 S, Range 26 E; also that part of the NE¼ Sec 35, Township 24S, Range 26E lying East of highway, also that part of the N½ of NE¼ of SE¼ of Sec 35, Township 24S, Range 26E, lying East of Highway, all in Lake County, Florida.

LAKE COUNTY STATE OF FLORIDA DOCUMENTARY STAMP TAX .020

PLACE STAMP HERE

FILED IN THE OFFICE OF THE CLERK OF THE CIRCUIT COURT OF LAKE COUNTY, FLORIDA, ON.......DEC. 2 3 1959.....AT 9:15 O'CLOCK A.M AND RECORDED IN THE "OFFICIAL RECORDS" BEGINNING WITH BOOK NO. 109... PAGE 3......AND RECORD VERIFIED.

Frank E. Owens CLERK

To Have and to Hold the Same, together with all the hereditaments and appurtenances thereto belonging or in anywise appertaining, to the said parties of the second part, their heirs and assigns forever, and the said parties of the first part do hereby fully warrant the title to said land and will defend the same against the lawful claim of all persons whomsoever.
Parties of the second part assume the payment of taxes for the year 1960 and subsequent years.

In Witness Whereof, The said parties of the first part have hereunto set their hands and seals the day and year above written.
Signed, sealed and delivered in the presence of

Wm. R. E. Wall — Robt Lee Chapman (SEAL)
Gladys B. Wallis — Helen Morgan Chapman (SEAL)
(SEAL)
(SEAL)

State of Florida , County of Pinellas

I Hereby Certify, That on this day personally appeared before me, an officer duly authorized to administer oaths and take acknowledgments ROBERT LEE CHAPMAN and HELEN MORGAN CHAPMAN, his wife

to me well known to be the persons described in and who executed the foregoing instrument and acknowledged before me that they executed the same freely and voluntarily for the purposes therein expressed.

WITNESS my hand and official seal this 20th day of December A.D. 1959

Gladys B. Wallis
Notary Public

Notary Public, State of Florida at Large
My Commission expires My Commission Expires Jan. 7, 1962
Bonded By American Fire & Casualty Co.

10M 4-57

35

WARRANTY DEED—Guarantee Abstract Co., St. Petersburg, Fla. Form R.E.-1

This Indenture, Made this 13th day of February A. D. 19 59

between R. L. CHAPMAN and HELEN MORGAN CHAPMAN, his wife

part ies of the first part and R. L. CHAPMAN Jr and ELISABETH CHAPMAN, his wife whose address is 1742 Nebraska Ave Northeast, St. Petersburg, Florida,

part ies of the second part.

Witnesseth, That the said part ies of the first part, for and in consideration of the sum of Ten and no/100 Dollars and other valuable considerations

to them in hand paid by the said part ies of the second part the receipt whereof is hereby acknowledged do by these presents Grant, Bargain, Sell, Remise, Release and Convey unto the said part ies of the second part, and to their heirs and assigns, forever, all the following described lot, piece or parcel of land situated in the County of ~~Brooks~~ Lake, State of Florida and known and described as follows, to wit:

An undivided one-sixth interest in and to NW¼, W½ of NE¼, N½ of SW¼, N½ of NW¼ of SE¼, all in Section 36, Township 24 South, Range 26 East, ALSO that part of the NE¼ of Section 35, Township 24 South, Range 26 East lying East of Highway, ALSO that part of the N½ of the NE¼ of the SE¼ of Section 35, Township 24 South, Range 26 East, lying East of Highway.

PLACE STAMP HERE

FILED IN THE OFFICE OF THE CLERK OF THE CIRCUIT COURT OF LAKE COUNTY, FLORIDA, ON FEB 16 1959 AT 11:25 O'CLOCK A.M. AND RECORDED IN THE "OFFICIAL RECORDS" BEGINNING WITH BOOK NO. 76 PAGE 553 AND RECORD VERIFIED.

Frank E. Evans CLERK

To Have and to Hold the Same, together with all the hereditaments and appurtenances thereto belonging or in anywise appertaining, to the said part ies of the second part, their heirs and assigns forever, and the said part ies of the first part do hereby fully warrant the title to said land and will defend the same against the lawful claim of all persons whomsoever. Part ies of the second part assume the payment of taxes for the year and subsequent years.

In Witness Whereof, The said part ies of the first part ha ve hereunto set their hand s and seal s the day and year above written.
Signed, sealed and delivered in the presence of

R. L. Chapman (SEAL)
Helen Morgan Chapman (SEAL)
(SEAL)
(SEAL)

State of Florida, County of Pinellas

I Hereby Certify, That on this day personally appeared before me, an officer duly authorized to administer oaths and take acknowledgments R. L. CHAPMAN and HELEN MORGAN CHAPMAN, his wife,

to me well known to be the person s described in and who executed the foregoing instrument and acknowledged before me that they executed the same freely and voluntarily for the purposes therein expressed.

WITNESS my hand and official seal this 13th day of February A. D. 19 59

Notary Public, State of Florida at Large
My commission expires Nov. 4, 1959.
Bonded by Mass. Bonding & Insurance Co.

Notary Public

My Commission expires _____ 19____

10M 4-57

36

Project Feasibility and Ability to Proceed - Site (Attachment V.B.1. p.12)

Exhibit JCB-3

Consumptive Use Permit
SJRWMD Permit No. 2-069-0010NM
Issued 2/11/92

ST. JOHNS RIVER WATER MANAGEMENT DISTRICT

Post Office Box 1429
Palatka, Florida 32078-1429

PERMIT NO. 2-069-0010NM DATE ISSUED FEBRUARY 11, 1992

CONSUMPTIVE USE

A PERMIT AUTHORIZING:

USE OF GROUND WATER FROM THE FLORIDAN AQUIFER TO SERVE AN ESTIMATED POPULATION OF 16,615 PEOPLE IN 5 YEARS.

LOCATION:

SECTION 35, TOWNSHIP 25 SOUTH, RANGE 26 EAST
LAKE COUNTY.
SOUTHLAKE

ISSUED TO:
(owner)

SOUTHLAKE UTILITIES, INC.
C/O ROBERT L. CHAPMAN, III
800 US HIGHWAY 27
CLERMONT, FL 34711

Permittee agrees to hold and save the St. Johns River Water Management District and its successors harmless from any and all damages, claims, of liabilities which may arise from permit issuance. Said application, including all plans and specifications attached thereto, is by reference made a part hereof.

This permit does not convey to permittee any property rights nor any rights or privileges other than those specified herein, nor relieve the permittee from complying with any law, regulation or requirement affecting the rights of other bodies or agencies. All structures and works installed by permittee hereunder shall remain the property of the permittee.

This Permit may be revoked, modified or transferred at any time pursuant to the appropriate provisions of Chapter 373 or 403, Florida Statutes and 40C-1, Florida Administrative Codes:

PERMIT IS CONDITIONED UPON:

SEE CONDITIONS ON ATTACHED "EXHIBIT A", DATED FEBRUARY 11, 1992

AUTHORIZED BY: St. Johns River Water Management District

Department of Resource Management Governing Board

By: _____ (Director) JEFF ELLEDGE

By: _____ (Assistant Secretary) HENRY DEAN

000083

"EXHIBIT A"

CONDITIONS FOR ISSUANCE OF PERMIT NUMBER 2-069-0010NM

SOUTHLAKE UTILITIES, INC.

DATED FEBRUARY 11, 1992

1. DISTRICT AUTHORIZED STAFF, UPON PROPER IDENTIFICATION, WILL HAVE PERMISSION TO ENTER, INSPECT AND OBSERVE PERMITTED AND RELATED FACILITIES IN ORDER TO DETERMINE COMPLIANCE WITH THE APPROVED PLANS, SPECIFICATIONS AND CONDITIONS OF THIS PERMIT.

2. NOTHING IN THIS PERMIT SHOULD BE CONSTRUED TO LIMIT THE AUTHORITY OF THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT TO DECLARE A WATER SHORTAGE AND ISSUE ORDERS PURSUANT TO SECTION 373.175, FLORIDA STATUTES, OR TO FORMULATE A PLAN FOR IMPLEMENTATION DURING PERIODS OF WATER SHORTAGE, PURSUANT TO SECTION 373.246, FLORIDA STATUTES. IN THE EVENT OF A WATER SHORTAGE, AS DECLARED BY THE DISTRICT GOVERNING BOARD, THE PERMITTEE MUST ADHERE TO REDUCTIONS IN WATER WITHDRAWALS AS SPECIFIED BY THE DISTRICT.

3. PRIOR TO THE CONSTRUCTION, MODIFICATION, OR ABANDONMENT OF A WELL, THE PERMITTEE MUST OBTAIN A WATER WELL CONSTRUCTION PERMIT FROM THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT PURSUANT TO CHAPTER 40C-3, FLORIDA ADMINISTRATIVE CODE. CONSTRUCTION, MODIFICATION OR ABANDONMENT OF A WELL WILL REQUIRE MODIFICATION OF THE CONSUMPTIVE USE PERMIT WHEN SUCH CONSTRUCTION, MODIFICATION OR ABANDONMENT IS OTHER THAN THAT SPECIFIED AND DESCRIBED ON THE CONSUMPTIVE USE PERMIT APPLICATION FORM.

4. LEAKING OR INOPERATIVE WELL CASINGS, VALVES, OR CONTROLS MUST BE REPAIRED OR REPLACED AS REQUIRED TO PUT THE SYSTEM BACK IN AN OPERATIVE CONDITION ACCEPTABLE TO THE DISTRICT. FAILURE TO MAKE SUCH REPAIRS WILL BE CAUSE FOR DEEMING THE WELL ABANDONED IN ACCORDANCE WITH CHAPTER 17.21.02(5), FLORIDA ADMINISTRATIVE CODE AND CHAPTER 373.309, FLORIDA STATUTES.

5. PERMITTEE MUST MITIGATE ANY ADVERSE IMPACT CAUSED BY WITHDRAWALS PERMITTED HEREIN ON LEGAL USES OF WATER EXISTING AT THE TIME OF PERMIT APPLICATION. THE DISTRICT HAS THE RIGHT TO CURTAIL PERMITTED WITHDRAWAL RATES OR WATER ALLOCATIONS IF THE WITHDRAWALS OF WATER CAUSE AN ADVERSE IMPACT ON LEGAL USES OF WATER WHICH EXISTED AT THE TIME OF PERMIT APPLICATION. ADVERSE IMPACTS ARE EXEMPLIFIED BUT NOT LIMITED TO:

   (A) REDUCTION OF WELL WATER LEVELS RESULTING IN A REDUCTION OF 10% IN THE ABILITY OF AN ADJACENT WELL TO PRODUCE WATER;

   (B) REDUCTION OF WATER LEVELS IN AN ADJACENT SURFACE WATER BODY RESULTING IN A SIGNIFICANT IMPAIRMENT OF THE USE OF WATER IN THAT WATER BODY.

   (C) SALINE WATER INTRUSION OR INTRODUCTION OF POLLUTANTS INTO THE WATER SUPPLY OF AN ADJACENT WATER USE RESULTING IN A SIGNIFICANT REDUCTION OF WATER QUALITY; AND

   (D) CHANGE IN WATER QUALITY RESULTING IN EITHER IMPAIRMENT OR LOSS OF USE OF A WELL OR WATER BODY.

6. PERMITTEE MUST MITIGATE ANY ADVERSE IMPACT CAUSED BY WITHDRAWALS PERMITTED HEREIN ON ADJACENT LAND USES WHICH EXISTED AT THE TIME OF PERMIT APPLICATION. THE DISTRICT HAS THE RIGHT TO CURTAIL PERMITTED WITHDRAWAL RATES OF WATER ALLOCATIONS IF WITHDRAWALS OF WATER CAUSE AN ADVERSE IMPACT ON ADJACENT LAND USE WHICH EXISTED AT THE TIME OF PERMIT APPLICATION. ADVERSE IMPACTS ARE EXEMPLIFIED BY BUT NOT LIMITED TO:

(A) SIGNIFICANT REDUCTION IN WATER LEVELS IN AN ADJACENT SURFACE WATER BODY;

(B) LAND COLLAPSE OR SUBSIDENCE CAUSED BY A REDUCTION IN WATER LEVELS; AND

(C) DAMAGE TO CROPS AND OTHER TYPES OF VEGETATION.

7. THE DISTRICT MUST BE NOTIFIED, IN WRITING, WITHIN 30 DAYS OF THE TRANSFER OF THIS PERMIT. ALL TRANSFERS ARE SUBJECT TO THE PROVISIONS OF SECTION 40C-2.351, FLORIDA ADMINISTRATIVE CODE, WHICH STATES THAT ALL TERMS AND CONDITIONS OF THE PERMIT SHALL BE BINDING OF THE TRANSFEREE.

8. A DISTRICT-ISSUED IDENTIFICATION TAG SHALL BE PROMINENTLY DISPLAYED AT EACH WITHDRAWAL SITE BY PERMANENTLY AFFIXING SUCH TAG TO THE PUMP, HEADGATE, VALVE OR OTHER WITHDRAWAL FACILITY AS PROVIDED BY SECTION 40C-2.401, FLORIDA ADMINISTRATIVE CODE. PERMITTEE SHALL NOTIFY THE DISTRICT IN THE EVENT THAT A REPLACEMENT TAG IS NEEDED.

9. IF THE PERMITTEE DOES NOT SERVE A NEW PROJECTED DEMAND LOCATED WITHIN THE SERVICE AREA UPON WHICH THE ANNUAL ALLOCATION WAS CALCULATED, THE ANNUAL ALLOCATION WILL BE SUBJECT TO MODIFICATION.

. ON THE TENTH DAY FOLLOWING THE MONTH OF RECORD, PERMITTEE MUST SUBMIT TO THE DISTRICT COPIES OF THE DER MONTHLY WATER TREATMENT PLANT REPORTS ON A MONTHLY BASIS FOLLOWING THE MONTH OF RECORD. THE PERMIT NUMBER MUST BE ATTACHED TO ALL REPORTS.

11. THE PERMITTEE MUST ENSURE THAT ALL SERVICE CONNECTIONS ARE METERED.

12. LANDSCRAPE IRRIGATION IS PROHIBITED BETWEEN THE HOURS OF 10:00 A.M. AND 4:00 P.M., EXCEPT AS FOLLOWS:

A. IRRIGATION USING A MICRO-IRRIGATION SYSTEM IS ALLOWED ANYTIME.

B. THE USE OF RECLAIMED WATER FOR IRRIGATION IS ALLOWED ANYTIME, PROVIDED APPROPRIATE SIGNS ARE PLACED ON THE PROPERTY TO INFORM THE GENERAL PUBLIC AND DISTRICT ENFORCEMENT PERSONNEL OF SUCH USE. SUCH SIGNS MUST BE IN ACCORDANCE WITH LOCAL RESTRICTIONS.

C. IRRIGATION OF, OR IN PREPARATION FOR PLANTING, NEW LANDSCAPE IS ALLOWED ANY TIME OF DAY FOR ONE 30 DAY PERIOD PROVIDED IRRIGATION IS LIMITED TO THE AMOUNT NECESSARY FOR PLANT ESTABLISHMENT.

D. WATERING IN OF CHEMICALS, INCLUDING INSECTICIDES, PESTICIDES, FERTILIZERS, FUNGICIDES, AND HERBICIDES WHEN REQUIRED BY LAW, THE MANUFACTURER, OR BEST MANAGEMENT PRACTICES IS ALLOWED ANYTIME WITHIN 24 HOURS OF APPLICATION.

E. IRRIGATION SYSTEMS MAY BE OPERATED ANYTIME FOR MAINTENANCE AND REPAIR PURPOSES NOT TO EXCEED TEN MINUTES PER HOUR PER ZONE.

13. WHENEVER FEASIBLE, THE PERMITTEE MUST USE NATIVE VEGETATION THAT REQUIRES LITTLE SUPPLEMENTAL IRRIGATION FOR LANDSCAPING WITHIN THE SERVICE AREA OF THE PROJECT.

14. THIS PERMIT WILL EXPIRE 5 YEARS FROM THE DATE OF ISSUANCE.

2-069-0010NM

15. MAXIMUM ANNUAL WITHDRAWALS MUST NOT EXCEED:

77.38 MGALS IN 1992
251.35 MGALS IN 1993
383.65 MGALS IN 1994
513.44 MGALS IN 1995
643.35 MGALS IN 1996

16. MAXIMUM DAILY WITHDRAWALS MUST NOT EXCEED:

.37 MGALS IN 1992
1.20 MGALS IN 1993
1.84 MGALS IN 1994
2.46 MGALS IN 1995
3.08 MGALS IN 1996

17. MAXIMUM DAILY WITHDRAWALS FOR ESSENTIAL USE, I.E. FIRE FIGHTING, MUST NOT EXCEED 1.84 MILLION GALLONS.

18. PRIOR TO BEGINNING USAGE ALL WITHDRAWAL POINTS MUST BE EQUIPPED WITH TOTALIZING FLOW METERS. SUCH METERS MUST MAINTAIN A 95% ACCURACY, BE VERIFIABLE AND BE INSTALLED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS.

19. TOTAL WITHDRAWAL FROM EACH MONITORED SOURCE MUST BE RECORDED CONTINUOUSLY, TOTALLED MONTHLY, AND REPORTED TO THE DISTRICT AT LEAST EVERY SIX MONTHS FROM THE INITIATION OF THE MONITORING USING FORM NO. EN-50.

20. THE PERMITTEE MUST HAVE ANY FLOW METER(S) CALIBRATED ONCE EVERY 5 YEARS WITHIN 30 DAYS OF THE ANNIVERSARY DATE OF PERMIT ISSUANCE, AND RECALIBRATED IF THE DIFFERENCE BETWEEN THE ACTUAL FLOW AND THE METER READING IS GREATER THAN 5%. DISTRICT FORM EN-51 MUST BE SUBMITTED TO THE DISTRICT WITHIN 10 DAYS OF THE INSPECTION/CALIBRATION.

21. THE PERMITTEE MUST MAINTAIN THE REQUIRED FLOW METER(S). IN CASE OF FAILURE OR BREAKDOWN OF ANY METER, THE DISTRICT MUST BE NOTIFIED IN WRITING WITHIN 5 DAYS OF ITS DISCOVERY. A DEFECTIVE METER MUST BE REPAIRED OR REPLACED WITHIN 30 DAYS OF ITS DISCOVERY.

22. TREATED EFFLUENT FROM SOUTHLAKE UTILITIES, INC., W.W.T.P. MUST BE USED AS IRRIGATION WATER WHENEVER AN IRRIGATION DEMAND EXISTS. GROUNDWATER RESOURCES MAY NOT BE USED FOR GREEN SPACE OR COMMON AREA IRRIGATION PURPOSES.

23. EXISTING WELLS "A", "B", AND "C" MUST BE AND ABANDONED IN ACCORDANCE WITH DISTRICT R THE CONSTRUCTION OF A SECOND (BACK-UP) PU

24. THE PERMITTEE MUST APPLY FOR AND IMP TION ORIENTED RATE STRUCTURE FROM THE FL VICE COMMISSION DESIGNED TO ENCOURAGE U WATER.

This plan was accepted

25. EACH RESIDENTIAL DWELLING (HOUSE IVIDUALLY METERED FOR WATER USE PRIOR TO OCCU

26. THE PERMITTEE MUST IMPLEMENT THE CONSERV PLAN DATED AS RECEIVED BY THE DISTRICT ON DECEMBER 4, 199 IN ACCORDANCE WITH SCHEDULE CONTAINED THEREIN. A REPORT DETAILING THE PROGRESS OF THE PLAN IMPLEMENTATION MUST BE SUBMITTED TO THE DISTRICT ON OR BEFORE THE MIDPOINT OF THE PERMIT DURATION.

27. SOURCE CLASSIFICATION IS CONFINED OR SEMI-CONFINED AQUIFER.

28. USE CLASSIFICATION IS ESSENTIAL AS NEEDED; 94% HOUSEHOLD; 5% WATER UTILITY; AND 1% COMMERCIAL/INDUSTRIAL.

000038

4

Exhibit JCB-4

Water Well Construction Permit Application
Dated 1/24/92

WATER WELL CONSTRUCTION PERMIT APPLICATION
ST. JOHNS RIVER WATER MANAGEMENT DISTRICT

Mail To PERMIT DIVISION
P O BOX 1429
PALATKA, FLORIDA 32078-1429
904-328-8321

JAN 24 1992
JACKSONVILLE

PERMIT NUMBER _____
APPLICATION NO. _____

Please Type or Print in Ink

WELL CONTRACTOR

NAME OF WELL CONTRACTOR _____ (Last) _____ (First)

MAILING ADDRESS _____ (Street or Box) _____ (City) _____ (State) _____ (Zip)

LICENSE NO _____ TELEPHONE NUMBER _____

WELL OWNER (APPLICANT)

NAME OF WELL OWNER Southlake Utilities, Inc. (Last) (First)

MAILING ADDRESS 800 U.S. Highway 27, Clermont Fl, 34711 (Street or Box) (City) (State) (Zip)

OWNER'S AGENT Chapman, Robert L. III, President (Address same) (Name and Address)

WELL USE

WELL USE: Pptable Water System P PRIVATE SUPPLY _____ IRRIGATION _____ INDUSTRIAL _____ OTHER

_____ MAXIMUM WELL CAPACITY (GPM) _____ ANNUAL AVERAGE WITHDRAWAL (GPD)

WELL LOCATION

WELL LOCATION On U.S. 27 (Near street, highway)

between U.S. 192 & S.R. 474

35 SECTION 24S TOWNSHIP 26E RANGE
or

_____ (Latitude) _____ (Longitude)

COUNTY Lake

SITE LOCATION SKETCH
(Nearest Main Highway)

See attached Vicinity Map "C"
& Well Location Map "W-1"

CONSTRUCTION METHODS

PERMIT FOR:	DRILLING METHOD:	CASING MATERIAL:	ANNULAR MATERIAL:
* NEW WELL	_____ CABLE TOOL	_____ GALVANIZED	_____ GROUT
_____ ABANDONED WELL	_____ JETTED	_____ IRON	_____ GRAVEL
_____ MODIFIED	_____ ROTARY	_____ PVC	_____ SAND
	_____ OTHER	_____ OTHER	_____ OTHER

CASING JOINED BY:
_____ COUPLING
_____ WELD
_____ COUPLING & WELD
_____ OTHER

12 SURFACE CASING DIAMETER (Inches)
_____ OPEN HOLE DIAMETER (Inches)
180 CASED DEPTH (Feet)
300 TOTAL DEPTH (Feet)
_____ BORE HOLE DIAMETER

DESCRIBE MODIFICATION OR ABANDONMENT PROCEDURE _____
PREVIOUS PERMIT NUMBER _____ CONSUMPTIVE USE PERMIT NUMBER _____

I agree to furnish a log within 30 days after drilling operations cease and to comply with all provisions of the Rules and Regulations of the SJRWMD and with local health regulations relative to well construction.

_____ (Signature of Well Contractor)

I hereby consent to be regulated by St. Johns River Water Management District regarding use of water and allocation thereof and if this permit is granted I agree to comply with the conditions set forth on the reverse side of this form. Access to proposed well site for inspection during construction and geophysical logging at any reasonable time after completion of the well is hereby granted to personnel of SJRWMD.

_____ (Amount of Fee included)

Robert L Chapman J (Signature of Owner or his Authorized Agent)

PERMIT

Permission for construction of this well is granted in accordance with the Rules and Regulations of St Johns River Water Management District, with plans submitted, and subject to conditions set forth on the reverse of this form. 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: _____ ISSUE DATE _____

TITLE. _____ EXPIRATION DATE _____

THIS PERMIT IS NOT VALID UNTIL PROPERLY SIGNED AND SEALED BY AN AUTHORIZED OFFICER OF SJRWMD AND SHALL BE MAINTAINED AT THE WELL SITE DURING ALL DRILLING OPERATIONS.

DISPLAY PROMINENTLY

* Copy of originals (for review purposes) original applications (new well) sent to Records 1/27/92. Mike T.

PUBLIC WATER SUPPLY WELL CONSTRUCTION APPLICATION
ST. JOHNS RIVER WATER MANAGEMENT DISTRICT

Mail To: PERMIT DIVISION (WWC)
POST OFFICE BOX 1429
PALATKA, FLORIDA 32077
PHONE 904/328-8321

RECEIVED JAN 24 1992 JACKSONVILLE

APPLICATION NO. 3-069-3119AP
EXTENSION DATE
CONDITIONS

RECEIVED MAR 20 1992 RECORDS Palatka

Type or print in ink. Attach a plat or sketch showing well location relative to existing buildings or physical features, property boundaries, known and proposed sources of contamination in the vicinity, and overhead obstructions such as power lines.

WELL

NAME OF WELL CONTRACTOR STEWART (Last) DAVID (First) ALAN (Middle)
CORPORATION/BUSINESS NAME Central Florida Well Drillers Inc LICENSE NO. 1971
MAILING ADDRESS 3720 N. Orange Blossom Trail (Street/Box) Orlando (City) Florida (State) 32804 (Zip) TELEPHONE 407-293-7381

WELL OWNER

NAME OF WELL OWNER Southlake Utilities, Inc. (Last) (First) (Middle)
MAILING ADDRESS 800 U.S. Highway 27, (Street or Box) Clermont (City) Florida (State) 34711 (Zip)
CORPORATION/BUSINESS NAME Southlake Utilities, Inc. COUNTY Lake
OWNER'S CONSULTING ENGINEER or GEOLOGIST Makemson & Associates, Inc. 6060-1 Chester Circle (Name and Address) Jacksonville, Fl 3221-
OWNER'S AGENT Chapman, Robert L. III, President (Address same) (Name and Address)

WELL USE

WELL TO SUPPLY Southlake Community (Name of business, subdivision, or other water system well is to serve) COUNTY Lake
NUMBER OF PEOPLE SERVED PER DAY (AVERAGE) 1,000
DAYS USED PER YEAR (AVERAGE) 365 WELL CAPACITY (GALLONS PER MINUTE) 700

WELL LOCATION

WELL LOCATION Highway 27 between U.S. 192 & S.R. 474 (Near street or rural route) Clermont (City) Flordia (State) 34711 (Zip)
SECTION 35 TOWNSHIP 24S RANGE 26E (or) LATITUDE
LONGITUDE

CONSTRUCTION METHODS

TYPE OF WELL: NEW WELL X MODIFIED WELL ABANDONED WELL
SURFACE CASING DIAMETER 12
OPEN HOLE DIAMETER 11¼
CASED DEPTH 180
PROPOSED TOTAL DEPTH 300
GROUTING PROPOSED (Per Chapter 17-22, F.A.C.)
UPPER 20 FEET X
ANNULAR BOTTOM TO TOP
CASING INTO BOTTOM 5 FEET OF CONSOLIDATED FORMATION X
METHOD OF DRILLING Cable Tool
CASING MATERIAL AND SPECIFICATIONS Black Steel .330 wall
PROCEDURE PROPOSED FOR ABANDONMENT
DESCRIPTION OF MODIFICATION
PREVIOUS PERMIT NUMBER

I agree to furnish a log within 30 days after drilling operations cease and to comply with all provisions of the rules and regulations of the SJRWMD and with the regulations of DER, relative to well construction.

David A. Stewart
(Signature of Drilling Contractor) 1/7/92

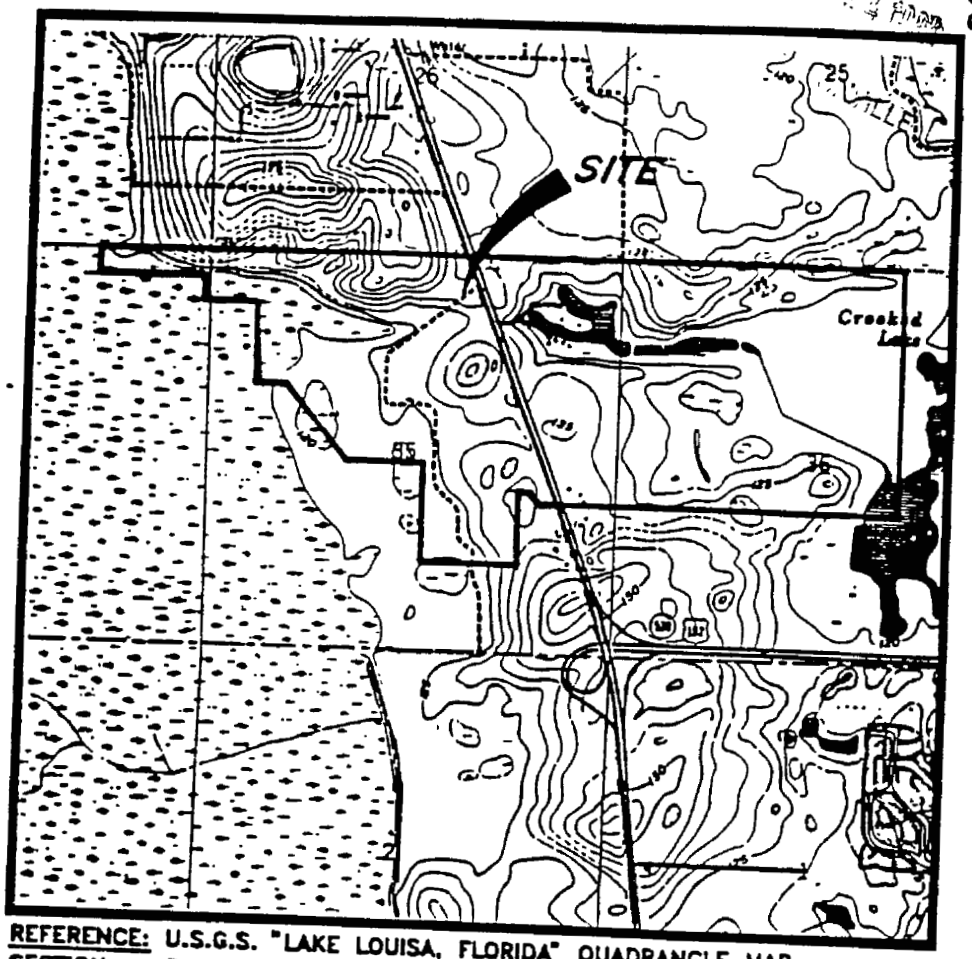
PERMIT NO.

I hereby consent to be regulated by SJRWMD regarding consumptive use of water and allocation thereof, and if this permit is granted I agree to comply with the conditions set forth on the reverse side thereof. Access to the proposed well site for inspection during construction and geophysical logging at any reasonable time after completion of the well is hereby granted to personnel of SJRWMD.

$125.00

* See Attached

2



REFERENCE: U.S.G.S. "LAKE LOUISA, FLORIDA" QUADRANGLE MAP
SECTION: 34,35,36
TOWNSHIP: 24 S
RANGE: 26 E

ISSUED: 1959
PHOTOREVISED: 1980
SCALE: 1" = 2000'

VICINITY MAP C

Map WI: Well Locations

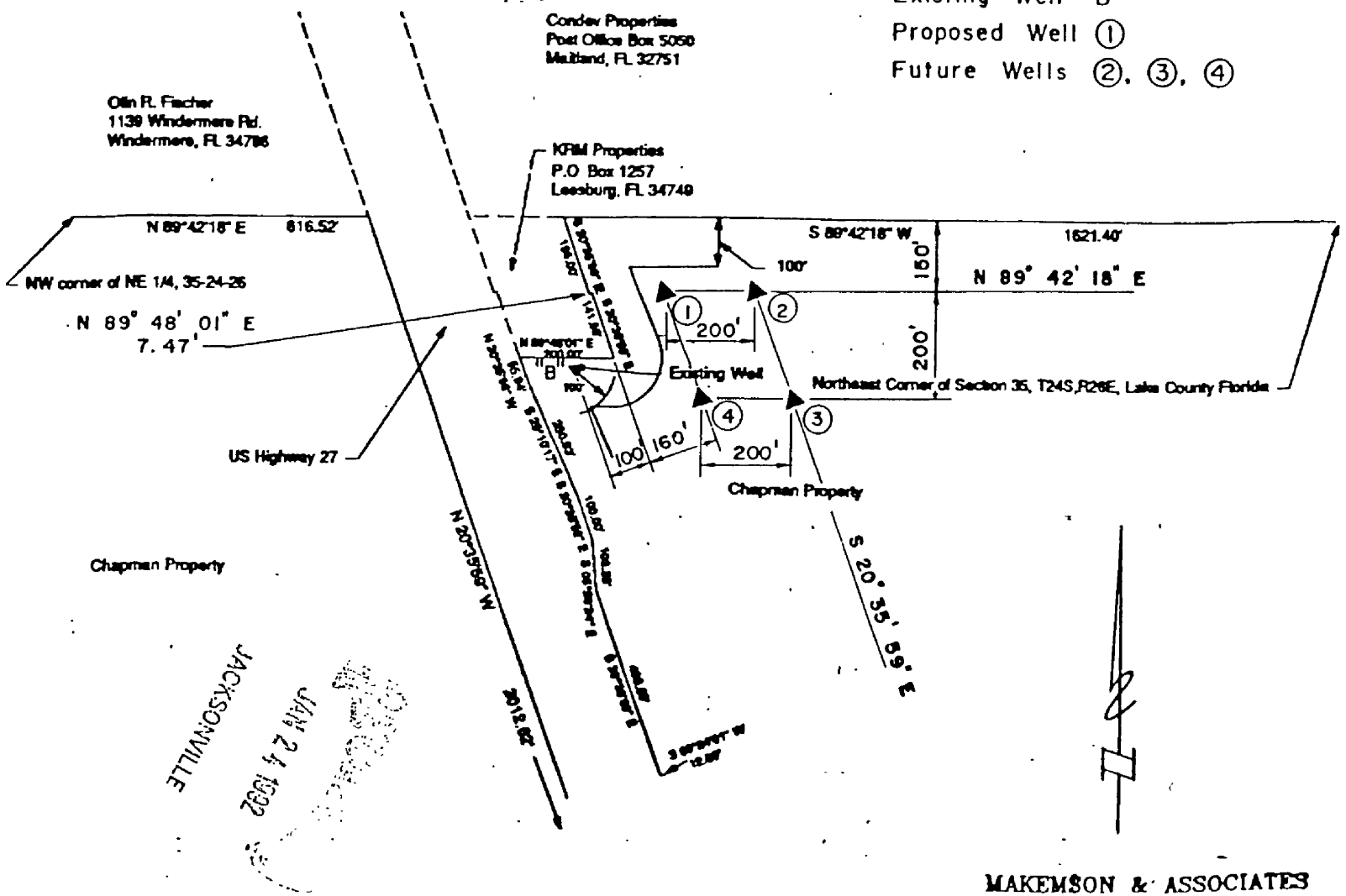


Exhibit JCB-5

Water Well Construction Permit
SJRWMD Permit No. 3-069-3119P
Issued 3/24/92

St. Johns River Water Management
P.O. Box 1429
Palatka, Florida 32177-1429
Telephone (904)329-4500

PERMIT

CONSTRUCTION PERMIT FOR

SOUTHLAKE UTILITIES INC.
800 U.S. HIGHWAY 27
CLERMONT, FL. 34711

PERMIT NO. 3-069-3119P **DATE OF ISSUANCE:** 3/24/92

DATE OF EXPIRATION: 3/23/93

Pursuant to the provisions of Chapter 40C-3 Florida Administrative Code, and Application No., 3-069-3119P **this permit is issued to:**

DAVID STEWART CENTRAL FLORIDA WELL DRILLERS **License No.** 1971

FOR THE CONSTRUCTION OF THE FOLLOWING:

12 INCH PUBLIC SUPPLY WELL TO SERVE AN AVERAGE OF 1000 PEOPLE PER DAY USING THE CABLE TOOL METHOD OF DRILLING.

LOCATED AT:

HIGHWAY 27 BETWEEN U.S. 192 AND S.R. 474 CLERMONT, FL.

Section 35 **Township** 24S **Range** 26E

In accordance with the application Dated: JANUARY 24, 1992

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 one year of issuance date and a copy of the well log must be submitted to this office within 30 days after operations cease. In the event construction or repair is not completed within this time period, an extension may be obtained upon written request by the permittee. This permit does not imply allocation of water, approval of sewage of other waste disposal facilities, or of water supply and other facilities in the area to be supplied by the well.

GRANTED BY: Jerry S. Whitney

TITLE: Asst. Dept. Director

1

3-069-3119P

CONDITIONS

The conditions below are necessary for the owner and drilling contractor to comply with during and upon completion of the construction of this well.

1. One week prior to well completion and before installation of hardware, the owner or driller must notify the District to schedule a time when a geophysical log can be run. If a time cannot be set that is convenient to both parties, the hardware installation may continue without further delay.

2. Well cuttings must be taken at ten foot intervals and at formation changes over the total length of the well. The contractor must notify the District one week in advance of the start of construction. A District field representative may be on site to collect samples, or bags will be provided for the contractor to do so.

3. Every Public Supply well must be equipped with a sampling tap located a minimum distance of twelve inches above the ground surface as required in paragraph 17-555.315(2)(f) and (3)(a).

4. Every Public Supply well must be pumped clean with the permanent pump and disinfected in accordance with paragraph 17-555.315(3)(b).

5. The well head must be protected by installing steel posts at the corners of the required 6X6 foot concrete slab. An alternative protective design may be used if approved in advance by the District.

6. The water well contractor must notify a District field representative 24 hours prior to initiating construction or grouting operations.

7. A permanent identification tag must be placed on the well head, concrete marker, terminal box, or a permanently attached fixture as required in sub-section 40C-3.461(3).

8. A copy of this permit must be on site during all phases of well construction.

9. The water bearing casing must be installed to a depth of at least 250 feet.

10. The proposed well site must be relocated to a minimum distance of 200 feet from the existing trailer septic tank and staked as required, and the site must be approved, prior to construction.

11. All wells to be used for public supply must be indentified and approved prior to construction.

12. All wells must be logged and water samples taken prior to use. If abandonment is required because of EDB contamination. The abandonment criteria must be met.

Exhibit JCB-6

Correspondence from William A. Mattick, KRM Properties
Dated 8/13/92

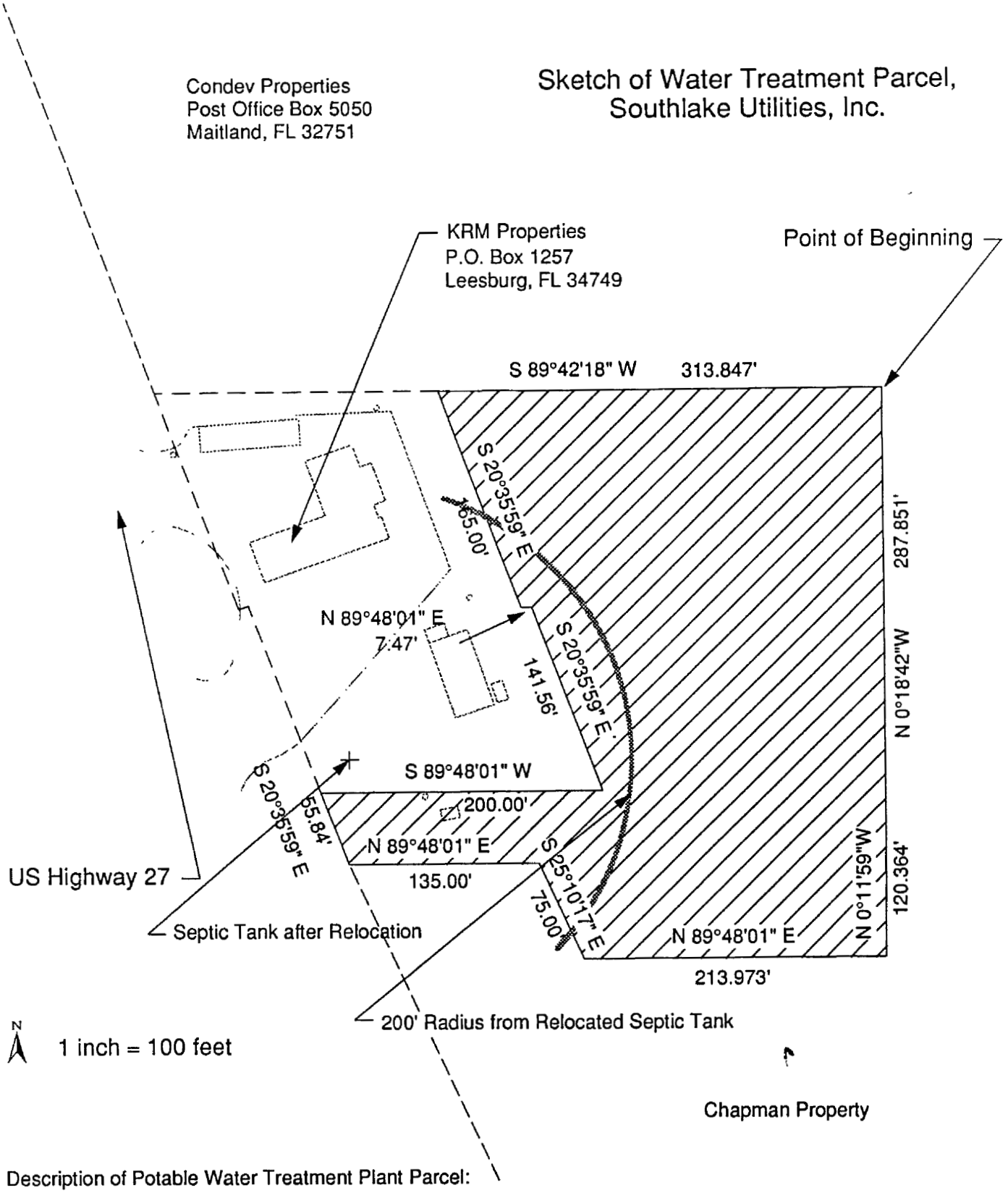
August 13, 1992

KRM Properties hereby agrees to permit Southlake Utilities, Inc. to relocate, at its expense, the trailer septic tank and drain field at the Southlake Shell Station on US 27 adjacent to the Chapman property to a site on the station property at least 200 feet from a newly proposed well to be constructed by Southlake.. A map indicating the site and the new location of the septic tank is enclosed. Southlake Utilities is also authorized to install ductile iron pipe from the trailer to the new septic tank location.

By _____
William A. Mattick, President

Condev Properties
Post Office Box 5050
Maitland, FL 32751

Sketch of Water Treatment Parcel, Southlake Utilities, Inc.



Description of Potable Water Treatment Plant Parcel:

That part of the North 1/2 of the Northeast 1/4 of Section 35, Township 24 South, Range 26 East, in Lake County, Florida, bounded and described as follows: from the the Northeast corner of said Section 35, continue along the northern boundary of said section S 89°42'18" W 1307.552 feet to the Point of Beginning; thence continue S 89°42'18" W 313.847', thence S 20°35'59" E 165.00', thence N 89°48'01" E 7.47 feet, thence S 20°35'59" E 141.56 feet, thence S 89°48'01" W 200 feet to the easterly right of way of U.S. Highway 27, thence continue along the easterly right of way of said highway S 20°35'59" E 55.84 feet, thence run N 89°48'01" E 135.00 feet, thence S 25°10'17"E 75.00 feet, thence N 89°48'01" E 213.973 feet, thence N 0° 11' 59" W 120.364 feet, thence N 0°18'42"W 287.851 feet, more or less, to the Point of Beginning, being a parcel of 2.526 acres, more or less.

2

Exhibit JCB-7

Application to Construct a Public Drinking Water System
Dated 3/25/92

RECEIVED
MAR 26 1992
DER
CENTRAL DISTRICT

State of Florida
Department of Environmental Regulation

MAR 1992
Central Florida
District

CENTRAL 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 of representation in this application is a violation of the law. Attach additional sheets as necessary.

Project Name: Southlake Community County: Lake

System Address: Street 800 U. S. Highway 27 City: Clermont

Applicant's Name and Title: Robert L. Chapman

Applicant's Address: 800 U. S. Highway 27, Clermont, Fl. 34711

Utility Supplying Water: Name Southlake Utilities, Inc.

Utility Address: 800 U. S. Highway 27, Clermont, Fl 34711

Owner/Operator After Construction, if different:

Owner/Operator Address:

Type of Proposed Facility: Aeration/Disinfection/Pumping

To Serve: condominiums/multi-family (Subdivision, trailer park, school, etc.)

APPROVED
WC35 210970
Proj:
Date: SEP 25 1992
STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

Latitude 28 ° 24 ' 08 "N Longitude 81 ° 43 ' 57 "W

Section: 35 Township: 24S Range: 26E

Provide latitude/longitude and section-township-range of all plants and sources - attach additional sheet if necessary

A. Applicant:

I, the owner/authorized representative* of Southlake Community
am fully aware that the statements made in this application for a permit to construct a 240,000 GPD WTP
are true, correct and complete to the best of my knowledge and belief. Further, the undersigned agrees to maintain the facility in such a manner as to comply with the provisions of Chapter 403, Florida Statutes, and all the rules of 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: Robert L. Chapman
Owner/Authorized Representative

Robert L. Chapman
Name and Title (Please type)

Date: 3/25/92 Telephone No. 904-394-8898

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

The undersigned, owner/authorized representative* of _____ hereby certifies that the above referenced 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: _____ Telephone No. _____

C. 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 transfers of the permitted establishment.

*Attach letter of authorization

Signed: _____

Name and Title (Please Type)

Date: _____ Telephone No.: _____

D. 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: R. W. Makemson

R. W. Makemson, Jr., P. E.

Name (Please Type)

(Affix Seal)

Makemson & Associates

Company Name (Please Type)

6060-1 Chester Circle

Jacksonville, Florida 32217

Mailing Address (Please Type)

Florida Registration No. 8985 Date: 02-04-92 Telephone No. 904-448-0197

PART A – GENERAL

1. Estimated total cost of project $175,000 Describe all water treatment Aeration, Disinfection (by chlorination)
2. Existing plant capacity (MGD) none Plant capacity increase (MGD) N/A
3. Previous DER permit number(s), if any none
4. Present population of area served 0 For capita consumption 100 gallons
5. Design population (additional served by this project) 2400 (phases I and IA)
6. Total connections served none Total connections approved none Additional connections 830
7. Give any industrial users of abnormal commands none
8. Current system water demand, in MGD (from plant operation report) none presently exists *see revised sheet 3*
   Average day - Maximum day - Maximum hour (GPM) -
   Additional water demand, MGD: Avg. day .240 Max. day .600 Max. Hr. GPM 40,000
9. Is plant designed for 24-hour operation of what portion? yes
10. Give characteristics of raw water (attach primary and secondary chemical analysis pursuant to Chapter 17-550, F.A.C. see attached analysis
11. Give source proposed water (deep well, shallow well, spring, surface) deep well
12. Sewage disposal Southlake Utilities, Inc., 800 U.S. Highway 27, Clermont, Fl
    (Name and Address of sewerage utility)
13. Finished water storage: Elevated (gals) none Ground (gals) 100,800
    Hydropneumatic (gals) 10,000 Existing Capacity (gals) 0 Capacity Increase (gals) 0
14. Existing service pump capacity (MGD) 0 Additional service pump capacity (MGD) N/A
15. Static head in relation to pumping plant 27'
16. Well permit from water management district? Yes [X] Permit No. 2-069-0014
    No [ ] Explain

PART B – DISTRIBUTION SYSTEM

1. Interconnection with other system none
2. Min. size pipe 6" Max. size pipe 12" Min. system pressure 25psi Max. system pressure 60 psi
3. Is fire control provided in design? yes
4. Describe dead-end conditions and necessity for flushing including number of such conditions and flushing schedule
   no dead ends; entire system is looped
5. Describe cross-connection control program per DER Rule 17-555.360(2)
6. Describe corrosion control program as necessary Per ten States Standards, Section 8.0.1
7. Water demand for additional connections (MGD) Estimated 1.9 mgd for future phases
8. Number of each type of additional connections (residential, commercial, agricultural, industrial) to be served
   All residential in phases I and IA.

3

PART C - WELL SUPPLY

Existing Wells								
Well Identification	1							
Size of Casing	6"							
Depth of Casing	468'							
Depth of Well	900'							
Pump (type)	turbine							
Pump Capacity (GPM)	300 /80							

Proposed Wells (when population reaches 350)								
Well Identification	2							
Size of Casing	12"							
Depth of Casing	400'	(approx.)						
Depth of Well	800'	(approx.)						
Pump (type)	turbine							
Pump Capacity (GPM)	750							

Type of well construction Cable Tooled

Casing material Steel Aquifer Floridian

Give all geological data, including log of test wells or wells in vicinity. There are no wells within 200' of existing well.

Describe possible sources of contamination (particularly those within 100' of well).
There are no sources of contamination within 200' of the well.

PART D - SURFACE SUPPLIES (NOT APPLICABLE)

1. Name of stream, lake, or pond _____
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 intake _____
4. Basis of min. dry-weather flow estimate _____

5.	Existing Raw Water Pumps	Proposed Raw Water Pumps
Type		
Capacity		
Section		
Discharge Head		

PART E - TREATMENT PLANT

1. Type of treatment:

   a) Pumping and disinfection _____ b) Conventional floc and settling _____ c) Upflow _____

   d) Demineralization (type) _____ e) Other pumping, aeration and disinfection

2. Design details:

   a) Emergency intake 4" line from exist. well bypass of raw water 8" line to high ser. pump

   b) Aeration: type natural draft max. design rate ~~700~~ 700 gpm detention 6 hr. @ ADF

   orifices - number of trays 3 tray area 166 SF loss of head -

   c) Service pumps: existing (no. & cap.) N/A

   proposed (no. & cap.) 2 ea. 640 gpm, one 80 gpm

   d) Disinfection: type disinfectant chlorine

   type, make, capacity and number of feeders Two W & T injectors, hydro intake & aerator discharge.

   e) Auxiliary power per Rule 17-555.320(6) When population reaches 350

   f) Metering device and location at well and at hydro tank discharge

   g) Mixing chamber (conventional): type N/A

   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: N/A

   capacity _____ Detention time at maximum plant capacity _____

   velocity _____ capacity of each compartment _____

   Distribution flow: inlet devices _____ outlet devices _____

   i) Suspended solids contact units (upflow) N/A

Process	Diameter	Capacity	Upflow Rate	Detention Period	Overflow Rate
Softening					
Clarification					

   j) Chemical dosing devices (other type disinfecting): N/A

   Number of machines and type feeding: Alum _____ Lime _____

   coagulant aid (Name _____ Activated Carbon _____

   recarbonation _____

   number and size of solution tanks _____

   points of application _____

   size and kind of piping _____

k) Filter units: N/A

type, material, number units _____

areas, dimensions, capacity of each unit 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 perforation to sand area _____

materials: 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) Not on site, samples sent to outside lab.

scope of tests provided for N/A

m) Bypass to plant 4" line from well emergency intake second well when pop. is

n) List type and capacities of emergency well and service pumping units emergency well in 350. future. Two each 640 gpm and one 80 gpm service pump.

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

See Sheet 6 of the drawings.

e

ENGINEERING REPORT

Southlake Community Potable Water Treatment Plant

The Southlake Community, which is being developed on U.S. Highway 27 just North of that highway's intersection with U. S. 192 in the South of Lake County, is proposing to construct a 240,000 gallon per day potable water treatment plant. This plant is to provide potable water for Phases 1 and 1A of what is intended to eventually become a large community of approximately 8,000 units of single and multi-family housing.

At the present time there are three (3) wells on the Southlake property: a 12" well on the West side of Highway 27, a 10" and a 6" well on the East side of the highway. These wells were constructed in the 1960's and were intended for agricultural use. None are properly grouted and, consequently, cannot be used as a public water supply. By agreement with Condev Associates, Southlake Development was given the rights to a well located approximately 2800 feet from the potable water treatment plant site. This well was initially drilled in 1954. Later, in 1974, 300' of 10" casing was placed inside the original casing and the well was re-drilled to a depth of 900' in order to improve the water quality. Still later, in May of 1975, 468' of 6" casing was placed inside the 10" casing and was grouted to meet the requirements for a public water supply well. This was the water supply for a labor camp built by Keene's Harvesting Company. An HRS Operating Permit #35-2MLC was issued to Keene's Harvesting Company on March 3, 1975. On October 12, 1982, Consumptive Use Permit #2-069-0014 was issued by SJRWMD.

The well as it presently exists is shown on sheet 3 of the drawings. The outer casing is 12" and extends to a depth of 111', inside that casing is a 10" casing which extends to a depth of 300', and inside the 10" casing is a 6" casing which extends to a depth of 468'. The 6" casing is properly grouted to a depth of 468.'

7

The well depth, which was originally 397', was re-drilled to 900' in 1974 at the time the 10" casing was installed. The present depth of the well is 900'. A water analysis report on the existing well, report #9446 is attached. This report does not include an investigation of possible EDB contamination, but a water sample from the well is being processed at this time and it is expected that this information will be available by March 1, 1992 and will be submitted at that time. A permit application to drill a second 12" well was sent to the SJRWMD several weeks ago. It is expected that processing of this application should be completed shortly, and at that time, a copy of the permit will be submitted to the FDER. It is anticipated that this well will be drilled shortly after construction of homes begins so that two (2) wells will be in service prior to the population of the project reaching 350 persons as required by Rule 17-555.315(1). It is requested that this permit application for a 240,000 gpd potable water treatment plant be approved with a specific condition requiring that a second well be provided prior to the population of the project reaching 300 persons.

Because of the quality of the raw water from the existing well, it would be possible to limit treatment to disinfection alone. However, to guard against the possibility in the future of the raw water containing a noticeable amount of dissolved hydrogen sulfide from either the existing or the proposed additional well, the requested treatment plant will provide both aeration and disinfection along with storage and pumping.

Ground Storage

Ground storage capacity is intended to satisfy the requirement for four (4) hours of storage at the 16-hour flow, and at the same time satisfy the Lake County fire flow requirement of 750 gallons per minute for two (2) hours.

At 240,000 gallons per day, the 16-hour flow is:

$$\frac{240{,}000}{16} = 15{,}000 \text{ gallons}$$

also: $\frac{240{,}000}{16 \times 60} = 250$ gallons per minute

Four hours storage of 16-hour flow is: 4 x 15,000 = 60,000 gallons

With a fire flow of 750 gpm for a two (2) hour period, plus a normal domestic 16-hour peak flow for that same two (2) hours, the demand on the treatment plant would be as follows:

normal demand for 2 hours = 250 gpm x 120 min.	=	30,000 gallons
fire demand for 2 hours = 750 gpm x 120 min.	=	90,000 gallons
Total maximum system demand	=	120,000 gallons
Well pump output, 120 min. @ 300 gpm	=	36,000 gallons
Storage volume consumed after 2 hours	=	84,000 gallons
Ground storage volume provided	=	100,800 gallons
Ground Storage volume remaining after 2 hours	=	16,800 gallons

Time to restore ground storage volume to the original 100,800 gallons while still delivering water at the 16-hour rate:

$(100,800 - 16,800) = 300t$

$t = 4$ hrs, 40 min.

The above calculations show that under the most severe circumstances, a domestic demand flow equal to times the 16-hour flow combined with the Lake County fire flow requirement of 750 gpm for two (2) hours, the treatment plant has sufficient storage and pumping capacities to satisfy the combined demand with no decrease in operating pressure. In addition, after the two (2) hour period, the ground storage will be replenished to it's original volume in 4 hours 40 minutes while still providing water at the 16-hour rate.

The ground storage capacity of 100,800 gallons will be contained in three (3) separate tanks. Each tank will consist of a 12' diameter, 40' long steel cylindrical vessel mounted horizontally on steel saddles which rest on concrete footings. The tanks are coated inside with TNEMEC Epoxy-Polymide #20-1 primer to a dry film thickness of 3 mils and a final coat of TNEMEC #20-2000 Pota Pox High Build Epoxy-Polymide. The outside of the tanks have a 2 mil dry film thickness of prime and a 4 mil thickness of alkyd coating.

All tanks have a 4" screened vent and all have a 4" screened overflow with a pipe which discharges onto a concrete splash plate. The tanks are joined by an 8" line and any or all of the tanks can be bypassed as shown on the drawings. One of the tanks is equipped with an aerator as shown on the drawings and described herein. The same tank is also equipped with a sight glass and level sensors which control the well. The aerator by-pass piping is also shown on the drawings.

To insure reliable operation of the treatment plant, an auxiliary power system is proposed which has sufficient capacity to operate the entire system including the existing well, the future well, the high pressure service pumps, the disinfection system, lighting and alarms. The proposed auxiliary power, in order to meet fire flow requirements, will be capable of operating the system at full demand. The auxiliary power system will be provided with an automatic start up device and is proposed to be installed prior to the population reaching 350 persons as required by Rule 17-555.320(6). It is requested that this permit be issued allowing for this delayed installation of the auxiliary power system until the population has reached 350 persons.

AERATION

The aerator proposed for the system, as shown on the drawings, is a natural draft aerator designed in accordance with subsection 4.5.1 of the Recommended Standards for Water Works (Ten State Standards). The aerator consists of series of three (3) trays spaced 12" apart, with a total tray area of 166 square feet (4.2 gallons per square foot of total tray area). Perforations in the distribution pan allow for every distribution of water into the first tray, after which it falls through the perforated bottoms of subsequent trays to the collector pan at the bottom and through two (2) 10" discharge pipes into the ground storage tank.

The aerator is constructed of 1/4" A-36 steel primed with a minimum dry film thickness of 3 mils of TNEMEC Epoxy-Polymide #20-1 and then coated with a minimum of 4 mils of TNEMEC #20-2000 Pota Pox High Build Epoxy-Polymide. All open areas will be protected from insects by a 24-mesh screen.

HYDROPNEUMATIC TANK

The hydropneumatic tank is oversized for the proposed 240,000 gallon per day system. It is a 10,000 gallon pressure tank which is attached to and a part of the equipment room. The diameter of the tank (and the width of the equipment room) is 8'-0". The length of the hydropneumatic tank is 26'-0" and the length of the equipment room is 10'-0" so that the overall length of the combined equipment room/hydropneumatic tank is 36'-0". One end of the hydropneumatic tank, at the interface with the equipment room, contains the sight glass for monitoring water level, the pressure relief valve, the smooth nosed sample tap, air release valve, pressure gage, level controls (inside the sight glass) and piping.

Water pressure in the hydropneumatic tank is maintained by the pressure sensing switches which control the high service pumps. These pumps are located in the equipment room. The pressure sensors are adjustable and are initially set to activate a high service pump when the pressure falls below 45 psi. If, after the pump is activated, the pressure continues to fall, the second high service pump is activated and, should the pressure still continue to fall, the third pump would be activated.

The hydropneumatic tank is intended to operate with 50% water and 50% air. To achieve this, level sensors are installed inside the sight glass which control the air compressor which is located inside the equipment room. As the water level in the tank increases above a set level (initially set at approximately 70% of the total volume) the air compressor is activated, causing compressed air to enter the tank until the water level falls to approximately the 50% level. This system prevents the tank from becoming waterlogged and at the same time prevents excessive cycling of the high service pumps.

EQUIPMENT ROOM

The equipment room, measuring 10' x 8', has at one end the face of the hydropneumatic tank and at the other end a 2'-6" x 6'-8" metal door. The equipment room contains the high service pumps, the electrical control panel (which controls the high service pumps and also the well pump) the air compressor, pressure switches (for controlling the high service pumps), a fluorescent light, a louvered fan with thermostat, the chlorinator booster pump and chlorine injector at the discharge manifold of the high service pumps. Directly outside the room, mounted on the side, is the auto switch equipment for the emergency power generator. The chlorination equipment is located outside, adjacent to and to the side of the equipment room.

Since the equipment room/hydropneumatic tank have been designed to adjust to a growing anticipated demand, the high service pumps are sized accordingly. To reflect an early small demand of less than 100,000 gallons per day (along with fire flow), a small, 80 gpm, 5HP, pump is provided for domestic flow, along with two (2) larger, 640 gpm, 30HP pumps as needed for fire flow. This system will function later, as flows approach 240,000 gpd, with the small, 80 gpm pump in that case acting as a "jockey pump." Later, when the system has reached the 240,000 gpm average daily flow and is further enlarged, the two larger, 640 gpm pumps will act as high service pumps and a larger, 800 gpm fire pump will replace the 80 gpm pump.

CHLORINATION EQUIPMENT

The chlorination equipment is located inside a lockable 3' x 3' fiberglass house, which is supported by a concrete base slab. The house is equipped with a light and exhaust fan as required by 17-555.320(5)(a). Safety equipment includes a loss of chlorination alarm, dual chlorine scales, automatic switchover device, and dual chlorinators. The booster pump for the system is located in the equipment room. The chlorination system diagram and the house configuration are shown on sheet 8 of the drawings; location of the chlorine house is shown on sheet 5 of the drawings.

STANDARD WATER ANALYSIS REPORT

Orlando Laboratories, Inc.

P. O. Box 8025A • Orlando, Florida 32806 • 305/843-1661

Report to: MERIDITH CORPORATION

Appearance: Clear

Date: October 18, 1974

Sampled by: Client

Report Number: 9446

Identification: Slako, R. D. Keene, Hwy. 27 Lake County.

METHODS

This water was analyzed according to "Standard Methods for the Examination of Water and Wastewater," Latest Edition, APHA, AWWA and WPCF.

RESULTS

Determination	Data Significance	p.p.m.	Determination	Data Significance	p.p.m.
Total Dissolved Solids, @ 105°C.	x.	110	Total Hardness, as $CaCO_3$	x.	72
Phenolphthalein Alkalinity, as $CaCO_3$	x.	0	Calcium Hardness, as $CaCO_3$	x.	66
Total Alkalinity, as $CaCO_3$	x.	66	Magnesium Hardness, as $CaCO_3$	x.	6
Carbonate Alkalinity, as $CaCO_3$	x.	0	Calcium, as Ca	x.	26
Bicarbonate Alkalinity, as $CaCO_3$	x.	66	Magnesium, as Mg	.x	1.5
Carbonates, as CO_3	x.	0	Sodium, as Na	x.	3.1
Bicarbonates, as HCO_3	x.	81	Iron, as Fe	.x	0.1
Hydroxides, as OH	x.	0	Manganese, as Mn	.x	0
Carbon Dioxide, as CO_2	x.	3	Copper, as Cu	.x	0
Chloride, as Cl	x.	0	Silica, as SiO_2	x.	12
Sulfate, as SO_4	x.	1	Color, Standard Platinum Cobalt Scale		0
Fluoride, as F	.x	0.1	Odor Threshold	x.	0
Phosphate, as PO_4	.x	1.8	Turbidity, Jackson Units	x.	0
pH (Laboratory)	.x	7.7	Field Hydrogen Sulfide, H_2S		<0.1
pHs	.x	8.0			
Stability Index	.x	8.3			
Saturation Index	.x	-0.3			

Signed: Judy Mosley
Chemist

(To convert ppm to grains per gallon, divide ppm by 17.1 – p.p.m. = mg/l)

Exhibit JCB-8

Water Treatment Plant Permit
FDEP Permit No. WC35-210970
Issued 9/25/92

Florida Department of Environmental Regulation

Central District • 3319 Maguire Boulevard, Suite 232 • Orlando, Florida 32803-3767

Lawton Chiles, Governor

Carol M. Browner, Secretary

NOTICE OF PERMIT

CERTIFIED MAIL
P744 727 237

Southlake Utilities, Inc.
800 U.S. Highway 27
Clermont, FL 34711

Attention: Robert L. Chapman, President

Lake County - PW
Southlake
(0.6 MGD)

Dear Mr. Chapman:

Enclosed is Permit Number WC35-210970 to construct a water treatment plant, issued pursuant to Section 403.861(9), Florida Statutes.

Any party to this Order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, 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 this Notice is filed with the Clerk of the Department.

Executed in Orlando, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

A. Alexander
District Director
3319 Maguire Boulevard
Suite 232
Orlando, Florida 32803-3767

Recycled Paper

FILING AND ACKNOWLEDGEMENT FILED, on this date, pursuant to §120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Clerk Date

AA/fh/pp

Copies furnished to:

R.W. Makemson, P.E.

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT and all copies were mailed before the close of business on SEP 25 1992 to the listed persons, by _____.

Rev. 4/91

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt Fee will provide you the signature of the person delivered to and the date of delivery.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Southlake Utilities Inc
800 US Hwy 27
Clermont FL 34711

4a. Article Number

P744 727 237

4b. Service Type

☐ Registered ☐ Insured
☑ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery

9/24/92

5. Signature (Addressee)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Agent)

PW/FH/210 920

PS Form 3811, November 1990 ☆U.S. GPO: 1991—287-066 **DOMESTIC RETURN RECEIPT**

Florida Department of Environmental Regulation

Central District • 3319 Maguire Boulevard, Suite 232 • Orlando, Florida 32803-3767

Lawton Chiles, Governor — Carol M. Browner, Secretary

Permittee:
Southlake Utilities, Inc.
800 U.S. Highway 27
Clermont, FL 34711

Attention: Robert L. Chapman, President

I. D. Number:
Permit/Certification
Number: WC35-210970
Date of Issue:
Expiration Date: 08/21/97
County: Lake
Project: Southlake (0.6 MGD)

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 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:

Construction of a water treatment plant to serve the Southlake Condominium/ Multi-Family Project located on U.S. Highway 27 just north of U.S. Highway 192 in Lake County, Florida. The source of water will be a proposed 12-inch Well (#2) with 750 GPM pump and an existing six-inch (468'/900') well with 180 gpm pump. The plant will include a 700 gpm cascade aerator, three 33,600-gallon ground storage tanks, three high service pumps at 80 gpm, 640 gpm and 640 gpm, gas chlorination and 10,000-gallon hydropneumatic tank.

The plant will be rated at 0.6 MGD maximum daily flow which will require a minimum Class C certified operator on-site for five visits per week and one weekend visit.

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

Recycled Paper

PERMITTEE:
Southlake Utilities, Inc.

Attention: Robert L. Chapman, President

I. D. Number:
Permit/Certification Number:
WC35-210970
Date of Issue:
Expiration Date: 08/21/97

SPECIFIC CONDITIONS:

1. General condition number 13 does not apply.

2. To obtain clearance of the facilities for service, the engineer of record shall submit a "Request for Letter of Release to Place Water Supply System into Service" [DER Form 17-555.910(9)] to the department (along with the "Facilities Inventory" sheet enclosed with the engineer's copy of the permit), a copy of this permit, and a copy of satisfactory bacteriological sample results taken on two consecutive days from three locations (each end and midpoint) along the new raw water line, from each of the three ground storage tanks, from the hydropneumatic tank and from the point of connection between the plant transmission line and the distribution system.

3. Where water and sewer mains cross with less than 18" vertical clearance, the sewer will be 20' of either ductile iron pipe or concrete encased vitrified clay or PVC pipe, centered on the point of crossing. When a water main parallels a sewer main a separation, measured edge to edge, of at least 10' should be maintained where practical.

4. This permit does not pertain to any wastewater, stormwater or dredge and fill aspects of this project.

5. The permittee will promptly notify the department upon sale or legal transfer of the permitted facility. In accordance with General Condition #11 of this permit, this permit is transferable only upon department approval. The new owner must apply, by letter, for a transfer of permit within 30 days.

6. Results of a geophysical well log shall be submitted on Well #1 in accordance with the conditions of the St. John's River Water Management District well construction permit.

7. Well #2 shall be completed and determined acceptable from a chemical, bacteriological and construction standpoint by the Department prior to clearance of the water plant for service. Therefore, a satisfactory bacteriological well survey, chemical analysis and well completion report will be required along with engineering plans of the raw water line and bacteriological main clearance.

8. A separate permit will be required for installation of the future 800 gpm high service pump.

9. All PVC piping four inches or greater shall meet AWWA C900 specifications.

PERMITTEE:
Southlake Utilities, Inc.

Attention: Robert L. Chapman, President

I. D. Number:
Permit/Certification Number:
WC35-210970
Date of Issue:
Expiration Date: 08/21/97

SPECIFIC CONDITIONS:

10. A satisfactory bacteriological well survey shall be completed on Well #1 with the permanent pump installed.

ISSUED 8-25-95

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

A. Alexander
District Director
3319 Maguire Boulevard
Suite 232
Orlando, Florida 32803

6

CERTIFICATION

Lake County - PW
Southlake
(0.6 MGD)
File Number: WC35-210970

I **HEREBY CERTIFY** that the engineering features described in the referenced Application to Construct a Public Drinking Water System provide reasonable assurance of compliance with the applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Title 17. I have not evaluated and do not make any certifications as to any other aspects of the proposal.

J. M. McNamara, P.E.

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

8-24-92

SEAL

7

Exhibit JCB-9

Request for Letter of Release to Place Water Supply System Into Service
FDEP Permit No. WC35-210970
Dated 3/18/94

wilson
& associates engineers
P.O. Box 915260
Longwood, FL 32791-5260

Florida Department of Environmental Protection
CENTRAL DISTRICT - DRINKING WATER SECTION
3319 Maguire Boulevard Suite 232
Orlando, FL 32803-3767

MEMORANDUM

TO: Mr. Joseph McNamara, Mr. Frank Huttner

DATE: 3-18-94

FROM: Ron Wilson

FILE: SOUTHLAKE UTILITIES

SUBJECT: TRANSMITTAL

REFERENCE: DER FORM 17-555.910(9

The following items are provided for your review and approval:

1. Request for Letter of Release to Place Water Supply System into Service;

2. "AS-BUILT" PLANS;

3. Raw Water analytical results not already on file with the Department;

   a. Results of turbidity analysis.

4. Well Log.

Thank You.

1

State of Florida
Department of Environmental Regulation

Request for Letter of Release to Place Water Supply System into Service

I. General Information

Name of Project: SOUTHLAKE UTILITIES, INC.

Permit No. WC35-210970 Date of Issuance 25 September 1992

☐ System completed to the full extent of the approved plans

☒ Partially completed to the extent noted herein

12" well with 1,000 GPM Turbine pump, yard piping as shown on "AS-BUILT" PLANS. H_2S below detectable limits does not require aeration/ground storage at this time. Well #2, 10", has been logged and accepted by S.J.R.W.M.D. and will be submitted at later date.

II. Engineer's Certification

This is to certify that the project has been substantially completed in accordance with approved plans and specifications, or that the deviations noted on the attached record drawings will not prevent the system from functioning in compliance with requirements of Chapter 17-555, Florida Administrative Code (F.A.C.), when properly operated and maintained. Further, the system has passed the pressure* and bacteriological tests that were conducted in accordance with AWWA Standards.

This certification is based upon on-site observation of construction, scheduled and conducted by me or by a project representative under my direct supervision.

Signature 3/15/94 Date

Seal

Ronald H. Wilson, P.E.
Name and Address

P.O. Box 915260 LONGWOOD, FL 32791-52(
Telephone No.
407-788-1766

III. Acceptance by Utility*

The subject system has been accepted for operation and maintenance.

Signature 3-18-94 Date

*In case of water distribution system or water main extention

Terry Shaw, Director
Name and Title

SOUTHLAKE UTILITIES, INC.

2

Instructions

The following supporting material must be submitted with this form: ON FILE @ DEPT.

1. One (1) set of record drawings; in case of water distribution system or water main, the sample points must be indicated.

2. Results of the bacteriological tests - ON FILE WITH DEPARTMENT.

   Please note that satisfactory bacteriological results for clearance for all parts of a community or non-community water supply facility except wells shall be two (2) consecutive daily samples with results of less than one (1) coliform per 100 milliliters of sample. For a community or non-community water supply system well clearance, a minimum of twenty (20) consecutive samples are required with no more than two (2) samples taken daily. Well sample results shall not exceed four (4) coliform per 100 milliliters of sample in more than ten percent (10%) of the samples analyzed. Sample results from any community or non-community water supply facility shall not be accepted on any analysis with TNTC or heavy non-coliform counts.

3. In case of well construction, a "Well Completion Report" must be submitted by the well driller. ATTACHED

This request must be accompanied by certification of completion of the sewerage system (if applicable). ON FILE.

Exhibit JCB-10

Application to Construct a Domestic Wastewater Facility
Dated 2/19/92

Florida Department of Environmental Regulation
Twin Towers Office Bldg. ● 2600 Blair Stone Road ● Tallahassee, Florida 32399-2400

DER Form # 17-600.910(1)
Form Title Ap. to Construct a Domestic Wastewater Facility
Effective Date July 1, 1991
DER Application No. _____ (Filled in by DER)

RECEIVED MAR 26 1992 DER CENTRAL DISTRICT
RECEIVED MAR 1992 Central Florida District
RECEIVED Central Florida District

Application to Construct a Domestic Wastewater Facility

Part I - Instructions

1) All applicable items must be completed in full in order to avoid delay in processing of this application. Where attached sheets (or other technical documentation) are utilized in lieu of the blank space provided, indicate appropriate cross-references in the space and provide copies to the Department in accordance with (3) below. Note that if part(s) of this application do not apply, those part(s) of the form need not be executed.
2) All information is to be typed or printed in ink.
3) Four (4) copies of this application (with supporting information) and a check for the application fee, in accordance with Rule 17-4.050, F.A.C., made payable to the State of Florida, Department of Environmental Regulation, shall be submitted with this application when sent to the appropriate district office or approved local program.
4) A preliminary design report (four copies) is required to be submitted in support of this application pursuant to Rules 17-600.710, 17-600.715, and 17-4.210, F.A.C. The preliminary design report must address each applicable section of Rule 17-600.715, F.A.C.
5) Attach an 8½" x 11" copy of a USGS map showing site locations. Be sure to include the map name and date on the USGS map provided.
6) Application to construct a wastewater treatment and/or disposal system may be made at any time using this form. Application to construct a treatment system may be made in conjunction with a permit application for construction of a reuse/land application system or an injection well system. If the treatment plant's construction permit is being applied for concurrently with an application for a reuse/land application system or injection well system, attach this form to the reuse/land application or injection well system construction permit application.
7) Where requested on this form, enter locations in both latitude/longitude and section/township/range formats.
8) Dates are to be entered in MM/DD/YR format.

Part II - General Information

1) Application type: [X] Treatment System [ ] Disposal System
[X] Construction of a New Facility [ ] Construction of a Modified Facility [ ] Construction of an Expanded Facility

2) If this application is for modification or expansion of an existing facility, complete the following:
The facility's DER identification number (also known as a GMS identification number) _____

3) Project/Facility Name: Southlake Community
Address 800 U.S. Highway 27
City Clermont Zip 34711 County Lake
Latitude 28 ° 23 ' 39 "N Longitude 81 ° 43 ' 57 "W Section 35 Township 24S Range 26E
Telephone Number (904) 394-8898

4) Applicant/Responsible Authority: Name Robert L. Chapman
Address 800 U.S. Highway 27
City Clermont State Fl Zip 34711
Telephone Number (904) 394-8898

5) Applicant/Responsible Authority is: [ ] County(C) [ ] Federal Agency (F) [ ] Municipality (M) [X] Private (P) [ ] State Agency (S)

6) General project description, reason needed, and relationship to existing facilities:
Southlake Community is a proposed development of 8000 multi-family residential units. This proposed wastewater treatment plant and its subsequent expansion will be operated by Southlake utilities, Inc. to serve that community.

DER Form # 17-600.910(1)
Form Title Ap. to Construct a Domestic Waste Water Facility
Effective Date July 1, 1991
DER Application No. _____ (Filled in by DER)

(7) Anticipated start of construction (approximate date): 06 / 01 / 92

Anticipated completion of construction (approximate date): 09 / 01 / 92

(8) For this facility indicate the current or most recent DER permits; issue and expiration dates; orders; and notices. Include any federal EPA-NPDES permits in this list. (none)

Permit Number	Permit Type	Issue Date	Expiration Date	Notice of Violations (Y or N)	Consent Orders (Y or N)
		/ /	/ /		
		/ /	/ /		
		/ /	/ /		
		/ /	/ /		

(9) What type of reclaimed water reuse or effluent disposal system will be used?

- ☐ Discharge to surface waters (Rule 17-600.510, F.A.C.)
- ☐ Discharge to surface waters - wetlands (Rule 17-600.620, F.A.C.)
- ☐ Discharge to surface waters - ocean outfall (Rule 17-600.520, F.A.C.)
- ☒ Reuse of reclaimed water and land application (Rule 17-600.530, F.A.C.)
- ☐ Ground water disposal by underground injection (Rule 17-600.540, F.A.C.)
- ☐ On-site waste treatment system with subsurface disposal (Rule 17-600.630, F.A.C.)
- ☐ Combination of the above or other (describe) _____

(10) Is reclaimed water produced by this facility reused (see Definition of "Reuse" in Rule 17-600.200(69), F.A.C.)? ☐ Yes (R) ☐ No (D)

Part III - Treatment System Data

(1) Treatment Facility Name Southlake Utilities, Inc.

(2) Location: Address 800 U.S. Highway 27

City Clermont Zip 34711 County Lake

Latitude 28 ° 23 ' 39 "N Longitude 81 ° 43 ' 57 "W Section 35 Township 24S Range 26E

Telephone Number (904) 394-8898

(3) Does the treatment system serve an area located in a county regulated by the Public Service Commission (PSC) and is the system subject to PSC jurisdiction? ☒ Yes ☐ No If yes, attach a copy of the Public Service Commission order and certificate number.

(4) Design Capacity:

Current Permitted Capacity 0 mgd + Proposed Design Capacity .450 mgd = Total Design Capacity .450 mgd

Basis of design flow: ☒ Annual average daily flow ☐ Maximum monthly average daily flow ☐ Three-month average daily flow

☐ Other, specify _____

DER Form # 17-600.910(1)
Form Title Ap. to Construct a Domestic Wastewater Facility
Effective Date July 1, 1991
DER Application No. _____ (Filled in by DER)

(5) Treatment level to be provided:

Parameter	Limit	Units*
*CBOD	20	mg/l (annual average)
*Tss	5	mg/l (annual average)
NO_3-N	12	mg/l (annual average)
pH Units	6.0 - 8.5	annual average
Chlorine Residual	1.0	mg/l (minimum)
Fecal Coliform	No Detectable	continuous.
*or 90% removal, whichever is more stringent		

*Note: Units should include a compliance frequency (e.g., annual average, monthly average, minimum, maximum, etc., whichever is appropriate)

(6) Disinfection level provided: ☐ Low-level ☒ Basic ☐ Intermediate ☐ High-level

(7) pH range provided: ☐ 6.0 minimum to 8.5, maximum ☒ 6.5, minimum to 8.5, maximum ☐ Other (specify) _____

(8) What Class reliability is provided? (Rules 17-600.400(1) and 17-600.300(4)(l), F.A.C.)? ☐ Class I ☐ Class II ☒ Class III

(9) If applying to construct a treatment system, what type of residuals disposal will be used?

☐ Distribution and Marketing (Chapter 17-640, F.A.C.)

☐ Land application (Chapter 17-640, F.A.C.)

☐ Incineration (Chapter 17-2, F.A.C.)

☐ Solid waste landfill (Chapter 17-7, F.A.C.)

☒ Combination of the above or other (describe) hauling to a municipal plant for further stabilization and eventual land spreading.

If land application is selected, submit an up-to-date Agricultural Use Plan or Dedicated Site Plan with this application as required by Chapter 17-640, F.A.C.

Part IV - Reuse/Disposal System Data

NOTE: If the reuse/disposal system includes a combination of methods, complete the required information for each reuse/disposal method used.

A. Discharge to surface waters (other than those covered in Sections B and C of this part): ☐ Yes ☒ Not applicable to this project

(1) Discharge location

Latitude ____°____'____"N Longitude ____°____'____"W Section _____ Township _____ Range _____

(2) Outfall information: Outfall configuration and construction materials: _____

_____

Length from shore _____ feet Diameter _____ inches Elevation of discharge invert _____ MSL

Receiving water bottom elevation at point of discharge _____ MSL (show outfall location on a USGS map)

(3) Receiving water body name: _____

(4) Type of receiving water: ☐ Fresh ☐ Marine or brackish

(5) Classification of receiving water (Chapter 17-302,F.A.C.): ☐ Class I ☐ Class II ☐ Class III ☐ Class IV ☐ Class V

(6) Is the receiving water body contiguous to, or identified as, an Outstanding Florida Water or an Outstanding National Resource Water?
☐ No ☐ Yes, name (locate on a USGS map): _____

(7) How were the treatment requirements listed in Part III of this application determined? ☐ Level I TBEL or WQBEL ☐ Level II WQBEL

(8) Design capacity of surface water discharge:
Current Permitted Capacity _____ mgd + Proposed Design Capacity _____ mgd = Total Design Capacity _____ mgd
Basis of design flow: ☐ Annual average daily flow ☐ Maximum monthly average daily flow ☐ Three-month average daily flow
☐ Other, specify _____

(9) All information required by Rule 17-600.510, F.A.C., (and Department rules referenced therein) shall be provided in the attached preliminary design report.

d. Discharge to surface waters - wetlands: ☐ Yes ☒ Not applicable to this project

(1) Is the wetland a jurisdictional wetland (i.e. within the landward extent of waters as defined in Rule 17-301.400, F.A.C., or isolated and not owned entirely by one person, or owned entirely by the State)? ☐ Yes ☐ No

(2) Discharge location:
Latitude _____° _____' _____"N Longitude _____° _____' _____"W Section _____ Township _____ Range _____

(3) Outfall information: Outfall/distribution system configuration and construction materials: _____

Locate outfall/distribution system on a USGS map.

(4) Will the wetland be used as a treatment wetland or receiving wetland? ☐ Treatment ☐ Receiving

(5) If the wetland is to be used as a treatment wetland, attach documentation showing ownership or the applicant's legal interest in the treatment wetland.

(6) If the wetland is to be used for treatment, identify type: ☐ man-made ☐ hydrologically altered ☐ unaltered

(7) If applicable, identify the classification of surface waters within the wetland: ☐ Class I ☐ Class II ☐ Class III ☐ Class IV ☐ Class V
Are the waters within the wetland part of an Outstanding Florida Water? ☐ Yes ☐ No

(8) Name of receiving water body the wetland discharges to: _____

(9) Classification of receiving water body: ☐ Class I ☐ Class II ☐ Class III ☐ Class IV ☐ Class V

(10) Is the receiving water body contiguous to, or identified as, an Outstanding Florida Water or an Outstanding National Resource Water?
☐ Yes ☐ No

(11) How were the discharge limits from the wetland established (Rule 17-611.450, F.A.C.)? ☐ TBEL ☐ WQBEL

(12) Design capacity of wetland system:
Current Permitted Capacity _____ mgd + Proposed Design Capacity _____ mgd = Total Design Capacity _____ mgd
Basis of design flow: ☐ Annual average daily flow ☐ Maximum monthly average daily flow ☐ Three-month average daily flow
☐ Other, specify _____

(13) All information required by Chapter 17-611, F.A.C., (and Department rules referenced therein) shall be provided in the attached preliminary design report.

DER Form # 17-600.910(1)
Form Title Ap. to Construct a Domestic Wastewater Facility
Effective Date July 1, 1991
DER Application No. _____ (Filled in by DER)

C. **Discharge to surface waters - ocean outfall:** ☐ Yes ☒ Not applicable to this project

(1) Discharge location:

Latitude ____° ____' ____"N Longitude ____° ____' ____"W Section ____ Township ____ Range ____

(2) Outfall information: Outfall configuration and construction materials: _____

_____

Length from shore ____ feet Diameter ____ inches Elevation of discharge invert ____ MSL

Receiving water bottom elevation at point of discharge ____ MSL (show outfall location on a USGS map)

(3) Receiving water body name: _____

(4) Classification of receiving water: ☐ Class I ☐ Class II ☐ Class III ☐ Class IV ☐ Class V

(5) Is the receiving water body contiguous to, or identified as, an Outstanding Florida Water or an Outstanding National Resource Water?

☐ Yes ☐ No

(6) How were the treatment requirements listed in Part III of this application determined?

☐ TBEL pursuant to Rule 17-600.520, F.A.C. ☐ Order by Secretary ☐ Other, Specify _____

(7) Design capacity of ocean outfall:

Current Permitted Capacity ____ mgd + Proposed Design Capacity ____ mgd = Total Design Capacity ____ mgd

Basis of design flow: ☐ Annual average daily flow ☐ Maximum monthly average daily flow ☐ Three-month average daily flow

☐ Other, specify _____

(8) All information required by Rule 17-600.520, F.A.C., (and Department rules referenced therein) shall be provided in the attached preliminary design report.

D. **Reuse of reclaimed water and land application:** ☒ Yes ☐ Not applicable to this project

(1) To apply for construction of a reuse/land application system, use DER Form 17-610.910(1).

(2) All information required by Rule 17-600.530, F.A.C., (and Department rules referenced therein) shall be provided in the attached preliminary design report.

(3) Design Capacity:

Current Permitted Capacity 0 mgd + Proposed Design Capacity .450 mgd = Total Design Capacity .450 mgd

Basis of design flow: ☒ Annual average daily flow ☐ Maximum monthly average daily flow ☐ Three-month average daily flow

☐ Other, specify _____

E. **Ground Water disposal by underground injection:** ☐ Yes ☒ Not applicable to this project

(1) To apply for construction of a Class I or Class V injection well system, use DER Form 17-28.910(1).

(2) All information required by Rule 17-600.540, F.A.C., (and Department rules referenced therein) shall be provided in the attached preliminary design report.

(3) Design capacity:

Current Permitted Capacity ____ mgd + Proposed Design Capacity ____ mgd = Total Design Capacity ____ mgd

Basis of design flow: ☐ Annual average daily flow ☐ Maximum monthly average daily flow ☐ Three-month average daily flow

☐ Other, specify _____

DER Form # 17-600.910(1)
Form Title Ap. to Construct a Domestic Wastewater Facility
Effective Date July 1, 1991
DER Application No. _____ (Filled in by DER)

Other disposal or reuse systems (systems not covered by Sections A through E, above)

1) Describe the system: _____

2) System location:

Latitude _____° _____' _____"N Longitude _____° _____' _____"W Section _____ Township _____ Range _____

3) Design capacity:

Current Permitted Capacity _____ mgd + Proposed Design Capacity _____ mgd = Total Design Capacity _____ mgd

Basis of design flow: ☐ Annual average daily flow ☐ Maximum monthly average daily flow ☐ Three-month average daily flow
☐ Other, specify _____

Total reuse/disposal capacity:

1) Total current reuse/disposal permitted capacity (total from Sections A through F, above) = 0 mgd

2) Total incremental reuse/disposal design capacity requested in this application (total from Sections A through F, above) = .450 mgd

3) Requested total reuse/disposal design capacity [add (1) and (2)] = .450 mgd

4) Basis of design flow in Questions (1) through (3) above:

☒ Annual average daily flow ☐ Maximum monthly average daily flow ☐ Three-month average daily flow
☐ Other, specify _____

Antidegradation requirements:

1) Does this proposed project include a new surface water discharge? ☐ Yes ☒ No

2) Does this proposed project include expansion of an existing surface water discharge? ☐ Yes ☒ No

3) If the response to either questions (1) or (2), above, is yes, attach documentation supporting that the proposed new or expanded discharge is in the public interest and meets the requirements of Rule 17-4.242, F.A.C., (including an evaluation of the economic and technical reasonableness of (1) reuse of domestic reclaimed water and (2) use of other discharge locations, use of land application, or reuse that would minimize or eliminate the need to lower water quality).

6

DER Form # 17-600.910(1)
Form Title Ap. to Construct a Domestic Wastewater Facility
Effective Date July 1, 1991
DER Application No. _____ (Filled in by DER)

Part V - Certifications

4. **Applicant**

I certify that the statements made in this application for a construction permit are true, correct and complete to the best of my knowledge and belief. I agree to retain the design engineer, or another professional engineer registered in Florida, to conduct on-site observation of construction, to prepare a certification of completion of construction, and to review record drawings for adequacy as referenced in Rule 17-600.730(4), F.A.C. Further, I agree to provide an appropriate operation and maintenance manual for the facilities pursuant to Rule 17-600.720, F.A.C., and to retain a professional engineer registered in Florida to examine (or to prepare if desired) the manual.

Date: 14 Feb 92 — Robert L Chapman III
Signature of the Applicant

Phone: (904) 394-8898 — Robert L. Chapman, President, Sorrento, Inc.
Name and Title (please type)

5. **Professional Engineer Registered in Florida (where required by Chapter 471, F.S.)**

This is to certify that the engineering features of this construction project have been (designed) (examined) by me and found to conform to engineering principles applicable to such projects. In my professional judgment this facility, when properly constructed, operated and maintained, will comply with all applicable statutes of the State of Florida and rules of the Department. I will provide the applicant with instructions for proper operation and maintenance of the facility.

R.W. Makemson
Signature of Engineer

Robert W. Makemson, Jr., P. E. #8985
Name (Please type) Florida Registration No.

Makemson & Associates
Company Name

(Affix Seal)

6060-1 Chester Circle
Company Address

Jacksonville, Florida 32217

Date. 02-13-92 Telephone No. (904) 448-0197

6. **Professional Engineer Registered in Florida (where required by Chapter 471, F.S.) and if different from project design engineer in B.**

I certify that this firm or individual has been retained by the applicant to prepare a certification of completion of construction and to review record drawings for adequacy as referenced in Rules 17-600.717 and 17-600.730(4), F.A.C.

Signature of Engineer

Name (Please type) Florida Registration No.

Company Name

(Affix Seal)

Company Address

Date: _____ Telephone No. (____) _____

7

Exhibit JCB-11

Application to Construct a Reuse/Land Application System
Dated 2/19/92

Florida Department of Environmental Regulation
Twin Towers Office Bldg. ● 2600 Blair Stone Road ● Tallahassee, Florida 32399-2400

DER Form # 17-610.910(1)
Form Title Application to Construct a Reuse/Land Application System
Effective Date January 30, 1990
DER Application No. (Filled in by DER)

Application to Construct a Reuse/Land Application System

Part I - Instructions

1) All applicable items must be completed in full in order to avoid delay in processing of this application. Where attached sheets (or other technical documentation) are utilized in lieu of the blank space provided, indicate appropriate cross-references in the space and provide copies to the Department in accordance with (3) below. Note that if part(s) of this application do not apply, those part(s) of the form need not be executed.

2) All information is to be typed or printed in ink.

3) Four (4) copies of this application (with supporting information) and a check for the application fee, in accordance with Rule 17-4.050, F.A.C., made payable to the State of Florida, Department of Environmental Regulation, shall be submitted with this application when sent to the appropriate district office or approved local program.

4) An engineering report (two copies) is required to be submitted in support of this application pursuant to Rules 17-610.310 and 17-610.830, F.A.C. The engineering report must address each section of the appropriate part of Chapter 17-610, F.A.C., along with each section in Rule 17-610.310, F.A.C.

5) Attach an 8½" x 11" copy of a USGS map showing site locations.

6) Application for a reuse/land application construction permit may be made at any time using this form. Application may be made in conjunction with a permit application for construction of an associated treatment plant. If the reuse/land application construction permit is being applied for concurrently with an application for the treatment plant, attach this form to the treatment plant construction permit application.

Part II - General Information

1) Application type: [X] Construction of a New Facility [ ] Construction of a Modified Facility [ ] Construction of an Expanded Facility

2) Applicant: Name Robert L. Chapman

Address 800 U.S. Highway 27

City Clermont Zip 34711

Telephone Number (904) 394-8898

3) Project Name: Southlake Community

Location: County Lake City Clermont

Street 800 U.S. Highway 27

Reuse/Land Application System:

Latitude 28 ° 23 · 39 "N Longitude 81 ° 43 · 58 "W Section 35 Township 24S Range 26E

4) General project description, reason needed, and relationship to existing facilities:

Southlake Community is a proposed devleopment of 8000 multi-family housing units to be provided with sewage service by Southlake Utilities, Inc. who is proposing to construct a .450 mgd extended aeration wastewater treatment plant.

5) Anticipated start of construction (approximate date): June 1, 1992

Anticipated completion of construction (approximate date): October 1, 1992

DER Form # 17-610.910(1)
Form Title Ap. to Construct a Reuse/Land Ap. System
Effective Date January 18, 1990
DER Application No _____ (Filled in by DER)

6) For this project indicate the current or most recent DER permits; issue and expiration dates; orders; and notices.
(none)

7) Indicate EPA-NPDES permit, effective date and expiration date:

Permit No. FL: (none) Issue Date _____ Expiration Date _____

8) What type of a reuse/land application system is proposed?

☐ Slow-rate land application system/restricted public access (Chapter 17-610, F.A.C., Part II)

☐ Slow-rate land application system/public access areas, residential irrigation, and edible crop irrigation. (Chapter 17-610, F.A.C., Part III) Note: Complete Part IV of this form.

☒ Rapid-rate land application system (Chapter 17-610, F.A.C., Part IV)

☐ Absorption field system (Chapter 17-610, F.A.C., Part V)

☐ Overland flow system (Chapter 17-610, F.A.C. Part VI)

☐ Other land application system with additional levels of preapplication treatment (Rule 17-610.660, F.A.C.)

☐ Other land application system with lower levels of preapplication treatment (Rule 17-610.670, F.A.C.)

9) For projects to be permitted under Parts II, IV, V, VI, or VII or Chapter 17-610, F.A.C..

Are the reuse or land application systems located on property owned by the applicant? ☒ Yes ☐ No

If no, attach copies of appropriate agreements, leases, etc. with the property owners.

10) Is the reuse/land application system underdrained? ☐ Yes ☒ No

11) Will a surface water discharge be needed? ☐ Yes ☒ No

12) Are you requesting a construction permit for a limited wet weather discharge? (See Rule 17-610.860, F.A.C.)

☐ Yes If yes, attach Form 17-610.910(2). ☒ No

13) Design capacity of reuse/land application system: ~~.450~~ 90,000 GPD, Per 8/18/92 letter mgd.

Part III - Treatment Plant Data

Each a copy of Part III for each treatment facility serving this reuse/land application system.

1) Treatment Plant Name Southlake Utilities, Inc.

2) Location: Address 800 U.S. Highway 27

City Clermont Zip 34711

Latitude 28 ° 23 ' 39 "N Longitude 81 ° 43 ' 57 "W Section 35 Township 24S Range 26E

3) Permitted Capacity (current or proposed) .450 mgd.

4) Treatment level:

☐ Less than secondary (40-60 mg/l BOD & TSS) ☒ Secondary (See Rule 17-600.420(1)(a), F.A.C.) ☐ Greater than secondary

5) Disinfection level (See Rule 17-600.440, F.A.C.) ☐ Low-level ☒ Basic ☐ Intermediate ☐ High-level

6) Is Class I reliability provided (See Rule 17-610.462(1), F.A.C.)? ☒ No 2

☐ Yes, full Class I reliability is provided ☐ Yes, reliability features equivalent to Class I (Describe in the engineering report).

DER Form # 17-610.910(1)
Form Title Ap. to Construct a Reuse/Land Ap. System
Effective Date January 16, 1990
DER Application No. _____ (Filled in by DER)

Part IV - Slow-Rate Land Application Systems; Public Access Areas; Residential Irrigation; and Edible Crops
(NOT APPLICABLE)

NOTE: **Complete Part IV of this form only** if the proposed reuse system is to be permitted under Part III of Chapter 17-610, F.A.C.

1) **Areas anticipated to be irrigated:**

☐ Residential lawns ☐ Cemeteries ☐ Landscape areas ☐ Edible crops
☐ Golf Courses ☐ Parks, playgrounds ☐ Highway medians, rights-of-way
☐ Others _____

_____

2) **Other uses of reclaimed water:**

☐ Toilet flush ☐ Fire protection ☐ Construction dust control ☐ Aesthetic purposes (decorative ponds, fountains, etc.)
☐ Others _____

_____

3) For each type of reuse identified in (1) and (2), above, list the area to be irrigated, the average anticipated application rate, and capacity. List major users (greater than or equal to 0.1 mgd., such as golf courses) separately. Locate areas or sites to receive reclaimed water on a USGS map.

Use Type/Major User	Area (acres)	Rate (inch/week)	Capacity (mgd)
TOTAL			

(4) If golf course lakes are used for storage, and if these lakes also serve as part of the stormwater management system, provide a concurrence letter from the Management and Storage of Surface Waters (MSSW) permitting agency stating that the lakes have sufficient capacity for both stormwater management and storage of reclaimed water.

(5) Number of hours/day an operator will be on site, seven days/week at the treatment plant: _____ hrs/day

If the treatment plant will be staffed by an operator less than 24 hrs/day, describe the additional levels of reliability included within the treatment or reuse systems (See Rule 17-610.462, F.A.C)

_____

_____

_____

(6) For each site where edible crops will be irrigated, locate the sites on a USGS map and describe the crops to be grown; type of application system to be used; provisions for crop washing and for processing, if any; and provisions for control of public access, if any. (See Rule 17-610.475, F.A.C.)

(7) Provide copies of user agreements or ordinances used to control individual users of reclaimed water.

DER Form # 17-610.910(1)
Form Title Ap. to Construct a Reuse/Land Ap. System
Effective Date January 18, 1990
DER Application No. _____ (Filled in by DER)

Part V - Certifications

Applicant

The undersigned applicant is fully aware that the statements made in this application for a construction permit are true, correct and complete to the best of his knowledge and belief. The undersigned agrees to retain the design engineer, or another professional engineer registered in Florida, to conduct on-site observation of construction, to prepare a certification of completion of construction, and to review record drawings for adequacy as referenced in Rule 17-610.840, F.A.C. Further, the undersigned agrees to provide an appropriate operation and maintenance manual for the facilities pursuant to Rules 17-600.720, 17-610.330, and 17-610.840, F.A.C., and to retain a professional engineer registered in Florida to examine (or to prepare if desired) the manual. For projects regulated by Part III of Chapter 17-610, F.A.C., the undersigned agrees to provide an approved industrial pretreatment program, if required by Rule 17-610.460(4), F.A.C.; an approved operating protocol; an approved cross-connection control program; and to obtain written permission from the Department of Environmental Regulation before placing these reuse facilities into operation.

Date: 19 Feb 92

Robert L Chapman III
Signature of the Applicant

Phone: (904) 394-8898

Robert L. Chapman, President, South Lake, Inc.
Name and Title (please type)

Professional Engineer Registered in Florida (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this construction project have been (designed) (examined) by me and found to conform to engineering principles applicable to such projects. In my professional judgment this facility, when properly constructed, operated and maintained, will comply with all applicable statutes of the State of Florida and rules of the Department. I will provide the applicant with instructions for proper operation and maintenance of the facility.

R W Makemson
Signature of Engineer

Robert W. Makemson, Jr., P. E. #8985
Name (Please type) Florida Registration No.

Makemson & Associates
Company Name

6060-1 Chester Circle
Company Address

(Affix Seal)

Jacksonville, Florida 32217

Date: 02-12-92 Telephone No. (904) 448-0197

Professional Engineer Registered in Florida (where required by Chapter 471, F.S.) and if different from project design engineer in B.

This is to acknowledge that this firm or individual has been retained by the applicant to prepare a certification of completion of construction and to review record drawings for adequacy as referenced in Rule 17-610.840, F.A.C.

Signature of Engineer

Name (Please type) Florida Registration No.

Company Name

(Affix Seal)

Company Address

Date: _____ Telephone No. (____) _____

Exhibit JCB-12

Correspondence from Christianne C. Ferraro, FDEP
Dated 8/18/92

Florida Department of Environmental Regulation

Central District • 3319 Maguire Boulevard, Suite 232 • Orlando, Florida 32803-3767

Lawton Chiles, Governor — Carol M. Browner, Secretary

file

August 18, 1992

MATRIX SYSTEMS INC
606-1 CHESTER CIRCLE
JACKSONVILLE FL 32217

OCD-DW-92-0556

ATTENTION R W MAKEMSON JR PE

Lake County - DW
Southlake Community
Wastewater Facility
Construction Permit Application
File Number: 210971

Dear Mr. Makemson:

This is to acknowledge receipt of your response to the request for additional information for the above project.

Your reply has been reviewed and the following item requires your attention and response in accordance with Rules 17-4.050, 17-4.055, 17-4.070, 17-28.700 and 17-610, Florida Administrative Code (F.A.C.):

The groundwater mounding analysis submitted is inadequate for permitting the disposal capacity requested in the permit application. Based on the available information, a maximum disposal rate to the percolation ponds would be limited to 90,000 GPD by the Department. The permit application may be revised to reflect this reduced rate or a meeting can be scheduled to discuss an appropriate mounding analysis for permitting the higher flow.

Please notify the Department if the permittee is in agreement with these flow restrictions or if a meeting is desired.

Also, a condition of the proposed permit may be added to require a distribution system to allow for even loading of the effluent across the pond bottoms. This provision would be based on the actual performance of the ponds during operation.

Pursuant to Section 120.60, Florida Statutes, the department may deny a permit application if the applicant, after receiving timely notice, fails to correct errors, omissions or supply additional information within a reasonable period of time.

1

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Upon receipt of your response to the above items, including two (2) copies each of appropriate documentation (revised application, drawings, specifications, etc.), processing of your application will continue. Please refer to this letter in your response. Should you wish to discuss the above comments, please feel free to contact Sarah Whitaker, P.G., at (407)894-7555.

Sincerely,

Christianne C. Ferraro

Christianne C. Ferraro, P.E.
Program Manager
Domestic Waste

CCF/dj/dv

cc: Ground Water Section
Robert Chapman

Exhibit JCB-13

Correspondence from Robert L. Chapman, Southlake Development Group
Dated 8/18/92

Southlake

DEVELOPMENT GROUP

800 U. S. Highway 27 Clermont, FL 34711

(904) 394-8898 FAX: (904) 394-8894

August 18, 1992

Ms. Christine C. Ferraro, P.E.
Program Manager
Domestic Waste
Florida Department Environmental Regulation
Central District
3319 Maguire Boulevard, Suite 232

RE: Lake County
Southlake Community Wastewater Facility
Construction Permit Application
File Number: 210971
OCD-DW-92-0556

Dear Ms. Ferraro:

We are in receipt of your letter of August 18, 1992. We accept for the time being the flow restrictions indicated as a minimum until we can further demonstrate, by mounding analysis or other accepted methodologies, the inherent capabilities of the soils.

We therefore desire to amend our application as follows: Maximum disposal rate to the percolation ponds of 90,000 GPD until adequate groundwater mounding or other acceptable analysis is provided. We reserve the right to amend the application when the additional analysis is completed.

We have also informed your staff that we are investigating the possibility of utilizing a subsurface application system, however at this time have not come to a conclusion as to whether we will pursue this. Therefore, we would like to proceed with permitting the currently proposed system as soon as possible.

Thank you again for you assistance.

Sincerely,

Robert L. Chapman, III
President

Exhibit JCB-14

Correspondence from R.W. Makemson Jr., Matrix Systems, Inc.
Dated 8/20/92

CF 8/26
LW 8/27

Matrix Systems, Inc.

6060-1 Chester Circle
Jacksonville, Florida 32217
(904) 448-0197

August 20, 1992

Ms. Christianne C. Ferraro, P.E.
Program Manager
Domestic Waste
Florida Department of Environmental Regulation
Central District
3319 Maguire Boulevard, Suite 232
Orlando, Fl 32803-3767

RE: Lake County
Southlake community Wastewater Facitity
Construction Permit Application
File Number: 210971
OCD-DW-92-0556

Dear Ms. Ferraro:

Please revise our application for the above captioned facility to reflect a request for a 90,000 GPD wastewater treatment system, until such time as additional information on groundwater conditions is available, as required by FDER. Our client is in accord with this request, inasmuch as timely permitting for his development is required for the project to go forward. See attached letter to you of August 18, 1992 from Robert Chapman.

If any additional information is required at this time please do not hesitate to contact us.

Sincerely,

R.W. Makemson Jr. P.E.

cpu:SLWWTP

Exhibit JCB-15

Wastewater Treatment Plant Permit
FDEP Permit No. DC35-210971
Issued 9/28/92

File

Florida Department of Environmental Regulation

Central District • 3319 Maguire Boulevard, Suite 232 • Orlando, Florida 32803-3767

Lawton Chiles, Governor

Carol M. Browner, Secretary

NOTICE OF PERMIT

CERTIFIED MAIL
P 402 739 259

SOUTHLAKE DEVELOPMENT GROUP
800 US HIGHWAY 27
CLERMONT FL 34711

ATTENTION ROBERT L CHAPMAN III
PRESIDENT

Lake County - DW
Southlake WWTP
Construction Permit Application
DER File No. 210971

Dear Mr. Chapman:

Enclosed is Permit Number DC35-210971 to construct a domestic wastewater facility, issued pursuant to Section(s) 403.087, Florida Statutes.

Any party to this Order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, 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 this Notice is filed with the Clerk of the Department.

Executed in Orlando, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

A. Alexander
District Director
3319 Maguire Boulevard
Suite 232
Orlando, Florida 32803-3767

Recycled Paper

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to §120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Clerk _____ Date 9/28/

ccf
AA/dj/bn

Copies furnished to:

Robert Makemson, PE
Lake County Environmental Services

P 402 739 259

Rec[illegible] for Certified Mail

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

Sent to SOUTHLAKE DEVELOPMENT GROUP	
Street and No	
P O , State and ZIP Code	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date 9-29-92	

PS Form **3800**, June 1991

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt Fee will provide you the signature of the person delivered to and the date of delivery.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Southlake DevelopmentGroup
800 US Highway 27
Clermont FL 34711

4a. Article Number
P 402 739 259

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

R L Chapman II
5. Signature (Addressee)

7. Date of Delivery 9-30-92

6. Signature (Agent)

8. Addressee's Address (Only if requested and fee is paid)
DW/dj/DC35-210971
Southlake WWTP (P)

Form **3811**, November 1990 ★U.S. GPO: 1991—287-066 **DOMESTIC RETURN RECEIPT**

Florida Department of Environmental Regulation

Central District • 3319 Maguire Boulevard, Suite 232 • Orlando, Florida 32803-3767

Lawton Chiles, Governor — Carol M. Browner, Secretary

Permittee:
Southlake Development Group
800 US Highway 27
Clermont, FL 34711

Attention: Robert L. Chapman, III
President

I. D. Number: 3035P05827
Permit Number: DC35-210971
Expiration Date: August 25, 1995
County: Lake
Latitude/Longitude:
28°23'39"N/81°43'57" W
Section/Township/Range
35 / 24S / 26E
Project: Southlake WWTP

This permit is issued under the provisions of Chapter(s) 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-4, 17-600 and 17-610. 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:

Construct: A 0.450 MGD (annual average daily design flow) extended aeration wastewater treatment plant with flow equalization, disinfection by chlorination and land application of reclaimed water via two 120,308 square foot percolation ponds with an approved disposal capacity of 90,000 GPD. Initial operation of the treatment plant will be at 75,000 GPD average daily flow with a phased increase to 164,750 GPD and 450,000 GPD by operational changes without additional construction. Permitted capacity of the plant will be limited to 90,000 GPD and shall not be increased until additional disposal/reuse capacity is permitted.

Location: West of US Highway 27 approximately 15 miles south of Clermont, Lake County, Florida.

Treatment Required: Secondary treatment with nitrate nitrogen (NO_3) not to exceed 12.0 mg/L and basic disinfection..

Operators Required: This is a Class C, Category III treatment facility. In accordance with Chapter 17-602, F.A.C. an operator of minimum certification Class C shall be on-site for 3 hours per day, 5 days a week and one site visit every weekend.

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

Recycled Paper

GENERAL CONDITIONS:

1. *The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.*

2. *This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.*

3. *As provided in subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.*

4. *This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.*

5. *This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.*

6. *The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.*

7. *The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:*

   (a) Have access to and copy any records that must be kept under conditions of the permit;

   (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and

   (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

   Reasonable time may depend on the nature of the concern being investigated.

8. *If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:*

   (a) A description of and cause of noncompliance; and

   (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

   The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

GENERAL CONDITIONS:

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Section 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Rule 17-4.120 and 17-30.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

( ) Determination of Best Available Control Technology (BACT)

( ) Determination of Prevention of Significant Deterioration (PSD)

( ) Certification of compliance with state Water Quality Standards (Section 401, PL 92-500)

( ) Compliance with New Source Performance Standards

14. The permittee shall comply with the following:

(a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

(b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

(c) Records of monitoring information shall include:

1. the date, exact place, and time of sampling or measurements;
2. the person responsible for performing the sampling or measurements;
3. the dates analyses were performed;
4. the person responsible for performing the analyses;
5. the analytical techniques or methods used;
6. the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

PERMITTEE:
Southlake Development Group

Attention: Robert L. Chapman, III
President

I. D. Number:
Permit Number: DC35-210971
Expiration Date: August 25, 1995

SPECIFIC CONDITIONS:

1. The required sampling shall be as follows:

Parameter	Recording or sampling Frequency
Flow	daily, 5 days per week
Chlorine residual	daily, 5 days per week
pH	daily, 5 days per week
$CBOD_5$*	monthly
TSS*	monthly
Fecal coliform	monthly
Nitrate as N	monthly

* influent and effluent

The sampling and analysis required above shall be in accordance with Chapter 17-601, F.A.C. and approved standard methods. Properly executed reports shall be submitted monthly to this office and Lake County Environmental Services, by the 28th day of the following month.

After July 1, 1993 any laboratory test required by this permit shall be performed by a laboratory that has been certified by HRS in accordance with Rule 10D-41.100 - .113, F.A.C., to perform that test. On-site tests for dissolved oxygen, pH, and total chlorine residual shall be performed by a laboratory certified to test for dissolved oxygen, pH, and total chlorine residual or under the direction of an operator certified in accordance with Chapter 17-602, F.A.C.

2. The reclaimed water delivered to the land application system shall be adequately chlorinated at all times so as to maintain 0.5 mg/L total chlorine residual after a minimum contact period of 15 minutes (based upon peak hourly flow).

3. Groundwater monitoring shall be performed in accordance with the attached Groundwater Monitoring Plan Implementation Schedule.

4. The reclaimed water facilities discharging to ground waters shall be operated and maintained at all times so as to prevent overflow or seepage of water to adjacent ground surfaces or runoff to surface waters.

5. Domestic residual (sludge) disposal shall be in accordance with Rule 17-640, F.A.C. Residuals shall be analyzed annually and the results submitted with each Agricultural Use Plan (AUP) update. The current AUP dedicates 6 acres of the Arnold Grove and Ranch, located off US Highway 27 south of Clermont, to this facility. AUP's shall be resubmitted annually for approval, on appropriate Department Forms, beginning one (1) year from the date of permit issuance.

7

PERMITTEE:
Southlake Development Group

Attention: Robert L. Chapman, III
President

I. D. Number:
Permit Number: DC35-210971
Expiration Date: August 25, 1995

SPECIFIC CONDITIONS:

6. The boundary of the zone of discharge shall be 100 feet from the site (wetted disposal area) boundary or to the installation's property boundary whichever is less. The zone of discharge shall be the volume underlying the surface within this boundary to the base of the unconfined aquifer.

7. Operation of the treatment plant shall be under the control of Certified Operators, in accordance with Rule 17-602.370, F.A.C., who shall perform the duties required by Rule 17-602.360 F.A.C.

8. The permittee shall submit the prescribed application and supporting data for an operation permit no later than six (6) months after notification of completion.

9. The applicant shall retain a professional engineer registered in the State of Florida, to observe construction of the project and to assure conformity to the application, plans and specifications as approved. Upon completion of construction, the engineer shall provide the department with a notification of completion of construction on DER Form 17-600.910(3).

10. This permit will allow a period of operation following notification of completion of construction, to make minor changes, adjustments etc., to obtain a minimum of six (6) months of test data to verify that the facility meets design standards, and to support the application for an operation permit.

11. A weather resistant structure shall be provided on-site to house the maintenance and operation log for the plant, as required by Rule 17-602.360(e), F.A.C.

12. This permit does not cover any of the structural engineering aspects of this project.

13. Where potable water and sanitary sewer mains cross with less than eighteen (18) inches vertical clearance, the sewage main shall be twenty (20) feet of either ductile iron pipe, concrete encased PVC pipe or encased in a watertight carrier pipe, centered on the point of crossing. A minimum horizontal separation of ten (10) feet (edge to edge) between potable water mains and sewage mains shall be maintained when practical. When the appropriate horizontal separation cannot be maintained the sewage main shall be either ductile iron pipe, concrete encased vitrified clay pipe, concrete encased PVC pipe or encased in a watertight pipe carrier.

14. The permittee will promptly notify the department upon sale or legal transfer of the permitted facility. In accordance with General Condition #11 of this permit, this permit is transferable only upon department approval. The new owner must apply, by letter, for a transfer of permit within 30 days.

8

PERMITTEE:
Southlake Development Group

Attention: Robert L. Chapman, III
President

I. D. Number:
Permit Number: DC35-210971
Expiration Date: August 25, 1995

SPECIFIC CONDITIONS:

15. Berms shall be constructed of material with low permeability and compacted sufficiently to prevent lateral seepage through them.

16. Normal pond operating conditions should have 1-7 days hydraulic loading followed by 5-14 days resting periods with the maximum allowable wastewater level in any of the percolation ponds not closer than three (3) feet from the top of the berm. Once that level is reached, the pond shall be removed from use until the next loading cycle. A staff gauge with graduation in feet and tenths shall be provided in each pond. Any emergency discharge of water from the percolation pond will be considered a violation of this permit unless as a result of the storm event which produces rainfall in excess of 7.0 inches for any day or the cumulation of rainfall greater than 10 inches for any three consecutive days. To document the rainfall, it is required that rain gauge readings be taken at the same time each day. It should be noted that discharge is allowed only in amount equal to the volume of excess rainfall (i.e., rainfall in excess of 7.0 inches for any day or the accumulation of rainfall greater than 10 inches for any three (3) consecutive days) times the surface area of pond(s). Within 24 hours of both commencement and ending of discharge, the permittee must notify the event to the department in writing. Within 10 days a report must be provided containing information on the time of discharge, volume discharged, a log of daily rain gauge reading, and wastewater characteristics for pH, $CBOD_5$, TSS, TN and TP.

17. Pond maintenance shall include periodically scraping the bottom to remove solids, emergent vegetation, silt deposits and discing the pond bottom. Vegetation along the berms shall be kept mowed for aesthetic purposes and to allow visual inspection of the berm slopes for erosion and deterioration.

18. Operational difficulties, which may cause or result in non-compliance with the requirements of this permit, shall be reported within twenty-four (24) hours to both the local pollution control program and to the Department.

ISSUED

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

A. Alexander
District Director
3319 Maguire Boulevard
Suite 232
Orlando, Florida 32803

Exhibit JCB-16

Notification that a Domestic Wastewater Facility Will Be Placed Into Operation
FDEP Permit No. DC35-210971
Dated 3/18/94

wilson
& associates engineers
P.O. Box 915260
Longwood, FL 32791-5260

FLORIDA Department of Environmental Protection
CENTRAL DISTRICT - Domestic Waste Section
3319 Maguire Boulevard Suite 232
Orlando, FL 32803-3767

MEMORANDUM

TO: Ms Dennise Judy

DATE: 3-18-94

FROM: Ron Wilson

FILE: SOUTHLAKE UTILITIES

SUBJECT: TRANSMITTAL

REFERENCE: FDER FORMS and "AS-BUILTS"

The following are attached for your review and approval:

1. DEP Form 17-640.900(2), Domestic Wastewater Collection/ Transmission Systems Certification of Completion of Construction, for the SOUTHLAKE UTILITIES, INC. Lift Station only - collection system certified by BOWYER-SINGLETON, INC. - Lift Station "AS-BUILTS" attached;

2. DEP Form 17-600.910(3), Notification that a Domestic Wastewater Facility Will Be Placed into Operation, four (4) copies, and a set of the treatment plant/evapo-perco ponds/monitoring well "AS-BUILTS".

Thank You.

RECEIVED
DEP CENTRAL
DISTRICT

Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

DER Form # 17-600.910(3)
Form Title Notification that a Domestic Wastewater Facility Will Be Placed Into Operation
Effective Date July 1, 1991
DER Application No _____ (Filled in by DER)

Notification that a Domestic Wastewater Facility Will Be Placed Into Operation

Part I - Instructions

(1) All applicable items must be completed in full in order to avoid delay in processing of this form. Where attached sheets (or other technical documentation) are utilized in lieu of the blank space provided, indicate appropriate cross-references in the space and provide copies to the Department in accordance with (3) below. Note that if part(s) of this application do not apply, those part(s) of the form need not be executed.

(2) All information is to be typed or printed in ink.

(3) Four (4) copies of this application (with supporting information) shall be submitted to the appropriate district office or approved local program.

(4) Attach an 8½" x 11" copy of a USGS map showing site locations. Be sure to include the map name and date on the USGS map provided.

(5) Submission of this form is required by Rule 17-600.725, F.A.C., before placing a wastewater facility into operation under a construction permit for any purpose, other than testing for leaks and equipment operation.

(6) Where requested on this form, enter location in both latitude/longitude and section/township/range formats.

(7) Dates are to be entered in MM/DD/YR format.

(8) In Part II/Question (3), if the treatment plant is the same as the project/facility described in Question (2), enter "Same."

Part II - General Information

(1) Applicant/Responsible Authority: Name SOUTHLAKE UTILITIES, INC.

Address 800 S. U.S. Hwy. 27

City CLERMONT State FL Zip 34711

Telephone Number (904) 394-8898

(2) Project/Facility Name: SAME

Street _____

City _____ Zip _____ County _____

Latitude 28 ° 23 · 39 "N Longitude 81 ° 43 · 58 "W Section 35 Township 24 S Range 26E

Telephone Number (904) 394- 8879

The facility's DER identification number (also known as the GMS identification number) 3035P05827

(3) Treatment Plant: Name SOUTHLAKE UTLITIES, INC.

Address 800 S. U.S. Hwy 27

City CLERMONT Zip 3471[illegible] County LAKE

Latitude SAME "N Longitude ____ ° ____ ' ____ "W Section ____ Township ____ Range ____

Telephone Number (904) 394-8898

The facility's DER identification number (also known as the GMS identification number) 3035P05827

(4) Construction Permit Number: DC35-210971

(5) Indicate EPA-NPDES permit, effective date and expiration date:

Permit No. FL: N/A Issue Date __/__/__ Expiration Date __/__/__

(6) Start of construction (date): 6/1/93

2

Northwest District 160 Governmental Center Pensacola, Florida 32501 5794 904-436-8300
Northeast District 7825 Baymeadows Suite 6200 Jacksonville Florida 32256-7577 904-448 4300
Central District 3319 Maguire Blvd Suite 232 Orlando, Florida 32803-3767 407-894 7555
Southwest District 4520 Oak Fair Blvd Tampa Florida 33610-7347 813-623 5561
South District 2269 Bay St Fort Myers Florida 33901 2696 813 332 6975
Southeast District 1900 S Congress Ave., Suite A West Palm Beach, Florida 33406 407-433 2650

DER Form # 17-600.910(3)
Form Title Notification that a Domestic Wastewater Facility Will Be Placed into Operation
Effective Date July 1, 1991
DER Application No. (Filled in by DER)

(7) Describe facilities that have been constructed to the point of being functionally complete: 450,000 GPD WWTP / EVAPO-PERCO PONDS LIMITED TO 90,000 GPD / MONITORING WELLS; SEE ATTACHED. "AS-BUILTS"

(8) Date on which construction on these facilities reached the point of where the facilities are functionally complete: 3,17,94

(9) These facilities will be operated for 6* months under the construction permit. MIN.

Note: This may not exceed six (6) months.

Date on which this operation period will end: 10,1,94

(10) Expiration date of the construction permit: 8,25,95

Note: If the end date of the operation period is after the expiration date of the construction permit, the construction permit must be extended.

(11) I hereby apply for an extension of this construction permit to: / / N/A

(12) Date on which an application for an operation permit will be filed: 11,1,94

Note: An application for an operation permit must be filed at least 60 days before expiration of the construction permit.

(13) Does this project involve discharge of reclaimed water or effluent onto property not owned or under the direct control of the permittee?

☐ Yes ☑ No If the response is yes, attach documentation required by Rule 17-600.725(2)(c), F.A.C.

Part III - Certifications

A. Applicant

I certify that the statements made in this notification are true, correct and complete to the best of my knowledge and belief. I agree to operate and maintain the wastewater facilities in such a manner as to comply with the provisions of Chapter 403, F.S., Chapter 17-600, F.A.C., and all other applicable rules of the Department. Further, I have provided an appropriate draft operation and maintenance manual which has been examined by a professional engineer as certified below. I agree to maintain a copy of the draft manual and attest that such draft operation and maintenance manual is available and located at SOUTHLAKE UTILITIES, INC. WWTP and can be submitted upon request as part of the permit procedure.

Date: 3/18/94

Signature of the Applicant

Phone: (904) 394-8898

TERRY SHAW, DIRECTOR
Name and Title (please type)

(407) 834-3239 ext 104
Allen's Environmental

3

DER Form # 17-600.910(3)
Form Title Notification that a Domestic Wastewater Facility Will Be Placed Into Operation
Effective Date July 1, 1991
DER Application No. (Filled in by DER)

B. **Professional Engineer Registered in Florida (where required by Chapter 471, F.S.) as to Wastewater Treatment, Reuse and Disposal System.**

I certify that the facilities listed above have been completed to the point where the facilities are functionally complete. I further certify that construction on these facilities has proceeded substantially in accordance with the construction permit and the approved preliminary design report and application materials, or that deviations noted below will not prevent the system from functioning in compliance with the requirements of Chapter 17-600, F.A.C., when properly operated and maintained. These determinations have been based upon on-site observation of construction, scheduled and 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 preliminary design report and application materials.

Signature of Engineer

RONALD H. WILSON, P.E. 9710
Name (Please type) Florida Registration No.

R. H. WILSON & ASSOC.
Company Name

P.O. BOX 915260
Company Address

(Affix Seal)

LONGWOOD, FL 32791-5260

Date: 3/18/94 Telephone No. (407) 788-1766

Substantial deviations from the construction permit and the approved preliminary design report and application materials (attach additional sheets if necessary):

NONE Except EVAPO-PERCO PONDS As NOTED ON "As-BUILTS".

C. **Professional Engineer Registered in Florida (where required by Chapter 471, F.S.) as to Operation and Maintenance Manual.**

I certify that the draft operation and maintenance manual for these wastewater facilities has been prepared or examined by me or by individual(s) under my direct supervision and that there is reasonable assurance, in my professional judgment, that the facilities, when properly maintained and operated in accordance with this manual, will comply with all applicable statutes of the State of Florida and rules of the Department.

Signature of Engineer

RONALD H. WILSON, P.E 9710
Name (Please type) Florida Registration No.

RH WILSON & ASSOC.
Company Name

(Affix Seal)

SAME
Company Address

Date: 3.18.94 Telephone No. (407) 682-1980

4

Exhibit JCB-17

Correspondence from James C. Boyd, P.E., Boyd Environmental Engineering, Inc.
Dated 2/15/01

February 15, 2001

Mr. H. Lee Miller
Section Supervisor
Domestic Waste Permitting
Florida Department of Environmental Protection
3319 Maguire Blvd., Suite 232
Orlando, FL 32803

BOYD
ENVIRONMENTAL
ENGINEERING INC

Re: Calculation of Flow Per ERC
Domestic Wastewater Treatment Facilities

Dear Mr. Miller:

In accordance with our telephone conversation on this date, we understand that FDEP does not mandate the use of a 300 gallons per day per equivalent residential connection (ERC) factor for determining available wastewater treatment plant capacity. As we discussed, a utility may justify the use a different ERC conversion factor based on historical flow and connection data. FDEP would review and approve a different ERC conversion factor based on a Flow Study or Capacity Analysis Report submitted by the utility.

Lee, we greatly appreciate your clarification of this issue. If we have misunderstood any aspect of our telephone conversation, please notify us.

Sincerely,

Boyd Environmental Engineering, Inc.

James C. Boyd, P.E.
President

Sent via Fax (407-897-2966) and US Mail, 2/15/01

166 Lookout Place • Suite 200 • Maitland, Florida 32751
Phone (407) 645-3888 FAX (407) 645-1199

Exhibit JCB-18

Correspondence from Douglas J. Hearn, P.G., Yovaish Engineering Sciences, Inc
Dated 5/6/98

YOVAISH
ENGINEERING SCIENCES, INC.

Consulting Engineers in the Earth Sciences, Geotechnology, Hydrogeology and Construction Materials Testing

May 6, 1998

Sarah M. Whitaker, P.G. and/or Mr. Rich Burklew, P.G
St. Johns River Water Management District
Orlando Service Center
618 E. South Street
Orlando, Florida 32801

Subject: **Response to Request for Additional Information Dated June 27, 1996, Consumptive Use Permit Application No. 2-069-0010ANM2, Southlake Utilities, Inc., Lake County, Florida (PN 98-584.01)**

Dear Ms. Whitaker/Mr. Burklew:

Attached are three (3) copies of all requested information regarding the above-referenced Request for Additional Information (RAI). For your convenience, the comments presented in the RAI are presented in full, followed by our corresponding response.

Please continue to send all day to day correspondence to Dr. Devo Seereeram, as Yovaish Engineering Sciences, Inc., is providing this response under his direction. We trust that this report addresses your immediate requirements. Please do not hesitate to call if there are any questions.

Sincerely,

Yovaish Engineering Sciences, Inc.

5-7-98

Douglas J. Hearn, P.G.
Florida Registration No. 0001279

RECEIVED
MAY 08 1998
2-069-0010 ANM 2
PDS
ORLANDO
SJR WMD

cc: Mr. Robert L. Chapman, III.
Southlake Utilities, Inc.
333 U.S. Highway 27
Clermont, Florida 34711

Dr. Devo Seereeram
5633 Partridge Drive
Orlando, Florida 32810

1. *Please provide a deed for the new parcel which was covered under permit number 2-069-0014. [Paragraphs 10.2(a)(b)(r); 10.3(a)(b), A.H.]*

   The well site has recently changed hands. The current owner address is as follows:

   Worthwhile Development, II, Ltd.
   700 Riverbend Boulevard
   Longwood, Florida 32779
   Attention: Mr. Jay Royall

   Southlake Utilities intends to purchase the well/site from the new owner in the near future.

2. *Please submit a copy of the as-built and proposed plans for the potable water distribution system with respect to the well locations. [Paragraphs 10.2(a)(c)(d)(e)(h)(i)(r); 10.3(a)(b)(c)(d)(e), A.H.]*

   This information is provided as Attachment A.

3. *Please provide information on past populations. These were not included on the historic water use table. It is indicated on this table that the current daily per capita usage is 190.95 gallons. This value is almost twice the 100 gallons a day per capita that was allocated in your permit. Please address this issue. In addition, it is noted that the projected per capita water usage is 100 gallons in all future years. Please explain what efforts have been and will be taken to lower the per capita usage. [Paragraphs 10.2(a)(b)(c)(d)(f)(h)(i)(k)(r); 10.3(a)(b)(d)(e), A.H.]*

   Please note that the noted Table 1 (Historic Water Use), presented average daily "household use." The utility maintains information on the number of residential connections, and an estimate of the population was not made at the time of renewal/application. Therefore, the per capita use reported in Table 1 reflects the daily use per connection, not per capita use.

   The earliest phases of the development in the area consisted of the Southlake Apartments. As of February 1998, Southlake Utilities had a total of 257 connections, 52 of which were meters for the Southlake Apartments (total of 440 apartments). The population in early February was estimated to be 1,214, with an average daily use of 196,600 GPD for the potable water service in January 1998. Using the estimated population and reported water use, the per capita water use is approximately 162 gallons/day.

   too high
   ?

This is less than 10 percent greater than the 150 gpd/capita use that the SJRWMD has established as a goal. The area is experiencing a rapid rate of growth, with a number of new single family and multi-family projects establishing water service. Pressure testing and flushing of lines are an ongoing process as new connections come on line. It is our opinion that the addition of the new services and related testing have inflated the per capita use as noted above. We anticipate that the per capita use will decline as these newer projects become established and discontinue testing. Historic data concerning the number of connections and estimated population served are presented in Attachment B.

4. *On April 25, 1996 the St. Johns River Water Management District modified its rules regarding consumptive use permits. These modifications to the rule increased the standard duration of consumptive use permits and Southlake Utilities, Inc. may be eligible for a longer duration permit. To consider granting a longer duration permit, we must have information regarding the projected water use beyond the next seven years. Should you wish the District to consider a longer duration permit, please provide information regarding the utility's water use projections for the next 10 years. A copy of the projected water use table is provided for your convenience. [Paragraphs 10.2(a)(b)(c)(e)(d)(r); 10.3(a)(b)(c), A.H.]*

Attachment B provides the extended water use projections. only through 2008

5. *The population projections and, therefore, the requested water use allocation, appear to be excessively high and unjustified compared to historic growth, especially when the current permit projected the population to be 16,615 in 1997. Please provide complete justification for the projected population growths through the year 2006. [Paragraphs 10.2(a)(b)(c)(d)(r); 10.3(a)(b)(c), A.H.]*

The population projections have been modified, as noted in Attachment B. The population projections have been modified from the earlier transmittal to reflect the actual number of connections that have been established since the start of the utility service. The population projections are based on the observed rate of growth.

6. *Are there any urban landscape, boulevards, golf courses, other recreational or open space areas to be irrigated? If so, please provide information on the acreage, locations (shown on a site plan), irrigation methods and requested allocations. Please also submit a golf course and urban landscape irrigation type use package, if applicable. [Paragraphs 10.2(a)(b)(c)(d)(h)(r); 10.3(a)(b), A.H.]*

The utility is considering a joint project with the Florida Department of Transportation to

provide irrigation of median of US 27 under the highway beautification program. In all likelihood, the utility will utilize reclaimed water to irrigate this area. However, this effort is in the conceptual phase. Irrigation in common areas is being considered, however, no commitments have been made to provide water for this use, and no specific areas have been discussed.

need more specifics & allocate TJ

7. *Please explain how the installed wellfield capacity will increase in years 1996, 1997, 1998, 2000 and 2001 as indicated on the future water use table. [Paragraphs 10.2(a)(b)(r); 10.3(a)(b), A.H.]*

The wellfield capacity will increase over time as it is needed to meet demands on the water system. This will be accomplished by modifying the pumping capacity of the wells through changes to pump configurations, etc. We do not propose any additional wells to meet the projected demand.

Wells	*Existing Well Capacity*		*End of Permit Well Capacity*	
	gpm	*gpd*	*gpm*	*gpd*
A	1,200	1,728,000	1,350	1,944,000
B	500	720,000	500	720,000
C	180	259,200	180	259,200
D	1,200	1,728,000	1,350	1,944,000
E	0	0	1,650	2,376,000
TOTAL	3,080	4,435,200	5,030	7,243,200

request modeling showing draw down imp

8. *Please complete the enclosed water conservation plan for public supply applicants. [Paragraphs 10.2(a)(b)(c)(d)(h)(i)(j)(r); 10.3(a)(b)(e)(g), A.H.]*

We understand that the District plans to implement a "form" based water conservation plan, which will include a formal audit followed by review by District staff and the utility to determine areas of conservation for this specific utility. We would be pleased to participate in this program when it becomes established, and will accept this requirement as a permit condition.

9. *Has condition 26 of your current permit, regarding the submittal of a report detailing the progress of the current water conservation plan, been submitted to the District? We were unable to locate this information in your compliance file. Please submit a copy of this report. [Paragraphs 10.2(a)(f)(h)(i)(r); 10.3(a)(e), A.H.]*

Southlake Utilities will abide by the water conservation goals/requirements noted in Item

assurance?

4

1998 data (Table 2)
390 connections
1600 customers

8 above. Due to the relatively small customer base, it has not been practical to implement the plan to date.

10. What quality is the waste water generated by the treatment plant and what are the projected waste water flows in 10 years. [Paragraphs 10.2(a)(b)(c)(d)(h)(i)(k)(r); 10.3(a)(b)(e)(f)(g), A.H.]

The wastewater treatment plant provides tertiary treatment. Most recent FDEP monthly reports and water quality for the finished effluent are provided as Attachment C. Wastewater flows have historically averaged 50 percent of the total water use. The projected wastewater flows are presented in the following table.

Year	*Projected Wastewater Flows (mgal/day)*	*Year*	*Projected Wastewater Flows (mgal/day)*
1998	0.11	2003	0.98
1999	0.13	2004	1.35
2000	0.21	2005	1.37
2001	0.35	2006	1.43
2002	0.575	2007	1.50

11. The current method of wastewater disposal is percolation ponds. Condition 22 of your current permit requires that treated effluent must be used for irrigation whenever an irrigation demand exists. The District assumes that individual lots are being irrigated, a demand for irrigation currently exists and that soon there will be sufficient flow in the utility's service area to allow the construction of a wastewater plant that would provide reclaimed water of "public access" quality. Please provide a reuse feasibility study for the District's review. This study must address the feasibility of upgrading the existing plant, if necessary, retrofitting existing residences and requiring all new construction to install dual lines for collection and distribution of reclaimed water. [Paragraphs 10.2(a)(b)(c)(d)(f)(h)(i)(j)(k)(r); 10.3(a)(b)(e)(f)(g), A.H.]

It is our contention that the most efficient use of the reclaimed water is to facilitate recharge to the surficial and Floridan aquifers via the percolation ponds. The deep, permeable sands and relatively deep water table provide for an environment in which the water recharged in the ponds is less susceptible to evaporation/evapotranspiration than if the reclaimed water is applied for irrigation of common areas, etc.

12. *Are all connections individually metered? Are there any RV parks, apartment complexes, strip malls, etc. on master meters? Please submit language for a policy to prohibit master meters. [Paragraphs 10.2(f)(h)(i)(k)(l)(r); 10.3(a)(b)(d)(e), A.H.]*

Each 1/2 building has a meter. The Public Service Commission approved pro rata individual billing based on use and sq. footage is collected each month. Also, 12 unit time shares at Summer Bay have master meters. A number of single family type developments are coming on line that will all be individually metered.

13. *Please provide information on the current water use rate structure for the District's review. The rate structure must encourage efficient water use. Please submit a demographic study of the service area that illustrates graphically (bar chart) the current percentage of users per each 1,000 gallon unit. This will help us review if the current block sizes promote water conservation. [Paragraphs 10.2(a)(b)(c)(d)(f)(h)(i)(k)(r); 10.3(a)(b)(e), A.H.]*

It does, as there is no "free gallonage" i.e. customers pay a base facilities charge plus a charge for every gallon. Also, Southlake PUD/FQD ordinance has water saving requirements, as does Lake County Building Code. Attachment D provides a rate schedule.

14. *Does the utility have any landscaping regulations requiring developments to use native vegetation that needs little supplemental irrigation? If requirements do not exist, please provide proposed language for a requirement. [Paragraphs 10.2(a)(b)(c)(d)(f)(h)(i)(k)(l)(r); 10.3(a)(b)(d)(e), A.H.]*

The Southlake DRI documents address this issue.

15. *Could the utility develop a xeriscape demonstration project for display in a prominent location such as a median or commons area? Please provide a plan and implementation schedule for a xeriscape demonstration project. [Paragraphs 10.2(a)(b)(c)(d)(f)(h)(i)(k)(r); 10.3(a)(b)(e), A.H.]*

The utility plans to do this under the previously mentioned DOT median beautification program. The Southlake developer already mulches and weeds, xeric live oaks in cloverleaf of 27 and 192.

16. *Are water saving devises, such as rain sensor shut-offs, required with all new construction? If not, please provide proposed language for such a requirement. Who will enforce this requirement. [Paragraphs 10.2(a)(b)(f)(h)(i)(k)(l)(m)(r); 10.3(a)(b)(d)(e), A.H.]*

The utility has no legal authority. Lake County building department enforces the use of

these devices, where applicable.

17. *Were wells "A", "B" and "C", as reference in the existing permit's condition 23, plugged and abandoned as required prior to the construction of a second (back-up) public supply well? If not, why not? [Paragraphs 10.2(a)(b)(r); 10.3(a)(b), A.H.]*

Wells A (12") and B (10") were logged by St. Johns and both preliminarily determined to be useful as public supply wells. Well B was converted to PWS, grouted, etc. and placed on line as one of the two current primary supply wells. It is an outstanding well. Well C has been disconnected from all systems but is potentially useful as fire reserve for the Fruit Stand. The Utility plans to retain these wells.

18. *Is the proposed well "E", as listed on page 7, table 2, an existing well? If not, when is it proposed to be constructed? [Paragraphs 10.2(a)(b)(r); 10.3(a)(b), A.H.]*

Well E is an existing well which is located east of U.S. Route 27 on the north side of the entrance to Wood bridge subdivision. Attachment E provides water quality data that was obtained during a recent sampling of the well.

Exhibit JCB-19

Correspondence from Tom Jackson, SJRWMD
Dated 6/5/98

ST. JOHNS RIVER WATER MANAGEMENT DISTRICT

Henry Dean, Executive Director
John R. Wehle, Assistant Executive Director

POST OFFICE BOX 1429 PALATKA, FLORIDA 32178-1429
TELEPHONE 904-329-4500 SUNCOM 904-860-4500
TDD 904-329-4450 TDD SUNCOM 860-4450
FAX (Executive) 329-4125 (Legal) 329-4485 (Permitting) 329-4315 (Administration/Finance) 329-4508
(Planning and Acquisition) 329-4848

SERVICE CENTERS

618 E. South Street
Orlando, Florida 32801
407-897-4300
TDD 407-897-5960

7775 Baymeadows Way
Suite 102
Jacksonville, Florida 32256
904-730-6270
TDD 904-448-7900

PERMITTING
305 East Drive
Melbourne, Florida 32904
407-984-4940
TDD 407-722-5368

OPERATIONS
2133 N. Wickham Road
Melbourne, Florida 32935-8109
407-752-3100
TDD 407-752-3102

June 5, 1998

CERTIFIED MAIL NO. Z 397 090 060

Dr. Devo Seereeram
5633 Partridge Drive
Orlando, FL 32810

RE: Second Request for Additional Information
Consumptive Use Permit Application No. 2-069-0010ANM2
Woodridge

Dear Dr. Seereeram:

Thank you for responding to District staff's June 27, 1996 request for additional information (RAI) regarding your Consumptive Use Permit (CUP) application. The District received the RAI response from Doug Hearn of Yovaish Engineering Science on May 8, 1998; however, additional information is needed to complete your application so that we can recommend appropriate action to our Governing Board. The information requested below is required in the District Rule Section 40C-2.101, Florida Administrative Code (F.A.C.), and in Section 4.3.1 of the Applicant's Handbook. The citation A.H. refers to the Applicant's Handbook.

In order to expedite the review of your application, please include the District's permit application number, shown above, on all cover correspondence and submit two (2) copies of all requested information unless otherwise instructed by a specific information request. All responses to this request for additional information should be sent to Tom Jackson at the Melbourne Service Center (Permitting) address.

1. RAI question 1 requested a copy of the deed for the parcel previously covered under permit number 2-069-0014. You replied that Southlake Utilities intends to purchase the well/site [for well E?] from the new owner in the near future. If this transaction has been completed, please provide a copy of the deed. If not completed, please provide a letter of intent from the current property owner which includes authorization to use the well and incorporate it in this CUP. [40C-2.101(1)]

2. Please provide the approval date for the rate structure submitted in Appendix D. The rate structure appears to be based on base charge plus a flat rate for gallonage used. Please be advised that the District strongly

Dan Roach, CHAIRMAN FERNANDINA BEACH
Kathy Chinoy, VICE CHAIRMAN PONTE VEDRA
James T. Swann, TREASURER COCOA
Otis Mason, SECRETARY ST. AUGUSTINE
William M. Segal MAITLAND
Griffin A. Greene VERO BEACH
James H. Williams OCALA
Patricia T. Harden SANFORD
Reid Hughes DAYTONA BEACH

encourages the use of a rate structure which encourages water conservation. Do you have plans to request from the Public Service Commission an inclined rate structure which encourages water conservation? [Paragraph 10.3(a,c), A.H.]

3. Your response to RAI question 10 that wastewater flows at the site have historically been approximately 50% of total water use. Please explain why the wastewater flows treated are such a low percentage of total water use. The present 165 gallons per capita per day (gpcd) usage rate, requested in Table 2 of the Public Supply Supplement, suggests that additional water conservation measures are needed. Please be aware that the form based plan, as discussed in your response to RAI question 8, has not yet been implemented. As requested, please complete the Water Conservation Plan for Public Supply which requires completion of a water audit. [Paragraph 10.3(a,c), A.H.]

4. Woodridge is located within a Priority Water Resource Caution Area (WRCA). Please provide assurance (e.g., ground water modeling) that the proposed withdrawal rates (approximately 3 mgd by 2007) will not adversely impact existing legal users in the area. [Paragraph 10.3(a,c), A.H.]

5. Please note that your revised version of Table 2 (historical usage) of the Public Supply Supplement (PSS) does not request an allocation for urban landscape irrigation. I understand that plans have not yet been made for irrigation of common areas, but please be advised that a permit modification may be required at a later date if plans are not submitted and/or an allocation requested before issuance of this CUP. If possible, please provide this information at this time. [Paragraph 10.3(a,c), A.H.]

6. You have submitted a revised version of Table 2 which uses 130 gallons per capita per day (gpcd) as the anticipated water usage amount by 2005. Please provide the basis for the requested amount and describe the conservation measures used to attain it. If necessary, please revise Table 2. [Paragraph 10.3(a,c), A.H.]

7. Additional water conservation practices should be implemented. I will contact you within one week to schedule a site visit and look forward to discussing outstanding issues including water conservation and reuse potential for this site. [Paragraph 10.3(a,c), A.H.]

We ask that you submit the requested information in a timely manner to help expedite the review of your application. Please be advised, that pursuant to District procedural rules, any application which has not been technically and administratively completed within ninety (90) days from the date of your receipt of a Request for Additional Information by the District, must be forwarded to the Governing Board with a recommendation for denial based upon an incomplete application. However, should you require more than 90 days to respond, one 90-day extension may be granted based on an evaluation of your specific circumstances. To request a 90-day time extension, please send a written request to me stating the reason for the request and we will let you know if we can grant such an extension.

We thank you again for your application and remind you that should you have any questions regarding this letter or the application in general, please contact me at (407)676-6618.

Sincerely,

Tom Jackson, Hydrologist
Department of Resource Management

cc: PDS/RAIL
John Juilianna
Rich Burklew RB
Douglas Hearn
Yovaish Engineering Sciences, Inc.
953 Sunshine Lane
Altamonte Springs, FL 32714
Southlake Utilities
ATTN: Robert L. Chapman III, President
800 US Highway 27
Clermont, FL 34711
Condev US 27 Ltd.
2487 Aloma
Winter Park, FL 32792

3

Exhibit JCB-20

Correspondence from Thomas E. Jackson, P.G., SJRWMD
Dated 8/30/99

Henry Dean, Executive Director
John R. Wehle, Assistant Executive Director

WATER MANAGEMENT DISTRICT

POST OFFICE BOX 1429 PALATKA, FLORIDA 32178-1429
TELEPHONE 904-329-4500 SUNCOM 904-860-4500
TDD 904-329-4450 TDD SUNCOM 860-4450
FAX (Executive) 329-4125 (Legal) 329-4485 (Permitting) 329-4315 (Administration/Finance) 329-4508

SERVICE CENTERS

618 E. South Street
Orlando, Florida 32801
407-897-4300
TDD 407-897-5960

7775 Baymeadows Way
Suite 102
Jacksonville, Florida 32256
904-730-6270
TDD 904-448-7900

PERMITTING:
305 East Drive
Melbourne, Florida 32904
407-984-4940
TDD 407-722-5368

OPERATIONS:
2133 N Wickham Road
Melbourne, Florida 32935-8109
407-752-3100
TDD 407-752-3102

August 30, 1999

CERTIFIED MAIL NO. Z 397 090 124

Dr. Devo Seereeram
5633 Partridge Drive
Orlando, FL 32810

RE: Third Request for Additional Information
Consumptive Use Permit Application No. 2-069-0010ANM2
Woodridge

Dear Dr. Seereeram:

Thank you for responding to my June 5, 1998, request for additional information (RAI) regarding your Consumptive Use Permit (CUP) application. The District received the RAI response from Doug Hearn of Yovaish Engineering Science on August 3, 1998; however, additional information is needed to complete your application so that we can recommend appropriate action to our Governing Board. The information requested below is required in the District Rule Section 40C-2.101, Florida Administrative Code (F.A.C.), and in Section 4.3.1 of the Applicant's Handbook. The citation A.H. refers to the Applicant's Handbook.

In order to expedite the review of your application, please include the District's permit application number, shown above, on all cover correspondence and submit two (2) copies of all requested information unless otherwise instructed by a specific information request. All responses to this request for additional information should be sent to Tom Jackson at the Orlando Service Center (Permitting) address.

1. In response to item 3 of RAI2 you have submitted a brief Proposed Water Conservation Plan (1 page plus cover; Attachment C). As previously requested, please complete the Water Conservation Plan (WCP) for Public Supply which requires completion of a water audit. I understand you are currently working on the water audit. Please submit the WCP and audit upon completion. It is essential that this information be submitted in a timely manner (within 90 days; no extensions) or I will have to recommend denial of the permit application.

   Additionally, please be advised that more definite plans for utilization of reclaimed water must be in place before permit issuance can be recommended

Dan Roach, CHAIRMAN FERNANDINA BEACH
Duane Ottenstroer, TREASURER SWITZERLAND
Otis Mason, SECRETARY ST. AUGUSTINE
William Kerr MELBOURNE BEACH
Jeff K. Jennings MAITLAND
William M. Segal MAITLAND
Ometrias D. Long APOPKA
Clay Albright EAST LAKE WEIR
Reid Hughes DAYTONA BEACH

by District staff. Please conduct a reuse feasibility study and submit results to the District upon completion. [Paragraph 10.3(a,c), A.H.]

2. Thank you for providing additional information on your existing water rate structure. You have indicated (Proposed WCP; Attachment C, item C3) that Southlake Utilities will *consider* implementing a conservation rate structure. Please note that, as stated in the Applicant's Handbook, "The applicant must submit a written proposal and implement a water conservation promoting rate structure, unless the applicant demonstrates that the cost of implementing such a rate structure is not justified because it will have little or no effect on reducing water use." Please propose a conservation rate structure (e.g., inclined rate structure) and estimate an implementation date. Please be advised that it is *essential* that an approved conservation rate structure be in place or that an implementation date for an approved conservation rate structure be agreed upon by the applicant , the Public Service Commission and the District before a CUP is issued for this project. [Paragraph 10.3(a,c), 12.2.5,1(f), A.H.]

3. Table 5-3 from the Water Facilities Plan (WFP; Attachment B, from CPH Engineers, November 1998) included 0.75 gpd in the projected water system flow amounts for *potential* development in Orange County, but the WFP indicated that no firm schedule for this development is available. Please be advised that if more definite plans are not in place before permit issuance, an allocation for the Orange County use cannot be included in the initial permit, but may be considered as a permit modification once plans are more definite. [Paragraph 10.3(a,b,c,d), A.H.]

4. Please revise Table 2 of the Public Supply Supplement (PSS) to reflect the 97 gpcd projected usage amounts by CPH Engineers, if this is what you are requesting. The table should be completed through the final year of the requested permit duration. I understand from your RAI2 response that you plan to request modification of the permit at a *future* date to include landscape irrigation. Please note that no water for urban landscape irrigation of common areas will be included in the allocations unless the amount is requested and a *basis* (e.g., completed Urban Landscape Irrigation Supplement form including map of irrigated common areas) for the request is provided. As previously requested, provide this information at this time. [Paragraph 10.3(a,c), A.H.]

We ask that you submit the requested information in a timely manner to help expedite the review of your application. Please be advised, that pursuant to District procedural rules, any

application which has not been technically and administratively completed within ninety (90) days from the date of your receipt of a Request for Additional Information by the District, must be forwarded to the Governing Board with a recommendation for denial based upon an incomplete application. However, should you require more than 90 days to respond, one 90-day extension may be granted based on an evaluation of your specific circumstances. To request a 90-day time extension, please send a written request to me stating the reason for the request and we will let you know if we can grant such an extension.

We thank you again for your application and remind you that, should you have any questions regarding this letter or the application in general, please contact me at (407) 893-3532, at the Orlando Service Center.

Sincerely,

Thomas E. Jackson

Thomas E. Jackson, P.G.
Hydrologist – Division of Water Use Regulation
Department of Resource Management

cc: PDS/RAIL3
David Dewey
James Hollingshead
Rich Burklew – Melbourne RM
Douglas Hearn
Yovaish Engineering Sciences, Inc.
953 Sunshine Lane
Altamonte Springs, FL 32714
Southlake Utilities
ATTN: Robert L. Chapman III, President
800 US Highway 27
Clermont, FL 34711
Condev US 27 Ltd.
2487 Aloma
Winter Park, FL 32792

Exhibit JCB-21

Correspondence from Douglas J. Hearn, P.G., Yovaish Engineering Sciences, Inc.
Dated 7/29/99

YOVAISH ENGINEERING SCIENCES, INC.

Consulting Engineers in the Earth Sciences, Geotechnology, Hydrogeology and Construction Materials Testing

July 29, 1999

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PDS
ORLANDO
SJR WMD

The St. Johns River Water Management District
Orlando Service Center
618 East South Street
Orlando, Florida 32801

Attention: Mr. Tom Jackson, P.G.
Hydrologist
Department of Resource Management

Subject: **Response to Request for Additional Information, Southlake Utilities, Inc., Consumptive Use Permit Application No. 2-069-0010ANM2**

Dear Mr. Jackson:

After a significant delay, we are now in a better position to respond to your request for additional information dated June 5, 1998. Your comments and our responses are provided herein. For completeness, the full comments are presented in full, by item number.

1. *RAI question 1 requested a copy of the deed for the parcel previously covered under permit number 2-069-0014. You replied that Southlake Utilities intends to purchase the well/site (for Well E?) from the new owner in the near future. If this transaction has been completed, please provide a copy of the deed. If not completed, please provide a letter of intent from the current property owner which includes authorization to use the well and incorporate it in this CUP.*

   The utility has chosen not to pursue acquisition of the noted well. Attachment A provides a copy of correspondence addressed to Mr. Jim Frazee of the SJRWMD with respect to the status of the well. The utility intends construct two new wells to provide additional system capacity and reliability. Current plans call for the construction of two (2) additional Floridan aquifer wells in a proposed new water treatment plant located northeast of the existing wells/plant (refer to Figure 1).

   As you are aware, additional growth/population projections tied into the approved/planned developments for the area have been performed. Attachment B provides pertinent information for these projections, which was compiled by CPH Engineers, Inc. In short, the most recent growth projections predict an average daily flow of 3.6 MGD through the year 2010. Allowing for this, the proposed well withdrawal rates and average daily flows through 2010 are presented in the following table.

953 Sunshine Lane • Altamonte Springs, FL 32714
Phone: 407-774-9383 Fax: 774-7438

Table 1. Proposed Well Pumping Rates.

Well ID	*Existing Well Capacity (gpm)*	*Existing Well Capacity (gpd)*	*End of Permit Well Capacity (gpm)*	*End of Permit Well Capacity (gpd)*	*Percent of Flows by Well #*	*Daily Withdrawals by Well Allowing for Average Daily Withdrawal of 3599250 gallons in 2010 (gpd)*
A	1,200	1,728,000	1,750	2,520,000	23%	820,142
B	500	720,000	750	1,080,000	10%	351,489
C	180	259,200	180	259,200	2%	84,357
D	1,200	1,728,000	1,500	2,160,000	20%	702,979
E (Proposed)	-	-	1,750	2,520,000	23%	820,142
F (Proposed)			1,750	2,520,000	23%	820,142
Total	3,080	4,435,200	7,680	11,059,200	100%	3,599,250

2. *Please provide the approval date for the rate structure submitted in Appendix D. The rate structure appears to be based on base charge plus a flat rate for gallonage used. Please be advised that the District strongly encourages the use of a rate structure which encourages water conservation. Do you have plans to request from the Public Service Commission an inclined rate structure which encourages water conservation.*

The current Water Tariff rates were approved by the Florida Public Service Commission on May 6, 1996, Authority No. WS-96-0028.

3. *Your response to RAI question 10 that wastewater flows at the site have historically been approximately 50% of total water use. Please explain why the wastewater flows treated are such a low percentage of total water use. The present 165 gallons per capita per day (gpcd) usage rate, requested in Table 2 of the Public Supply Supplement, suggests that additional water conservation measures are needed. Please be aware that the form based plan, as discussed in your response to RAI question 8, has not yet been implemented. As requested, please complete the Water Conservation Plan for Public Supply which requires completion of a water audit.*

The data suggests that the a significant portion of the water used within the utility service area is consumed by other customer uses, such as irrigation of residential lots. The utility requests that all customers abide by SJRWMD water use restrictions. Based on a more thorough evaluation of recent water use data by CPH Engineers (Attachment B, Page 5-8), per capita use of water was estimated at 97 gpd in 1998. This suggests that the utility is well within SJRWMD guidelines for per capita use. A proposed Water Conservation Plan is provided as Attachment C. Please note that the utility is currently performing a water audit and will provide the results within the next several months.

4. *Woodridge is located within a Priority Water Resource Caution Area (WRCA). Please provide assurance (e.g., ground water modeling) that the proposed withdrawal rates (approximately 3 mgd by 2007) will not adversely impact existing legal users in the area.*

As input to the SJRWMD evaluation for the requested water use, a simple analytical drawdown analysis was performed to assess the impact of the wells on adjoining water users. To determine the effect of the proposed withdrawals, the drawdown/cone of depression created by pumpage was estimated utilizing an analytical groundwater model that simulates two-dimensional transient groundwater flow (WinFlow). The transient analysis uses equations developed by Theis (1935) and by Hantush and Jacob (1955) for confined and leaky aquifers, respectively.

The analytical method was used to evaluate the drawdown in a confined aquifer under transient conditions, given a number of estimates relative to the hydraulic characteristics of the aquifer, and the proposed withdrawal rates.

4.1 Aquifer Coefficients Used For Analyses

Based on interpretation of an earlier version of the SJRWMD East Central Florida Regional groundwater flow model, average regional values were determined for use in our drawdown assessment. The average values used in our analysis, are as follows:

a. Transmissivity (T) - Published SJRWMD data for the area estimated the transmissivity of the upper Floridan aquifer at 250,000 to 333,000 ft^2/day. A value of 290,000 ft^2/day was used for our analyses.

b. Leakage Factor - The Winflow model utilizes the Hantush Leakage Factor, which is in units of length. A leakage factor of 4770 was selected, based on the groundwater flow modeling compiled by Dr. Devo Seereeram. PhD, P.E., for the wastewater disposal system for the utility.

c. Storage Coefficient (S) - Based on our experience with similar conditions, review of published data, we have estimated the coefficient of storage to be approximately 0.00075.

4.2 Withdrawal Rates

As note above, the average daily flows for the water system in 2010 are approximately 3.6 MGD. The simulated withdrawals from the well(s) are noted in Table 1 above. The duration of the withdrawals was for a period of 10 years at the noted pumping rates.

4.3 Drawdown/Impact Evaluation Results

Transient analyses were run with the WinFlow model using the above noted aquifer parameters. To allow drawdown to be calculated, head/pressure levels were set at elevation +0 feet, with no regional gradient. The estimated cone of depression (input parameters presented in Appendix C) was superimposed on maps of the site area to evaluate the impact on adjoining water/Floridan aquifer users. The resultant map is presented on Figure 2. Based on evaluation of our analysis, the steady-state drawdown in the immediate vicinity of the wells site would be less than 1 foot, with a drawdown of 0.1 feet occurring within ½ mile of the wellfield.

4.4 Interference with Existing Users

Based on the results of our evaluations presented above, it is our opinion that the steady-state cone of depression created by the proposed withdrawals from the project will not significantly impact adjacent users. In addition, most of the residential wells and public supply wells would be set to account for gross water level changes induced by pumping from local large scale users. Therefore, it is our opinion that an extensive well inventory as outlined by the SJRWMD, "Procedure for Well Inventory - Interference With Existing Users", is not required.

Review of available data for the utility indicates that an extensive aquifer performance test and subsequent analyses have not been performed to date. During the construction of Wells E and F, it is our recommendation that our analysis be better refined by performing a full scale aquifer performance testing.

5. *Please note that your revised version of Table 2 (historical usage) of the Public Supply Supplement (PSS) does not request an allocation for urban landscape irrigation. I understand that plans have not yet been made for irrigation of common areas, but please be advised that a permit modification may be required at a later date if plans are not submitted and/or an allocation requested before issuance of this CUP. If possible, please provide this information at this time.*

We will request a modification of the permit to accommodate this use once plans are better defined with respect to the proposed use.

6. *You have submitted a revised version of Table 2 which uses 130 gallons per capita per day (gpcd) as the anticipated water usage amount by 2005. Please provide the basis for the requested amount and describe the conservation measures used to attain it. If necessary, please revise Table 2.*

As noted above, CPH Engineers has performed more intensive evaluations concerning growth and water use projections, based on approved/planned developments. Please refer to Attachment B for additional information/breakdown from the noted document.

7. *Additional water conservation practices should be implemented. I will contact you within one week to schedule a site visit and look forward to discussing outstanding issues including water conservation and reuse potential for this site.*

As you are aware, we met with yourself and Mr. Rich Burklew, P.G., last summer concerning this matter.

Closure

We trust that the enclosed information is complete and meets your needs. Should you have any questions concerning this matter, please do not hesitate to contact me.

Sincerely,

Yovaish Engineering Sciences, Inc.

8-2-99

Douglas J. Hearn, P.G.
Florida Registration No. 0001279

Attachments
A 1999-04-19 Letter to Jim Frazee
B Excerpts from CPH Water Facilities Plan
C Proposed Water Conservation Plan
D WinFlow Simulation Input Parameters

Figures
1 Existing and Proposed Well Locations
2 Predicted Drawdown Contours

ATTACHMENT A

April 14, 1999 Correspondence Concerning Well at Sarah's Place

Response to Request for Additional Information,
Southlake Utilities, Inc.,
Consumptive Use Permit Application No. 2-069-0010ANM2

April 19, 1999

SJRWMD
Orlando Service Center
618 East South Street
Orlando, Florida 32801

Attention: Mr. Jim Frazee

Subject: **Status of Well at Woodridge Soubdivision/Sarah's Place Apartments, Consumptive Use Permit Application No. 2-069-0010ANM2, Southlake Utilities, Inc., Lake County, Florida (PN 98-584.01)**

Dear Mr. Frazee:

In response to recent correspondence from you and representatives of Southlake Utilities, the Utility has determined that the Sarah's Place well does not fit into their long term needs. Therefore, Southlake Utilities will discontinue efforts to include the well in the current Consumptive Use Permit review.

Please pursue abandonment/future utilization concerns that the SJRWMD has concerning this well with the current landowner/current CUP holder. Call if you have any questions and/or concerns.

Sincerely,

Yovaish Engineering Sciences, Inc.

Douglas J. Hearn, P.G.
Florida Registration No. 0001279

cc: Mr. Tom Jackson, P.G. - SJRWMD Melbourne
Dr. Devo Seereeram, P.E.
Mr. Ron Wilson, P.E. - R.H. Wilson and Associates
Mr. Alan Baker, P.E. - CPH Engineers - DeLand

Via Fax & U.S. Mail
1999-04-19 Letter to Jim Frazee at SJRWMD.wpd

7

ATTACHMENT B

Excerpts from Southlake Utilities Water Facilites Plan Prepared By CPH Engineers, Inc.
November, 1998
CPH Job No. S7301.00

Response to Request for Additional Information,
Southlake Utilities, Inc.,
Consumptive Use Permit Application No. 2-069-0010ANM2

SOUTHLAKE UTILITIES

WATER FACILITIES PLAN

November 1998

Prepared by:

CPH-Engineers, Inc.
101 N. Woodland Boulevard Suite 100
DeLand, Florida 32720
Phone: (904) 736-4142
Fax: (904) 736-8412

CPH Job No. S7301.00

SECTION 5.0
FUTURE CONDITIONS

5.1 Census Tracts

Lake County Public Works Department is in the process of preparing current population estimates and projections for a 2020 plan. Population estimates and projections through the year 2020 are being made according to traffic zones. The data will be reviewed by citizens and technical committees and is expected to be accepted in late 1998.

Census data for the service area was projected before planning for the proposed developments and the Existing census data does not adequately project the future population. The current and projected population of the service area have been estimated based on permitted and proposed future developments.

5.2 Future Land Use

The designated future land use for the service area is Urban, Urban Expansion, and Ridge. The Lake County Comprehensive Plan allows for all land uses within the Urban land use category except residential development over 7 units per acre and mining activities. All land uses are allowed within the Urban Expansion land use category except for residential developments over 4 units per acre, corridor commercial developments, and mining activities. Under the Ridge land use category, all land uses are allowed except for residential developments over 4 units per acre, commercial developments over 5,000 square feet, corridor commercial, industrial developments, mining, golf courses, power plants, incinerators, landfills, and airports.

Future development within the service area is expected to consist of residential developments and a small amount of commercial development to serve the needs of the residential areas.

5.3 Demographic Projections

5.3.1 Population Projections in Five Year Increments for a Twenty Year Planning Period

Population projections for a twenty year planning period have been based on the number of permitted developments within the service area. Information from the various developers has been obtained and population projections have been based according to the information furnished by the developers.

The Clear Creek development is permitted for 246 single family units. Information from the developer, D.H. Horton, Inc indicates that 14 units in Phase I have been

completed. Several other units in Phase I are under construction are expected to be completed in the near future. The developer projects that all 246 units will be constructed by the year 2000.

The Woodridge development has been permitted for 330 single family units. Condev, the developer, provided information that 240 homes have been constructed. All 330 homes are expected to be finished by 1999. Condev is also planing the Glenbrook development consisting of 268 single family units and 359 multi-family units. Construction of both developments is expected to begin in early 1999. According to the developer, all 268 single family homes are expected to be completed by 2002 and all 359 multi-family units are expected to be completed by 2000.

Worthwhile Development is constructing Sarah's Place, which has been permitted for 330 multi-family units. Worthwhile Development stated that Sarah's Place will be completed in 1998. Currently, 30 units are occupied and the remaining units are expected to be filled when construction is completed.

Worthwhile Development began construction on Nelson Park Apartments October 1998. This development has been permitted for 358 multi-family units and is expected to be completed by October 1999.

High Grove Apartments has been permitted for 160 single family units. McIntosh Engineers is providing services for this development.

McIntosh Engineers has also been providing planning and engineering services for Southlake F.Q.D. Southlake has been permitted for 8,000 units. The Southlake Apartments development is one of the Southlake F.Q.D. projects and has been permitted for 590 multi-family units. 434 units have been completed and the construction of the remaining 110 units is expected to be completed in the near future.

Summer Bay is a time share development which has been permitted for 2028 units. Information from the Summer Bay construction office indicated that 130 units have been completed. The construction schedule plans on 75 units per year until build out.

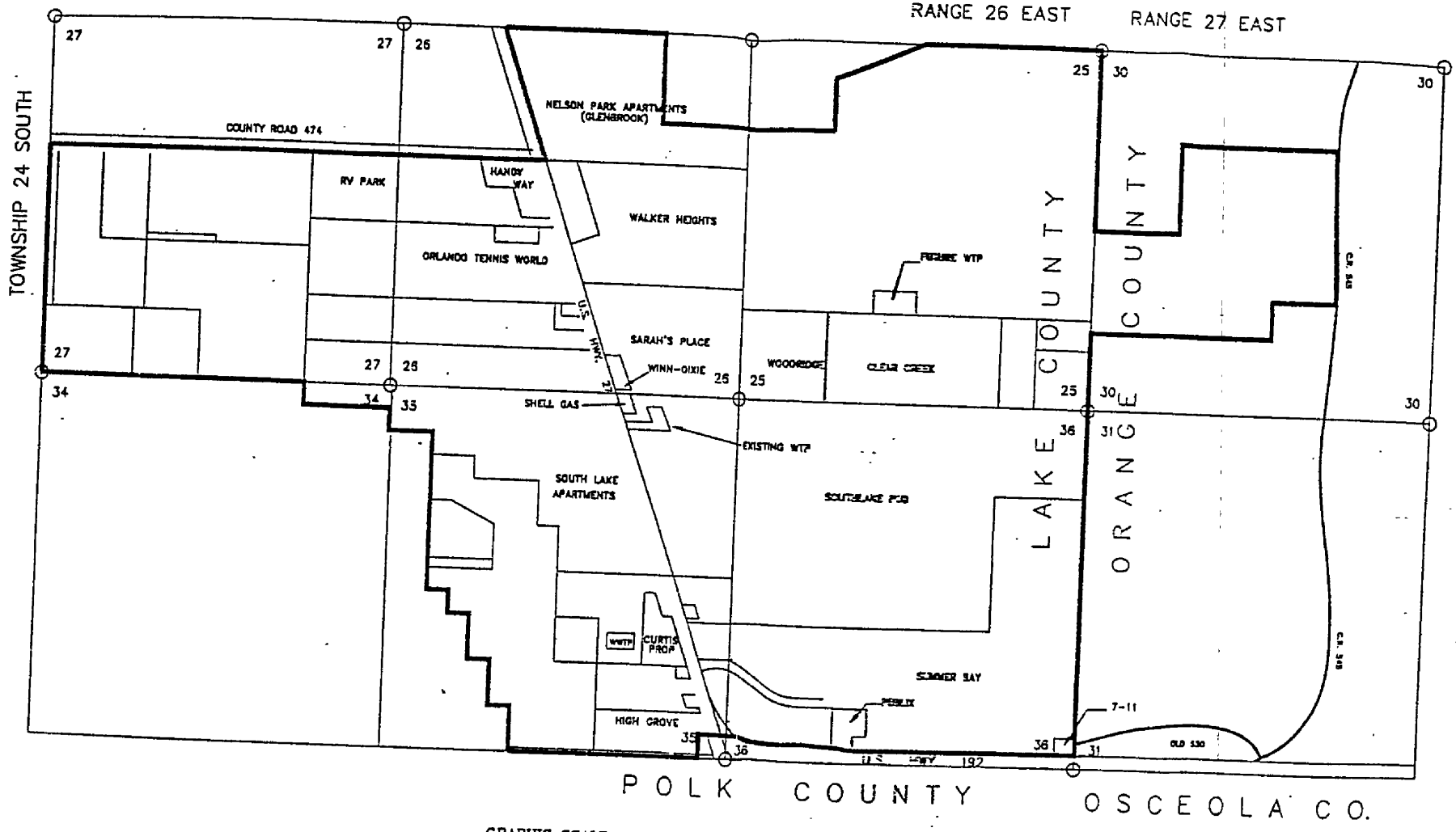
Walker Heights is a multi-family development which has been permitted for 733 units.

Based on the proposed development of the service area, the following unit projections for the service area have been made. Table 5-1 lists the population projections for a 20 year planning period.

Table 5-1 Unit Projections for Service Area							
Development	**1998**	**2000**	**2005**	**2010**	**2015**	**2020**	**Total Units per Development**
Clear Creek	14	246	246	246	246	246	246
Woodridge single-family	240	330	330	330	330	330	330
Sarah's Place multi-family	200	330	330	330	330	330	330
Glenbrook single family	0	0	268	268	268	268	268
Glenbrook multi-family	0	358	358	358	358	358	358
High Grove single-family	0	50	160	160	160	160	160
Southlake proposed single family	0	100	600	1,100	1,800	2,500	2,500
Southlake proposed multi-family	0	100	599	599	599	599	599
Southlake existing multi-family	434	434	434	434	434	434	434
Southlake future multi-family	0	100	600	1,100	2,000	3,000	3,000
Walker Heights multi-family	0	100	374	374	374	374	374
Walker Heights single family	0	0	286	286	286	286	286
Summer Bay timeshare	130	280	717	1,154	1,591	2,028	2,028
Total Units	**1,018**	**2,428**	**5,302**	**6,739**	**8,776**	**10,913**	

Figure 5-1 illustrates the Southlake service area and the existing and proposed developments within the service area.

EXISTING AND PROPOSED DEVELOPEMENTS WITHIN SERVICE AREA



Conklin Porter and Holmes ENGINEERS, INC.

CPH NO. 97001.00	FIGURE 5-1 EXISTING AND PROPOSED DEVELOPMENTS WITHIN SERVICE AREA
DEVELOPMENTS.dwg	

Based on the above information, population projections have been calculated in Table 5-2. Population projections have been formulated based on the assumption of 2.5 persons per multi-family unit and 3.5 persons per single-family unit.

Table 5-2
Population Projections for Service Area

Development	1998	2000	2005	2010	2015	2020	Population per Development
Clear Creek	49	861	861	861	861	861	861
Woodridge	840	1,155	1,155	1,155	1,155	1,155	1,155
Sarah's Place	500	825	825	825	825	825	825
Glenbrook single family	0	0	938	938	938	938	938
Glenbrook multi-family	0	895	895	895	895	895	895
High Grove	0	175	560	560	560	560	560
Southlake proposed single family	0	350	2,100	3,850	6,300	8,750	8,750
Southlake proposed multi-family	0	250	1,498	1,498	1,498	1,498	1,498
Southlake existing multi-family	1,085	1,085	1,085	1,085	1,085	1,085	1,085
Southlake future multi-family	0	250	1,500	2,750	5,000	7,500	7,500
Walker Heights multi-family	0	250	935	935	935	935	935
Walker-Heights single family	0	0	1,001	1,001	1,001	1,001	1,001
Summer Bay	325	700	1,793	2,885	3,978	5,070	5,070
Total Population	**2,799**	**6,796**	**15,146**	**19,230**	**25,031**	**31,073**	

1400 2831 21000 24000

5.4 Forecast of Water Usage

5.4.1 Design Flow Requirements in Five Year Increments for a Twenty Year Planning Period

The water service area served by Sorrilake Utilities is experiencing a rapid growth rate due to the numerous developments within the service area. These developments and their projected flows are summarized in Table 5-3. The flows have been estimated based on the number of units currently occupied in each development and the proposed number of units for each development. A flow of 350 gallons per day for single-family units and a flow of 250 gallons per day for multi-family units has been used in applications for public drinking water facility construction permits.

Table 5-3
Projected Water System Flows per Development (Gallons per Day)

Development	1998	2000	2005	2010	2015	2020
Clear Creek single family	4,900	86,100	86,100	86,100	86,100	86,100
Woodridge single family	84,000	115,500	115,500	115,500	115,500	115,500
Woodridge Commercial	1,200	1,200	7,200	10,800	12,000	12,000
Sarah's Place multi-family	50,000	82,500	82,500	82,500	82,500	82,500
Glenbrook single family	0	0	93,800	93,800	93,800	93,800
Glenbrook multi-family	0	89,500	89,500	89,500	89,500	89,500
Glenbrook Commercial	0	3,000	18,000	27,000	30,000	30,000
High Grove single-family	0	17,500	56,000	56,000	56,000	56,000
High Grove Commercial	0	600	3,600	5,400	6,000	6,000

15

Table 5-3
Projected Water System Flows per Development (Gallons per Day)

Development	1998	2000	2005	2010	2015	2020
Southlake proposed single family	0	35,000	210,000	385,000	630,000	875,000
Southlake proposed multi-family	0	25,000	149,750	149,750	149,750	149,750
Southlake existing multi-family	108,500	108,500	108,500	108,500	108,500	108,500
Southlake future multi-family	0	25,000	150,000	275,000	500,000	750,000
Southlake Commercial	0	7,000	42,000	63,000	70,000	70,000
Walker Heights multi-family	0	25,000	93,500	93,500	93,500	93,500
Walker Heights single family	0	0	100,100	100,100	100,100	100,100
Walker Commercial	0	1,000	6,000	9,000	10,000	10,000
Summer Bay timeshare	32,500	70,000	179,250	288,500	397,750	507,000
Summer Bay Commercial	0	3,600	21,600	32,400	36,000	36,000
Publix	0	600	3,600	5,400	6,000	6,000
Curtis Commercial	0	2,500	15,000	22,500	25,000	25,000
Orange County Development	0	0	750,000	750,000	750,000	750,000
Total Flow	281,100	699,100	2,381,500	3,599,250	4,948,000	6,302,250

Flows have been projected based on an average daily usage from January 1998 to July 1998 of 270,000 gallons and a service area population of 2,799. These numbers indicate a per capita usage of 97 gpcd. FDEP requires that a factor of 2.25 be used to project the maximum daily flow. Table 5-4 summarizes the projected flows for the service area.

Orange County has the right to request that Southlake Utilities provide potable water service for approximately 2,600-acres of land in southwestern Orange County that is suitable for development. If water service is requested by Orange County, Southlake Utilities has the obligation to provide water service, and the water system capacity must be sufficient in size to serve the 2,600-acres.

Southlake Utilities plans to expand the capacity of the water supply system to meet the projected demands of this area. The projected water demands for the Orange County parcel are estimated to be 1,000 gallons per acre per day or approximately 3.0 MGD. A schedule for development of this parcel is not available. The additional 3.0 MGD demand for Orange County will be included with the service area demands. 0.75 MGD average daily flow allowance for Orange County will be phased in over a five-year period starting in 2000. An additional 0.75 MGD average daily flow will be phased in over a five-year period starting in 2005, 2010, and 2015.

Table 5-4
Projected Flows for Service Area

Year	Population	Average Day (gal/day)	Max Day (gal/day)	Max Day Demand Factor
1998	2,799	281,000	632,250	2.25
2000	6,796	699,100	1,572,975	2.25
2005	15,146	2,381,500[1]	5,358,375	2.25
2010	19,230	3,599,250[1]	8,098,313	2.25
2015	25,031	4,948,000[1]	11,133,000	2.25
2020	31,073	6,302,250[1]	14,180,063	2.25

[1] Includes an additional 0.75 MGD for Orange County

Section 9.08.00 of the Lake County Land Development Regulations and the National Fire Protection Standards (NFPA) outlines the required Fire Protection Standards for Lake County. All new buildings or structures are required to have an available water supply for fire protection. The Lake County and Orange County fire protection regulations are summarized in Table 5-5 below.

ATTACHMENT C

Proposed Water Conservation Plan

Response to Request for Additional Information,
Southlake Utilities, Inc.,
Consumptive Use Permit Application No. 2-069-0010ANM2

POTABLE WATER SUPPLY (RESIDENTIAL)

C.1 Audit of Water Supply System

The Utility is currently undergoing an audit, and anticipates the results within the next several months. Corrective measures to conserve water will be implemented if the on-going audit results indicate cost-effectiveness.

C.2 Re-Use Feasibility

The utility currently plans to increase the level of treatment for the wastewater plant within the next three years. The net result will be that reclaimed water will be available for those projects where it is economically feasible to provide the transmission facilities.

C.3 Conservation Rate Structure

The utility will consider implementing a conservation rate structure. The rate structure will be developed such that excessive water use is discouraged by imposing a surcharge, provided it is not in violation of the charter issued by the Public Service Commission. All new customers/homeowners served by the utility will be provided a leaflet describing the rate structure and the purpose for its implementation (water conservation).

C.4 Irrigation Meters

The water utility will not provide individual meters for use in residential irrigation.

C.5 Landscaping/Xeriscaping

The utility will request that project builders/landscapers utilize xeriscaping in the landscaping of individual residences. Each builder/landscaper working in the utility service area will be provided a written request that they utilize xeriscaping techniques and referred to the Lake County Extension Service for further information/guidance. The use of low volume, micro-irrigation systems will also be requested.

C.6 Individual Residential Wells

Individual Floridan aquifer residential wells will not be permitted.

C.7 Education

The water utility will provide an education program for employees and customers consisting of bi-monthly water conservation briefs issued with water bills. Each new homeowner will be provided by the sales office and/or water utility, literature describing water conservation measures that can be considered. This literature will include a description of the conservation rate structure, and an outline of the Water Conservation Plan filed with SJRWMD. The water utility will offer audits for individual connections to recommend techniques to reduce water consumption.

ATTACHMENT D

WinFlow Simulation Input Parameters

Response to Request for Additional Information,
Southlake Utilities, Inc.,
Consumptive Use Permit Application No. 2-069-0010ANM2

```
================================================================================
                                  WinFlow
                    Analytical Model of 2D Ground-Water Flow
                                 Developed by
                              James O. Rumbaugh, III
                              Douglas B. Rumbaugh
                        (c) 1995 Environmental Simulations, Inc.
================================================================================
Date: 6/29/99
Time: 15:20:11.00
Input File: SOUTHLAK.WFL
Map File  :
================================================================================
                                 Model Entities
Number of Linesinks Defined by Infiltration Rate = 0
Number of Linesinks Defined by Head = 0
Number of Ponds = 0
Number of Wells = 6

     Well #1
        Center of Well --  x: 437195.843750   y: 1464486.125000
        Radius = 0.500000
        Pumping Rate = 109629.937500
        Head at Well Radius           = -0.732193
     Well #2
        Center of Well --  x: 437945.718750   y: 1464088.250000
        Radius = 0.416670
        Pumping Rate = 46984.261719
        Head at Well Radius           = -0.605661
     Well #3
        Center of Well --  x: 438105.562500   y: 1463640.125000
        Radius = 0.250000
        Pumping Rate = 11276.219727
        Head at Well Radius           = -0.387874
     Well #4
        Center of Well --  x: 438073.593750   y: 1464135.375000
        Radius = 0.500000
        Pumping Rate = 93968.523438
        Head at Well Radius           = -0.731591
     Well #5
        Center of Well --  x: 441600.531250   y: 1466720.750000
        Radius = 0.667000
        Pumping Rate = 109629.937500
        Head at Well Radius           = -0.775501
     Well #6
        Center of Well --  x: 441393.281250   y: 1466722.125000
        Radius = 0.667000
        Pumping Rate = 109629.937500
        Head at Well Radius           = -0.779237

Reference Head = 0.000000    Defined at -- x: 537946.000000   y: 0.000000
```

==========

Aquifer Properties

.... Transient Flow Model ....

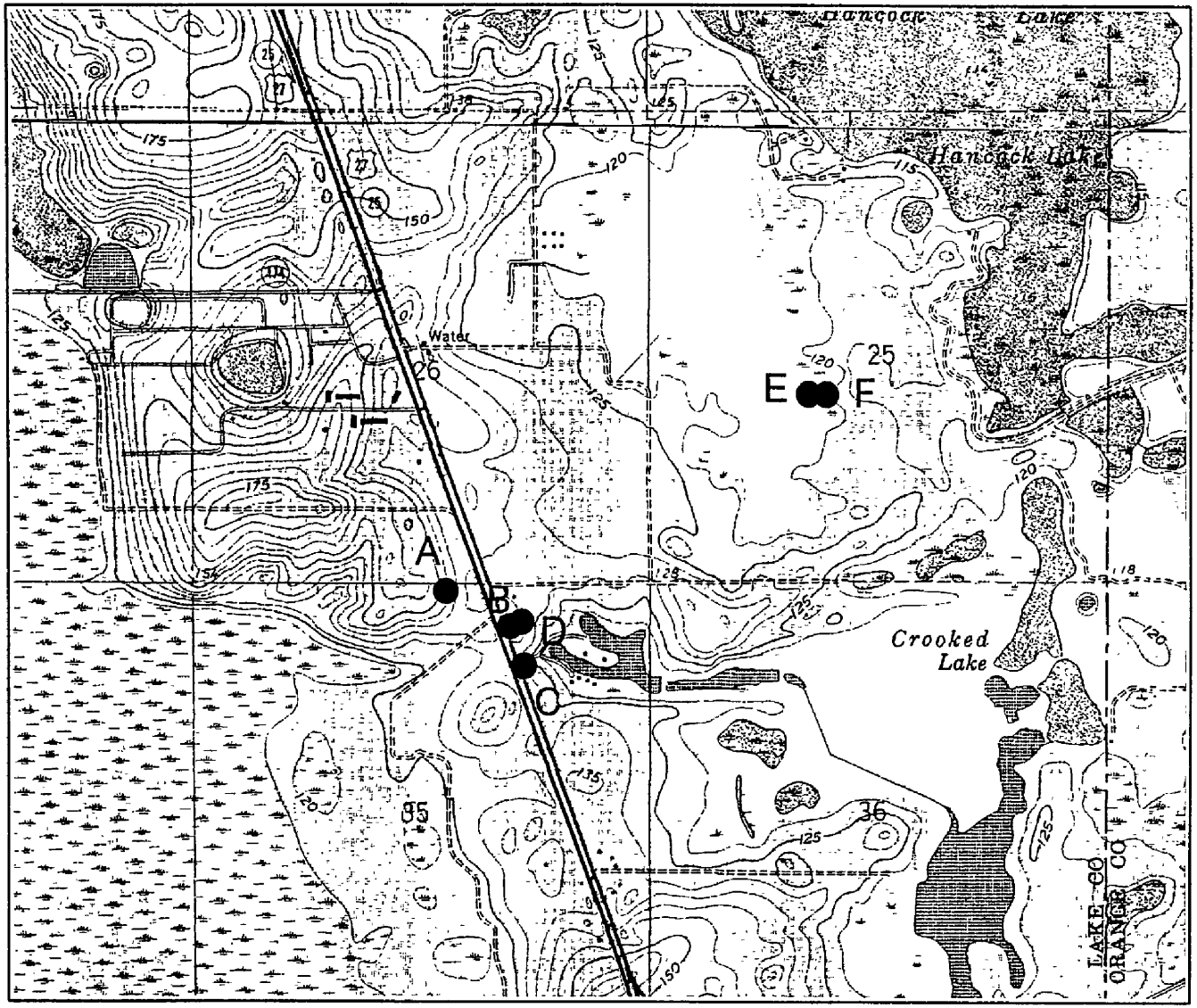
Permeability.....= 364.000000 [L/T]
Porosity.....= 0.250000
Storage.....= 0.000750
Leakage factor.....= 4770.000000
Elevation of Aquifer Top....= -20.000000
Elevation of Aquifer Bottom.= -820.000000
Uniform Regional Gradient...= 0.000000
Angle of Uniform Gradient...= 0.000000

Model Results Computed at Time = 3650.000000

FIGURES

Response to Request for Additional Information,
Southlake Utilities, Inc.,
Consumptive Use Permit Application No. 2-069-0010ANM2

Existing and Proposed Well Locations



LEGEND

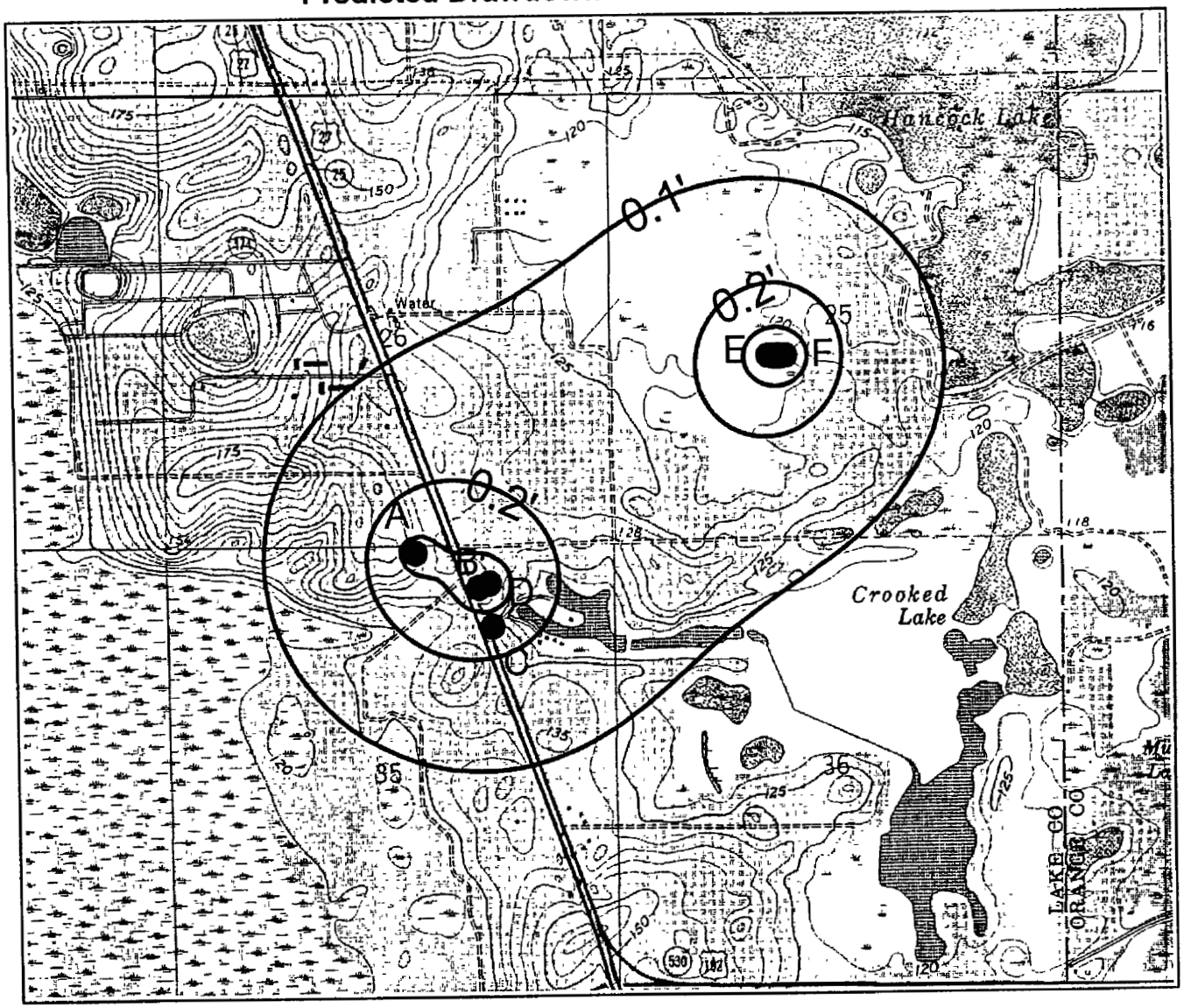
● Well Location (Typical)

2000 0 2000 Feet

YOVAISH ENGINEERING SERVICES, INC.

Figure 1

Predicted Drawdown Contours - 20 Yrs ADF



LEGEND

Well Location (Typical)

Estimated Drawdown Contour (0.1 Ft Interval)

2000 0 2000 Feet

Figure 2

Exhibit JCB-22

Consumptive Use Technical Staff Report, SJRWMD
Dated 3/30/00

CONSUMPTIVE USE TECHNICAL STAFF REPORT
PUBLIC SUPPLY:
HOUSEHOLD, COMMERCIAL/INDUSTRIAL,
AND WATER UTILITY TYPE USES

March 30, 2000

GRS #2392

Formerly 2-069-0010ANM2

OWNER Condev U.S. 27 Ltd.
2487 Aloma
Winter Park, FL 32792
(407) 679-1748

APPLICANT: Southlake Utilities
800 U.S. Highway 27
Clermont, FL
(352) 394-8898
ATTN: Robert L. Chapman III, President

PROJECT NAME: Woodridge-Southlake Utilities, Inc.

ACRES SERVED: 2765

LOCATION: Lake County
Secs. 25, 26, 27 and 35 / T24S / R26E

WATER USE:

Requested Allocation/Use:	1,138.8 million gallons per year (mgy) of ground water from the Floridan aquifer for public supply use through the year 2008.
Recommended allocation:	418.0 mgy of ground water from the Floridan aquifer for household, commercial, and utility uses through the year 2003.
Allocation Based On:	Industry Standards and Historical Use / Projected Population

PREVIOUSLY PERMITTED USE:

CUP no. 2-069-0010NM was issued on February 11, 1992.

Expiration: February 11, 1997

Allocation: 77.38 mgy ground water in 1992,
251.35 mgy ground water in 1993,
383.65 mgy ground water in 1994,
513.44 mgy ground water in 1995, and
643.33 mgy ground water in 1996 for household (94%), water utility, 5%), and commercial/industrial (1%) uses.
1.84 mgd (max) for essential use as needed

USE STATUS:

This is a timely renewal of an existing permit with a request for an increase in allocation and the addition of two new wells. The recommended allocation for the utility is 1.145 million gallons per day in the year 2003 for Household, Commercial and Utility type uses.

	1999	2003
Population served	4,807	11,806
Average daily use (mgd)	.528	1.145
Household Average daily use (mgd)	.4835	1.099
Average gpdc (household)	101	97
Commercial/Industrial Average daily use (mgd)	0.0275	0.034
Water Utility daily use (mgd)	0.00	0.00
Unaccounted for water (mgd)	0.017	0.010
Use Classifications:		
Household:	94.6%	95.9%
Commercial/Industrial:	5.3%	3.2%
Urban Landscape Irrigation	0%	0%
Water Utility:	0%	0%
Unaccounted For Use	3.2%	0.9%

AUTHORIZATION:

The District authorizes, as limited by the attached permit conditions, the use of up to 418.0 million gallons per year of ground water from the Floridan aquifer for public supply (household, commercial/industrial, and water utility type uses) in the year 2003.

TIME FRAMES:

Application Received	May 30, 1996
First RAI Letter	June 27,1996
Expired Time Frame Letter	October 22,1996
Request for Extension	November 7, 1996
Extension Granted	November 8, 1996
Expired Time Frame Letter	March 18,1997
Request for Extension	April 14, 1997
Extension Granted	April 24, 1997
Request for Extension	March 3, 1998
Extension Granted	March 9, 1998
RAI Response Received	May 8, 1998
2nd RAI Letter	June 5, 1998
Request for Extension	September 8, 1998
Extension Granted	September 10, 1998
Request for Extension	December 9, 1998
Extension Granted	December 9, 1998
Request for Extension	February 16, 1999
Extension Granted	February 19, 1999
Request for Extension	May 27, 1999
Extension Granted	May 27,1999
RAI Response Received	August 3, 1999
3rd RAI Letter	August 30, 1999
Warning Letter	January 3, 2000
RAI Response Received	February 4, 2000
Application Complete	February 4, 2000
90th day	May 4, 2000

PROJECT DESCRIPTION:

This utility's service area is located in south Lake County (Figure 1). The service area is located along the U.S Highway 27 corridor to the north of the intersection of U.S Highways 27 and 192. This application is for renewal of an existing permit with a request for two new wells and an increase in allocation. The previous permit allocated

643.33 mgy ground water in 1996 for household, water utility and commercial/industrial uses. However, the actual consumption in the service area in 1999 was approximately 193 mgy because actual growth was significantly less than anticipated in the previous permit. The service area includes a mixture of high density residential, single family residential and light commercial uses. The regional growth rate is relatively high but difficult to accurately project beyond a short time period. Per capita consumption has apparently decreased over the past seven years from high level of approximately 190 gallons per capita per day (gpcd) to current levels of approximately 100 gpcd.

WELL INFORMATION:

Well Number	Casing Diameter	Total Depth	Existing/ Proposed	Source	Type Use
A	12"	300' bgs	Existing	Floridan	Public Supply
B	10"	240' bgs	Existing	Floridan	Public Supply
C	6"	900' bgs	Existing	Floridan	Public Supply
D	12"	448' bgs	Existing	Floridan	Public Supply
E	16"	600' bgs	Proposed	Floridan	Public Supply
F	16"	600' bgs	Proposed	Floridan	Public Supply

PERMIT APPLICATION REVIEW:

Section 373.223, Florida Statutes (F.S.), and Section 40C-2.301, Florida Administrative Code (F.A.C.), require an applicant to establish that the proposed use of water:

(a) is a reasonable-beneficial use;

(b) will not interfere with any presently existing legal use of water; and,

© is consistent with the public interest.

In addition, the above requirements are detailed further in the District's Applicant's Handbook: Consumptive Uses of Water, February 8, 1999. District staff has reviewed the applicant's request for renewal of their consumptive use permit, pursuant to the above-described requirements, and has determined that the application meets the conditions for issuance of this permit. Highlights of the staff review are provided below:

Wetland Impacts:

I. The staff evaluated whether the proposed withdrawal of water would harm wetlands since there are existing wetlands within the project area. Section 9.4.3, A.H. provides that the issuance of a permit will be denied as inconsistent with the public interest if the permit would allow withdrawals of water that would cause an unmitigated adverse impact on an adjacent land use which existed at the time of permit application. Such adverse Impacts include damage to crops, wetlands or other types of vegetation (section 9.4.3© A.H.) In addition, subsection 10.3(d), A.H. provides that the environmental harm caused by the consumptive use must

be reduced to an acceptable amount in order for a use to be considered reasonable beneficial.

The applicant conducted an analytical drawdown analysis in order to assess the impact of the proposed withdrawals on adjoining water users. The model simulated estimated average daily flows for the water system in 2010 (3.6 MGD). District staff used model results to evaluate whether the proposed withdrawal of water will harm wetlands. The ground water modeling indicates that drawdowns in the Floridan aquifer in the immediate vicinity of the wells will be less than 1.0 foot decreasing to 0.2 feet at a distance of approximately 500 feet from the wells. The model employed does not provide estimates of the corresponding drawdown in the surficial aquifer. However, due to the minimal drawdown in the Floridan aquifer associated with the proposed use, staff has concluded that the proposed withdrawal of water will not harm or damage adjacent wetlands within the 3 year recommended permit duration. The applicant has proposed to complete an aquifer performance testing program when the two new wells are constructed to further refine the understanding of the aquifer characteristics of the area for future predictive modeling efforts. Staff recommends that the applicant be required to complete an aquifer performance testing program as a condition of this permit.

Interference With Existing Legal Uses:

II. The staff evaluated whether the proposed withdrawal of water would interfere with Existing Legal Users since the proposed withdrawals were significantly greater than existing withdrawals. Section 9.4.4, A.H. provides that the issuance of a permit will be denied as inconsistent with the public interest if the permit would allow withdrawals of water that would cause an interference with a legal use of water which existed at the time of permit application. It is presumed that interference occurs when the withdrawal capability of any individual withdrawal facility of a presently existing legal use of water experiences a 10% or greater reduction in withdrawal capacity.

The applicant conducted an analytical drawdown analysis in order to assess the impact of the proposed withdrawals on adjacent water users. The model simulated estimated average daily flows for the water system in 2010 (3.6 MGD). The ground water modeling indicates that drawdowns in the Floridan aquifer in the immediate vicinity of the wells will be less than 1.0 foot decreasing to 0.2 feet at a distance of approximately 500 feet from the wells. Due to the minimal estimated drawdown in the Floridan aquifer associated with the proposed use, staff has concluded that the proposed withdrawal of water will not interfere with existing legal users within the 3 year recommended permit duration. The applicant has proposed to complete an aquifer performance testing program when the two new wells are constructed to further refine the understanding of the aquifer characteristics of the area for future predictive modeling efforts. Staff recommends that the applicant be required to complete an aquifer performance testing program as a condition of this permit (Condition 11).

CONSERVATION:
The utility submitted water conservation information on 8/3/99 as part of the permit application process. Conservation efforts include the following:

1. Water Audits:
   An audit of the entire system was provided with the application package.
   Reuse Feasibility

2. The Utility currently plans to increase the level of treatment for the wastewater plant within the next three years. According to the utility, reclaimed water will be available for those projects where it is economically feasible to provide the transmission facilities. Staff recommends the permittee be required to complete a reuse feasibility study as a condition of this permit.

3. Customer Education:
   a) Bimonthly water conservation briefs will be issued with water bills.
   b) Each new homeowner will be provided literature describing water conservation measures that can be considered.
   c) The Utility will offer audits for individual connections to recommend techniques to reduce water consumption.
   4) Irrigation meters are not available to customers.

4. Water Conservation Rate Structure:
   As part of this application process, the Utility was asked to implement an inclined block rate structure. The permittee was unable to implement an inclined block rate structure within the application review period. However, the permittee has agreed to pursue a water conservation promoting rate structure as part of their next Public Service Commission rate case. District staff recommends that this be required as a condition of this permit (Conditions 13 and 14).

REUSE:
The Utility has a wastewater treatment facility and currently disposes of wastewater via percolation ponds. The permittee has not improved the wastewater facility to produce reclaimed quality water at this time. The Utility currently plans to increase the level of treatment for the wastewater plant within the next three years. The projected wastewater flows in the year 2003 approach 1 million gallons per day. According to the utility, reclaimed water will be available for those projects where it is economically feasible to provide the transmission facilities. Staff recommends the permittee be required to complete a reuse feasibility study as a condition of this permit (Condition 12).

PERMIT DURATION:
The applicant has not requested a 20 year permit duration. Section 6.5.2 of the Applicant's Handbook provides that individual consumptive use permits shall have a

duration of 10 years unless the Governing Board determines that a different permit duration is warranted based on a consideration and balancing of factors listed in section 6.5.3. Based on the consideration and balancing of these factors, the staff is recommending a permit duration of three years. Staff is recommending a duration of 3 years pursuant to subsection 6.5.3(g) and 6.5.3(i). A shorter duration permit is necessary to insure that the source is capable of producing the requested amount of water without causing unmitigated adverse impacts. A three year permit will allow the permittee to build the two proposed wells and complete an Aquifer Performance Test Program so that future impact analyses can be refined. In addition, the permittee has not been able to implement all available water conservation measures which are generally feasible for public utilities of this size. A three year permit will enable the District to reevaluate the ability of the permittee to implement beneficial reuse and implement a water conservation based rate structure.

STAFF RECOMMENDATION: Approval

GENERAL CONDITIONS (see condition sheet): 1-9, 12, 13

SPECIAL CONDITIONS:

OTHER CONDITIONS:

1. All submittals made to demonstrate compliance with this permit must include the CUP number 2392 plainly labeled.

2. This permit will expire 3 years from the date of issuance.

3. Maximum annual ground water withdrawals for public supply use must not exceed:

   240.6 million gallons in 2000,
   299.7 million gallons in 2001,
   358.9 million gallons in 2002, and
   418.0 million gallons in 2003.

4. Maximum daily ground water withdrawals for public supply use must not exceed:

   1.154 million gallons in 2000,
   1.568 million gallons in 2001,
   1.983 million gallons in 2002, and
   2.398 million gallons in 2003.

5. Maximum daily ground water withdrawals from the Floridan aquifer for essential type use (fire protection) must not exceed 1.84 million gallons from 2000 to 2003.

6. Wells B and D, as listed on the application, are equipped with totalizing flowmeters. The meters must maintain 95% accuracy, be verifiable and be installed according to manufacturer specifications.

7. Prior to beginning usage, well numbers A, C, E and F as listed on the application must be equipped with totalizing flow meters. Such meters must maintain 95% accuracy, be verifiable and be installed according to the manufacturer's specifications. Documentation (i.e. manufacturer's specifications and photo) of the proper installation of these meters must be submitted within 30 days of meter placement.

8. Total withdrawal from wells A, B, C, D, E and F, as listed on the application, must be recorded continuously, totaled monthly, and reported to the District at least every six months from the initiation of the monitoring using District Form No. EN-50. The reporting dates each year will be as follows:

Reporting Period	Report Due Date
January - June	July 31
July - December	January 31

9. The Permittee must maintain the flow meters. In case of failure or breakdown of any meter, the District must be notified in writing within 5 days of its discovery. A defective meter must be repaired or replaced within 30 days of its discovery.

10. The Permittee must have the flow meters calibrated once every 3 years within 30 days of the anniversary date of permit issuance, and recalibrated if the difference between the actual flow and the meter reading is greater than 5%. District Form No. EN-51 must be submitted to the District within 10 days of the inspection/ calibration.

11. Prior to construction of Wells E and F, the permittee will submit a proposed Aquifer Performance Test Program, for District approval. Prior to use of Wells E and F, the permittee will implement a District approved Aquifer Performance Test Program and submit a hydrogeological report, that documents the results of the Aquifer Performance Test Program, as described in Appendix F of the Applicant's Handbook.

12. Reclaimed water from the Southlake WRF must be used as irrigation water whenever an irrigation demand exists and such reuse is feasible pursuant to District rules. Ground water resources may not be used for green space or common area irrigation. The permittee must conduct a comprehensive reuse feasibility study to evaluate all potential reuse alternatives within two years of permit issuance. A report detailing the results of the comprehensive reuse feasibility study must be submitted to the District for approval at least six months prior to the permit expiration date.

13. The permittee must develop, and obtain District approval of, a proposed water conserving rate structure within two years of permit issuance. The evaluation must include a demographic study of the service area and graphically illustrate the percentage of users per each increasing 1,000 gallon unit of water. A report detailing the proposed rate structure must be submitted to the District at least six months prior to the permit expiration date.

14. The permittee must submit, for adoption, a District approved water conserving rate structure to the Florida Public Service Commission (FPSC) as part of their next water rate case.

HOLLINGSHEAD

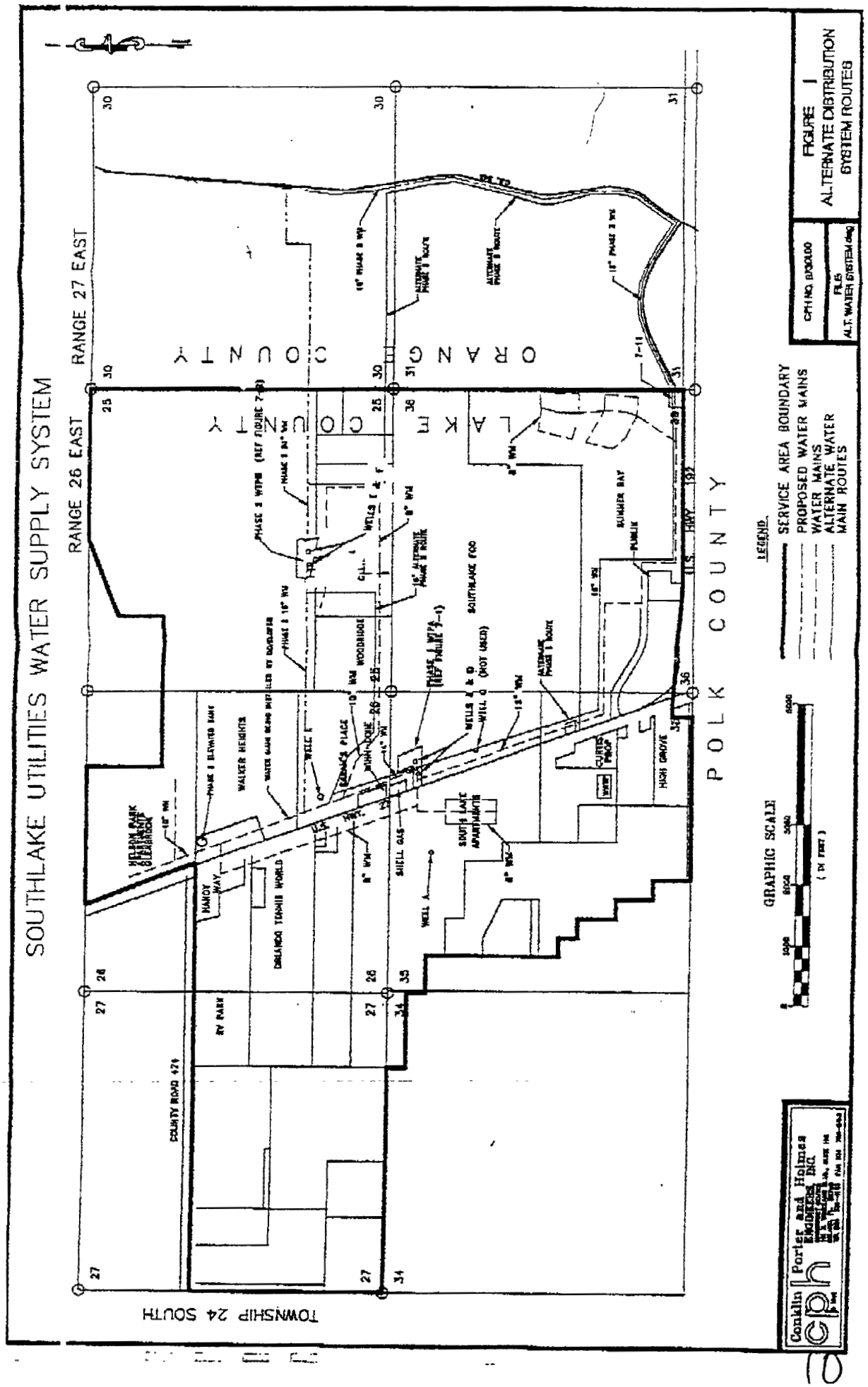

SOUTHLAKE UTILITIES WATER SUPPLY SYSTEM
RANGE 26 EAST
RANGE 27 EAST
TOWNSHIP 24 SOUTH
ORANGE COUNTY
POLK COUNTY
LEGEND
SERVICE AREA BOUNDARY
PROPOSED WATER MAINS
WATER MAINS
ALTERNATE WATER MAIN ROUTES
GRAPHIC SCALE
FIGURE 1
ALTERNATE DISTRIBUTION SYSTEM ROUTES
CPH NO. 97000.00
FILE ALT. WATER SYSTEM.dwg
Conklin Porter and Holmes ENGINEERS, INC.
CPH

Exhibit JCB-23

Commission Staff's First Set of Interrogatories to Southlake Utilities, Inc
Dated 11/7/00

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Emergency petition by D.R. Horton Custom Homes, Inc. to eliminate authority of Southlake Utilities, Inc. to collect service availability charges and AFPI charges in Lake County.	DOCKET NO. 981609-WS
In re: Complaint by D.R. Horton Custom Homes, Inc. against Southlake Utilities, Inc. in Lake County regarding collection of certain AFPI charges.	DOCKET NO. 980992-WS FILED: NOVEMBER 7, 2000

COMMISSION STAFF'S FIRST SET OF INTERROGATORIES TO SOUTHLAKE UTILITIES, INC.

The Staff of the Florida Public Service Commission, by and through its undersigned attorney, hereby propounds the following interrogatory, number one, to Southlake Utilities, Inc. (Southlake or utility), pursuant to Rule 1.340, Florida Rules of Civil Procedure. The interrogatory shall be answered under oath by Southlake or its agent who is qualified to answer and who shall be fully identified, within thirty (30) days.

INSTRUCTIONS

A. Southlake shall answer this interrogatory to the fullest extent possible and shall furnish all information which is reasonably available to Southlake, its principals, agents, attorneys, affiliates or other representatives. Southlake may respond to the interrogatory by indicating that the requested information is reported on a specific schedule in the minimum filing requirements.

B. If Southlake cannot answer the interrogatory in full, after exercising due diligence to secure the information to do so, it should state the answer to the extent possible and specify why it is unable to answer the remainder. In addition, Southlake shall state whatever information or knowledge that it has concerning the unanswered portion.

C. If the requested information is not applicable, that response should be reported as well as the reason why. If the requested information is not available, that response should be reported as well as the reason why.

D. If the utility is an operating division of a larger company, but separate records permit isolation of the subject utility system, the utility's response to the interrogatory may reflect such information. For example, cost of capital information for the utility may be on a divisional basis and similar information for the combined company will be reported under the heading "parent company." This adaptation should be disclosed in the utility's response.

E. Please report the name(s) of each person responding to the interrogatory, the business address and telephone number of each such person, and the relationship of each person to Southlake.

F. If the interrogatory contained herein asks for information that has already been provided or is in the process of being provided to the Commission through a Commission audit, please so state, indicating the date provided and the audit document/record request number.

COMMISSION STAFF'S FIRST SET OF INTERROGATORIES TO
SOUTHLAKE UTILITIES, INC.
DOCKETS NOS. 981609-WS, 980992-WS

INTERROGATORIES

1. How many meters were connected in September 2000? Please classify by meter size.

SEE ATTACHED SCHEDULES A AND B

DATED: 11-7-00

Samantha M. Cibula

Samantha Cibula, Senior Attorney

Bureau of Water and Wastewater
Division of Legal Services
Florida Public Service Commission

3

I HEREBY DECLARE that the responses to the above interrogatory is true and correct to my best knowledge and belief.

Southlake Utilities, Inc.
c/o Scott Schildberg, Esquire
Martin, Ade, et al.
One Independent Drive, Suite 3000
Jacksonville, Florida 32202

SOUTHLAKE UTILITIES, INC.

By: Robert L. Chapman III
Robert L. Chapman, III,
Its President

STATE OF North Carolina

COUNTY OF Durham

SWORN to and subscribed before me at Durham, Durham County North Carolina this 11th day of December, 2000.

Cheryl Smith
Notary Public
State of North Carolina
My Commission Expires: June 28, 2005

(S E A L)

SMC

4

Southlakes Utilities, Inc.
Meter / Unit Connection Information

	1998		1999			Nov. 17, 2000			2000 Growth To Date	
	YE Units	Meters	YE Units	Meters	ERC (350 gpd)	Units	Meters	ERC (350 gpd)	Units	ERCs
Res 5/8x3/4"	294	294	406	406	406.0	517	517	517.0	111	111.0
M-F 5/8x3/4"	0	0	272	1	8.6	276	276	197.1	4	188.6
Com 5/8x3/4"	7	7	18	18	30.4	19	34	46.8	1	16.4
M-F 1"	362	44	362	44	125.7	362	44	125.7	0	0.0
Com 1"	5	5	6	6	21.6	6	6	21.6	0	0.0
M-F 1 1/2"	72	8	72	8	45.7	72	8	45.7	0	0.0
Com 1 1/2"	1	1	1	1	3.0	3	3	12.7	2	9.7
M-F 2"	328	13	353	14	159.2	666	39	382.8	313	223.6
Com 2"	1	1	4	4	54.6	9	9	94.0	5	39.4
Com 4"	0	0	1	1	26.0	1	1	26.0	0	0.0
M-F 6"	402	0	330	2	247.2	656	3	508.0	326	260.8
Total	1472	373	1825	505	1,128.0	2587	940	1,977.5	762	849.5

Note : The ERCs are based on the projected demand for each metered connection.

5

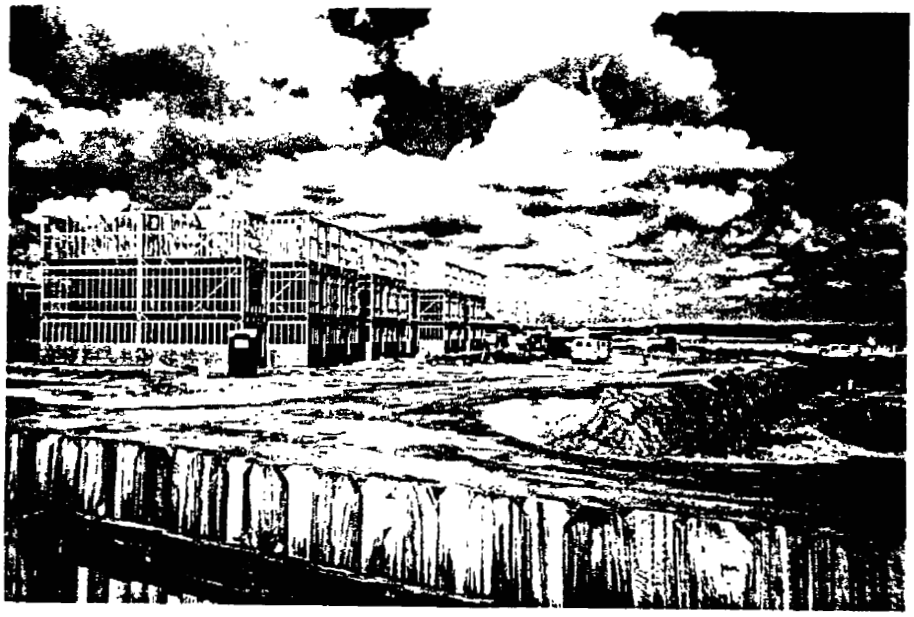
SCHEDULE A

Southlake Utilities, Inc.		12/31/99			11/17/00		
		YE Units	Meters	ERCs	YE Units	Meters	ERCs
5/8 x 3/4" Meter -							
Sgl family houses		392	392	392.000	500	500	500.000
Sgl familyTimeshares		14	14	14.000	17	17	17.000
Multifamily	Cagan Crossing / Ridgepointe	272 *	1 *	8.571 *	276	276	197.143
Commercial / Gen Serv	Ridgepointe Club Hse	0	0	0.000	1	1	0.714
	Ridgepointe Outside Hose	0	0	0.000	0	15	15.000
	Macchi	1	1	1.143	1	1	1.143
	Publix	7	7	12.000	8	8	13.714
	Winn-Dixie	7	7	6.686	7	7	6.686
	Southlake Car Wash	1	1	8.571	1	1	8.571
	SB Guard Hse	1	1	1.000	1	1	1.000
	SB Trailer	1	1	1.000	0	0	0.000
		Note(*) - Under Construction					
1" Meter -							
Multifamily	Southlake Apts	362	44	125.714	362	44	125.714
Commercial / Gen Serv	Handy Way	1	1	7.857	1	1	7.857
	Stratford Pool	1	1	1.714	1	1	1.714
	SB Admin Bldg	1	1	1.646	1	1	1.646
	Spur Gas	1	1	2.500	1	1	2.500
	Speedway Gas	1	1	5.029	1	1	5.029
	Ridgeland Church	1	1	2.857	1	1	2.857
1 1/2" Meter -							
Multifamily	Southlake Apts	72	8	45.714	72	8	45.714
Commercial / Gen Serv	SB Welcome Ctr	0	0	0.000	1	1	5.714
	Randy's Restaurant	0	0	0.000	1	1	4.000
	SB Club Hse	1	1	3.000	1	1	3.000
2" Meter -							
Multifamily	Raintree Apts	0	0	0.000	313 *	25 *	223.571 *
	Summer Bay	353	14	159.200	353	14	159.200
Commercial / Gen Serv	Publix	1	1	22.286	1	1	22.286
	Winn-Dixie	1	1	15.714	1	1	15.714
	Denny's Restaurant	0	0	0.000	1 *	1 *	8.000 *
	SB Irrig	0	0	0.000	1	1	8.000
	Raintree Clubhse	0	0	0.000	1	1	8.000
	Aurora Pool	0	0	0.000	1	1	8.000
	Ridgepointe Pool	0	0	0.000	1	1	8.000
	Southlake Irrig	1	1	8.571	1	1	8.000
	Clear Crk Irrig	1	1	8.000	1	1	8.000
					Note(*) - Construction in Progress, Meters Set		
4" Meter -							
Commercial / Gen Serv	SB Maint Bldg	1	1	26.000	1	1	26.000
6" Meter -							
Multifamily	Nelson Park	0	0	0.000	326	1	260.800
	Sarah's Place	330	2	247.176	330	2	247.176
TOTALS		1,825	505	1,127.950	2,587	940	1,977.465

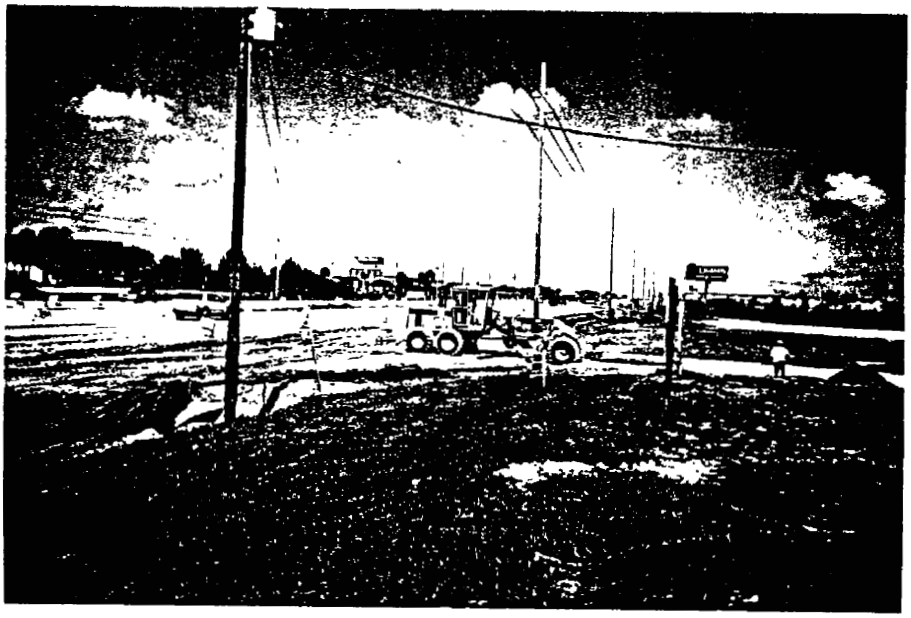
Exhibit JCB-24

Photographs of Raintree Apartments
Dated 2/14/01

Project Sign



Buildings Under Construction



Access Road Under Construction

Raintree Apartments
Photos Taken 2/14/01

Buildings Under Construction

Raintree Apartments
Photos Taken 2/14/01

Exhibit JCB-25

Capacity Analysis Report
R.H. Wilson & Associates Engineers
Received by FDEP 11/21/00

r wilson
h & associates engineers

30 October 2000

Florida Department of Environmental Protection
Central District –Domestic Waste Permitting
3319 Maguire Boulevard Suite 232
Orlando, FL 32803-3767

Attn: Mr. H. Lee Miller, Permitting Supervisor

RE: Southlake Utilities, Inc. Wastewater Treatment Facility, Capacity Increase for effluent disposal system, Lake County, Florida.
SU: Submittal Package, *Application for a Public Drinking Water Construction Permit.*

Dear Mr. Miller,

We are please to provide the submittal package for our client, Mr. Robert L. Chapman, III, President, Southlake Utilities, Inc., containing the following:

1. A $5,000.00 check for the application/review fee;
2. Four copies each of the FDEP Wastewater Permit Application Form 1 General Information, signed and dated by the Owner and Wastewater Permit Application Form 2A for Domestic Wastewater Facilities, signed and dated by the owner and signed, dated and sealed by the Engineer of Record;
3. Four copies of the Design Engineering Plans signed, dated and sealed by the Engineer of Record; and
4. Two copies of the ***CAPACITY ANALYSIS REPORT,*** signed and dated by the owner and signed, dated and sealed by the Engineer of Record.

We will be available at 407-330-5321 or 407-862-0376 to answer any questions necessary to expedite the issuance of this permit.

Respectfully Submitted,

Ronald H. Wilson, P.E.

CC: Robert L. Chapman, III, President, Southlake Utilities, Inc.

P.O. Box 915260 Longwood, FL 32791-5260 • Ph: (407) 330-5291 • Fax: (407) 330-5267

NOV 2000
RECEIVED
D.E.P. CENTRAL
DISTRICT

CAPACITY ANALYSIS REPORT

FOR

SOUTHLAKE UTILITIES, INC. Wastewater Treatment Facility

LAKE COUNTY, FLORIDA

OCTOBER 2000

Prepared For

Prepared For: Robert L. Chapman, III, President
Southlake Utilities, Inc.

Prepared By: R. H. Wilson & Associates – Civil Engineers
Longwood, FL 32779

2

1.0 INTRODUCTION

The Florida Department of Environmental Protection Rule 62-600.405(5) and 62-600.735 of the Florida Administrative Code (6-8-93) require a Capacity Analysis Report be submitted to the Department when requesting a Modification to a Wastewater Treatment Facility and the Operating Permit. This item is submitted as a part of the submittal package.

The Capacity Analysis Report will be submitted to the Department by R. H. Wilson & Associates, Inc. for ***SOUTHLAKE UTILITIES, INC.*** Wastewater Treatment Facility in compliance with the F.A.C. The WWTF is located on the west side of US Hwy. 27, one-half mile north of US Hwy. 192 on the west end of Sub-Station Road Lake County. The Chief Operator for this facility is Norman W. Langevin, Certificate No. C-4419.

1 AUTHORIZATION

1.1

SOUTHLAKE UTILITIES, INC., Robert L. Chapman, III, President, has retained R. H. Wilson and Associates to complete an on-site inspection of the gravity collection system, the lift station/force main system, WWTP and the two evaporation-percolation ponds; complete and evaluation of the findings; and prepare the Capacity Analysis Report as part of the submittal package for the proposed modification to FDEP Operating Permit No. FLA010634.

1.2 REPORT OBJECTIVES

The objectives of this report are as follows:

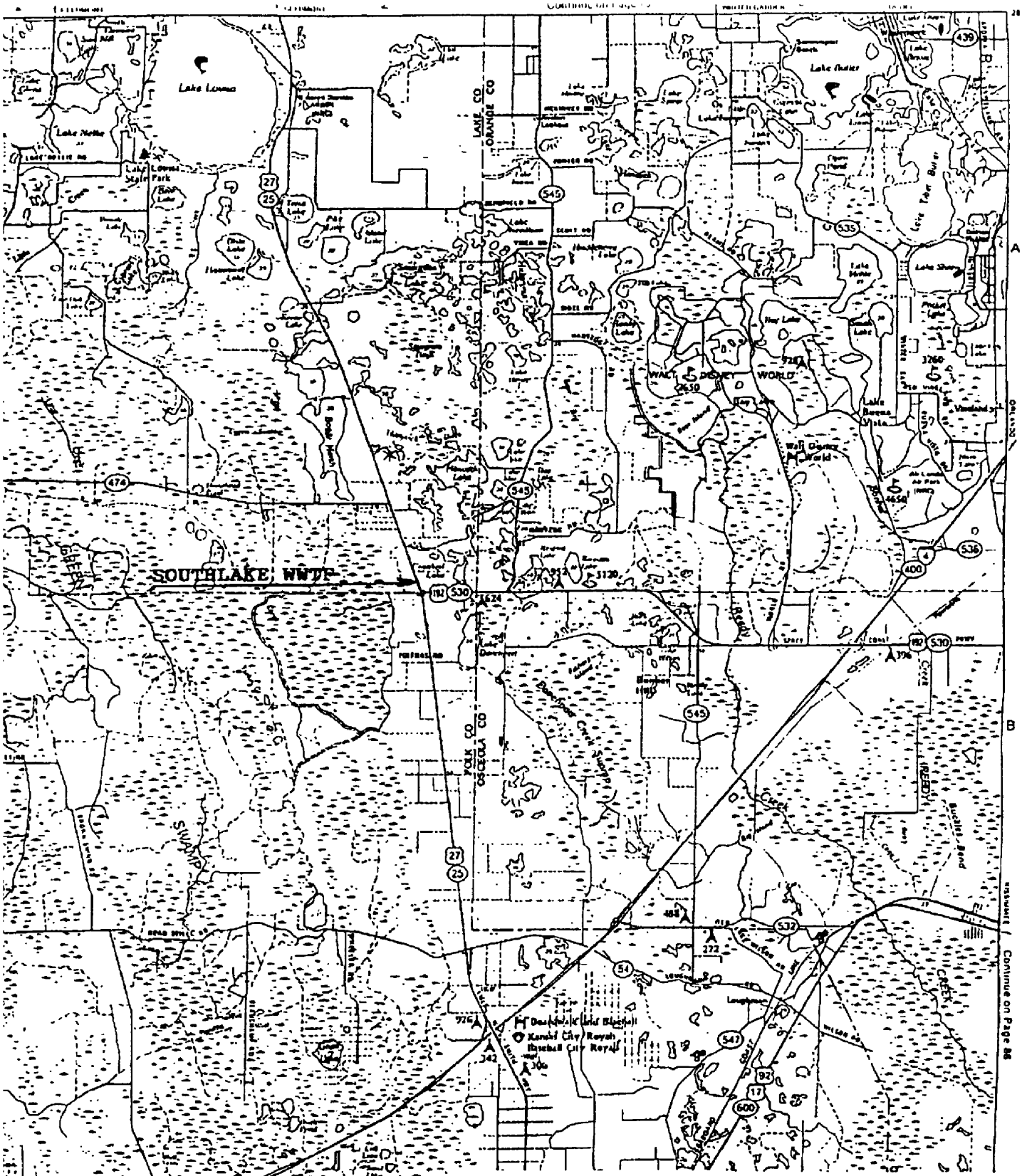
1. To provide a Capacity Analysis Report per the applicable rules in the F. A. C.;
2. To provide an acceptable design and hydraulic analysis to increase the capacity of the evaporation-percoation ponds, R001, from 0.550 MGD to 0.775 MGD.
3. To provide hydraulic easements(s) as required from any adjacent property owners as determined by site groundwater information and pond loading analytical studies completed by Dr. Devo Seereeram, PhD., P.E.

The information used to prepare the Permit Applications and the Report was collected during the on-site inspections of the groundwater monitoring wells and pizometers, WWTP, gravity collection and transmission systems by this engineer and the plant owner, records maintained at the facility and Southlake Utilities, Inc. office and the Monthly Operating Reports, etc.

1.3 SERVICE AREA DESCRIPTION

This WWTF and its infrastructure provide wastewater service to a part of the unincorporated area in South East Lake County and South West Orange County.

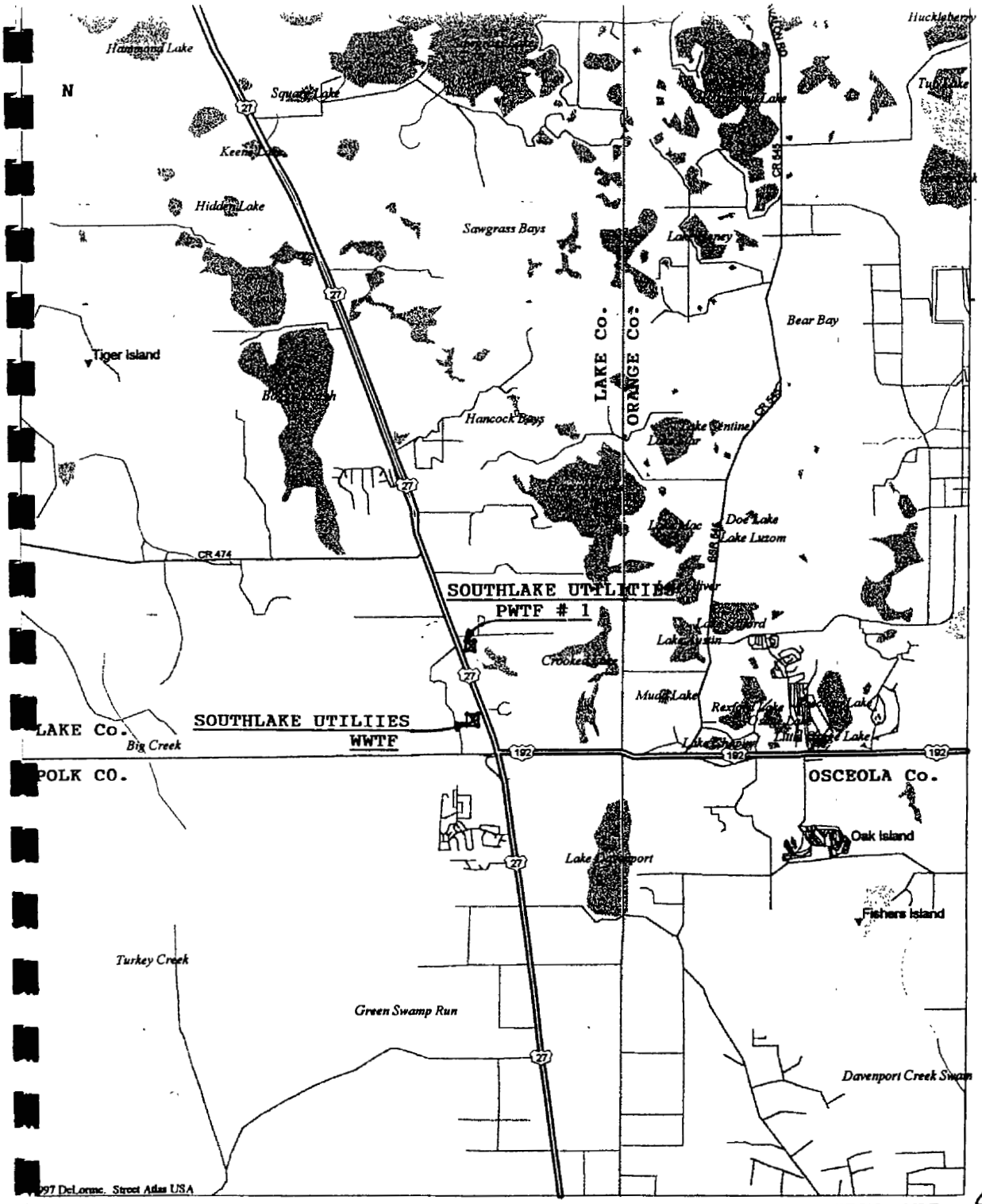
The facility location is shown on the AREA LACATION MAP and the LOCATION MAP. The Treatment Facility/Evaporation-Percolation Ponds are shown on the UTILITY SITE PLAN and the PSC service area is shown on the SERVICE AREA PLAT MAP.



AREA LOCATION MAP

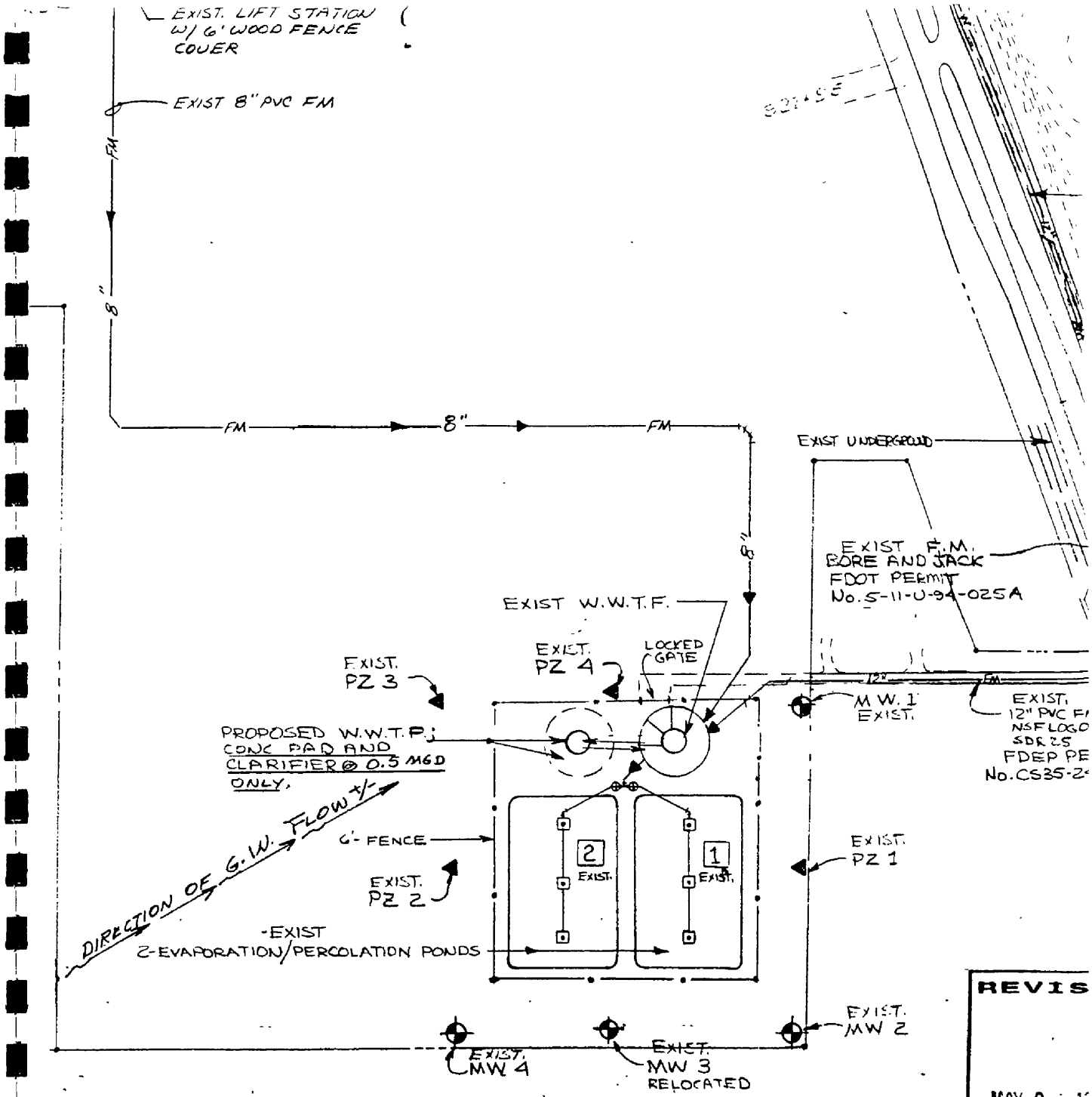
SOUTHLAKE UTILITIES, INC.
800 South U.S. Hwy 27
Clermont, Fl. 34711

R.H. Wilson & Associates, Lngwd., Fl.



SOUTHLAKE UTILITIES, INC. LOCATION MAP

S



UTILITY SITE PLAN

1"=200'

REVIS

MAY 0 4 1

APPRO

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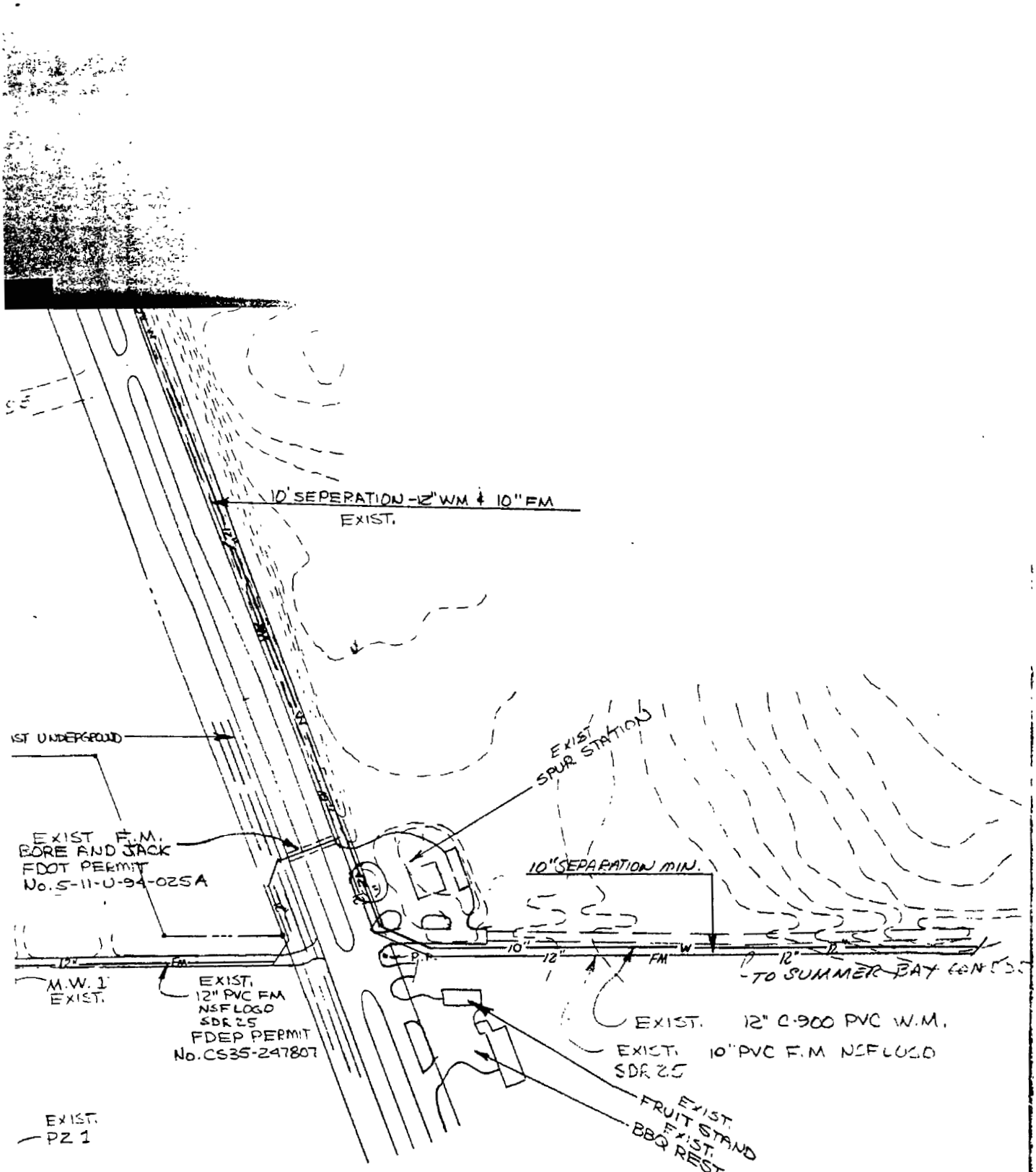


REVISIONS:	**JOB NAME:** SOUTHLAKE COMMUNITY LAKE COUNTY, FLA.	**SHEET** 1 of 7
		DRAWN: Hmm
		DESIGN: RHW
MAY 0 4 1995	**DATE:** 11-6-95	**SCALE:** NOTED
APPROVED:	**ENGINEER:** R.H. WILSON & ASSOCIATES P.O. BOX 915260 LONGWOOD, FLORIDA 32791-5260	

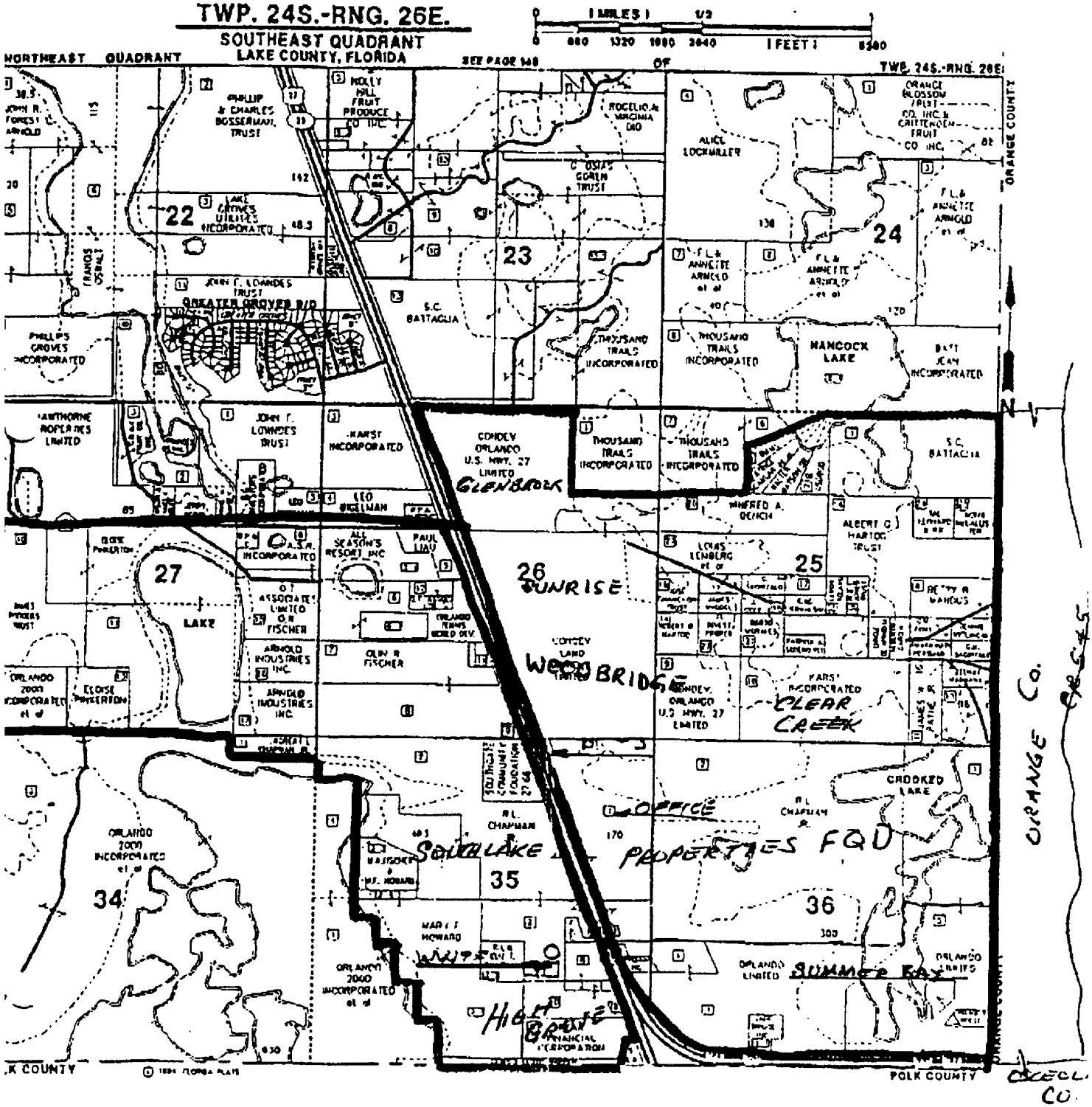
2

SOUTHLAKE UTILITIES, INC.
800 U.S. Highway 27 Clermont, FL 34711
(352) 394-8898 FAX (352) 394-8894
Florida PSC Certificates 464-S and 533-W

SERVICE AREA as shown on PLAT MAP

TWP. 24S.-RNG. 26E.

SOUTHEAST QUADRANT
LAKE COUNTY, FLORIDA



CAPACITY ANALYSIS REPORT

CERTIFICATIONS

FOR

SOUTHLAKE UTILITIES, INC.

Wastewater Treatment Facility And Infrastructure

LAKE COUNTY, Florida

September 2000

The information contained in this Report was collected, evaluated and prepared in accordance with sound engineering principals and the recommendations contained within have been discussed with the permittee and that he is fully aware and intends to comply with the recommendations and schedules included in this Report.

Ronald H. Wilson, P.E.
R.H.WILSON & ASSOC., Inc.
Date: 10/27-00
FL. REG. ENGINEER NO. 9710

Robert L. Chapman, III, President
Southlake Utilities, Inc.
Date: 9/27/00

1. HISTORY AND EXISTING PERMIT CONDITIONS

1.1 PERMIT HISTORY

SOUTHLAKE UTILITIES, INC. is a Florida Public Service Commission certificated utility providing water and wastewater services for the area shown on the ***UTILITY SERVICE AREA MAP***. The FDEP GMS I.D. NO. is 3035P05827.

1.1.1 CURRENT FDEP PERMITS

The current FDEP operating permit is FLA010634, issued on 1 November 1996 with an expiration date of 1 November 2001.

1.1.2 CURRENT FDEP PERMITTED CAPACITY & TREATMENT OBJECTIVES

The Southlake Utilities, Inc. wastewater treatment plant currently discharges treated effluent meeting the Secondary Treatment Effluent Standards as listed in the following table;

TABLE 1.1.2

SOUTHLAKE UTILITIES, INC. – WWTF

FDEP PERMIT LIMITS

1. Maximum Annual Average Flow Capacity - 0.550 mgd - EA Mode
2. Reuse & land application system R001 –3.088 acres and 0.55 mgd, (2, 1.54 acre ponds)
3. $CBOD_5$ & TSS max. concentrations – monthly Grab samples:
   - 20 mg/l annual average;
   - 30 mg/l monthly average;
   - 45 mg/l weekly average;
   - 60 mg/l single sample.
4. pH range - 6.0 to 8.5, grab sample-5 days per week;
5. min. Cl_2 Residual of 0.5mg/l after 15 minutes, grab sample 5 days per week;
6. Nitrate as N – 12 mg/l max, monthly grab sample;
7. Fecal Coliform – monthly grab sample, shall not exceed 200 per 100ml of sample.

1.2 PLANT FLOW CHARACTERISTICS

Data from the MORs (monthly operation reports) from Sept. 1999 through August 2000 are summarized in Table 1.2.1. Monthly CBOD, TSS, Flows, etc. were evaluated to find typical flow characteristics. The annual average flow for the past 12 month period was 0.186 MGD. The minimum monthly flow was 0.158 MGD and the peak monthly flow was 0.235 MGD. The MORs may be found in the APPENDIX.

The ***SUMMARY SHEET (MORs)*** and the ***WWTF COMPARISON CHART*** on the next page provide information on wastewater flow, treatment and effluent quality, etc.

SOUTHLAKE UTILITIES, INC. Wastewater Treatment Facility

SUMMARY SHEET

DISCHARGE MONITORING REPORTS – Sept. 99 To August 00

	1999			1999	2000							2000
ITEM	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG
FLOW	0.158	0.172	0.172	0.163	0.172	0.172	0.187	0.198	0.190	0.207	0.211	0.235
CBODs	409	267	150	59	95	203	213	233	106	133	166	60
Effluent	1.9	3.4	1.6	< 1	< 1	1.2	1.6	1.4	1.4	5.6	2.1	< 1
TSS	201	194	160	40	130	149	293	312	189	159	209	196
Effluent	4.2	4.2	5.8	8.4	4.8	1.1	4.0	4.8	5.0	11.3	5.3	3.1
Ph	7.4	7.4	7.6	7.5	7.6	7.6	7.5	7.0	7.6	7.5	7.6	7.6
Cl_2 Resid.	1.0	1.4	1.1	0.7	0.8	2	0.9	0.9	0.9	0.6	1.8	4.0
Nitrates	6.1	<0.05	6.6	0.05	1.8	0.7	0.54	0.27	0.36	9.0	5.8	3.2
Fecal Coli	<1	1.3	<1	< 1	< 1	<1	<1	< 1	<1	< 1	< 1	< 1

SOUTHLAKE UTILITIES, INC.

WWTF COMPARISON CHART

TREATMENT RESULTS* vs PERMIT LIMITATIONS

ITEM	ANNUAL AVERAGE RESULTS	PERMIT LIMITATIONS
FLOW	0.186 MGD	0.55 MGD (AADF)
CBODs(Inf)	174.5 mg/l	200 mg/l
CBODs(Eff)	1.93 mg/l	20 mg/l
TSS(Inf)	194.3 mf/l	200 mg/l
TSS(Eff)	5.17 mg/l	20 mg/l
Ph	7.49 Units	6.0 – 8.5 Units
CL_2 Residual	1.36 mg/l	0.5 mg/l Minimum
NITRATES	2.87 mg/l	12 mg/l Maximum
FECAL COLI	1 per 100 ml	200/100 ml

- September 1999 through August 2000.

Prepared By: R. H. Wilson & Assoc.
Civil Engineers

1.2.1 GRAVITY SYSTEMS & LIFT STATIONS/FORCE MAINS

The gravity collection system (manholes and covers and cleanouts)is less than seven years old. The system was accepted by the utility's engineer from the contractors with ***"no infiltration allowed"***. All lift stations, valve pits and force mains are also less than 7 years old, and were inspected, tested and accepted with no inflow from gravity systems to lift stations and no pressure loss on force mains (2 hours at 75 psig). The field staff has verified this status quo each year for the past 7 years.

The Lift Stations were constructed in 1994, 1995, 1996 and 1999 as follows:

No. 1 - Located in the southwest section of the Utility Area, west of us 27 in the CAGANS CROSSING Apartment Complex in the SOUTHLAKE FQD and serves present and future customers west of US 27 and north of the WWTP to CR 474. The station is equipped with dual submersible Ebara Pumps, 450 gpm ea. at 60' TDH, and pumps through a 6" PVC force main to the Bar Screen/flow equalization unit at the WWTP;

No. 2 - Located in the central eastern section of the Utility Area and east of US 27 in the WOODRIDGE PUD and was constructed at the west side of the CLEAR CREEK PUD and is equipped with dual Flight Submersible pumps, 375 gpm ea. at 90' TDH and pumps through an 8" dia. force main to the 10" to 12" force main along the east side of US 27. The 12" force main was pushed under US 27 and discharges into the Bar Screen area of the flow equalization unit at the WWTP;

No. 3 – Located in the SUMMER BAY PUD in the Southeast corner on Lake County on the north side of US 192. And is equipped with dual EBARA submersible pumps, 550 gpm ea. at 100' TDH and pumps through a 10" force main to the 12" force main under U S 27 as discussed in No. 2;

No. 4 – Located in the GLENNBROOK PUD on the north east area of the Utility Area, east of U S 27 at the end of CR 474 extended. The lift station is equipped with duar EBARA Submersible Pumps, 400 gpm at 75' TDH and pump through a 8" dia. force main to the 10" force main on the east side of U S 27 as discussed in No. 2.

No. 5. – Located on the east side of the SUNRISE PUD, east side of U S 27, and is under construction and will have 400 GPM EBARA Pumps at 80' TDH pumping through a 6" Force main to the 10" force main on the east side of U S 27 as discussed in No. 2 and No. 4;

No. 6 - Also permitted, but not under construction, the HIGH GROVE PUD, 168 Single Family Homes and Commercial Area(25 Acres) on the west side of U S 27 south of the WWTP, designed for 200 GPM EBARA pumps at 60' TDH through 6" force main directly to WWTF Bar Screen.

All lift stations are equipped with float controls, emergency power receptacles equipped with Surge Protection, Control Panel with ***emergency light*** and ***horn*** and are in very good condition. Edwardo Garcia, Operations and Maintenance Manager, checks the lift stations one time each day, minimum, 7 days per week. He is also a resident of the community.

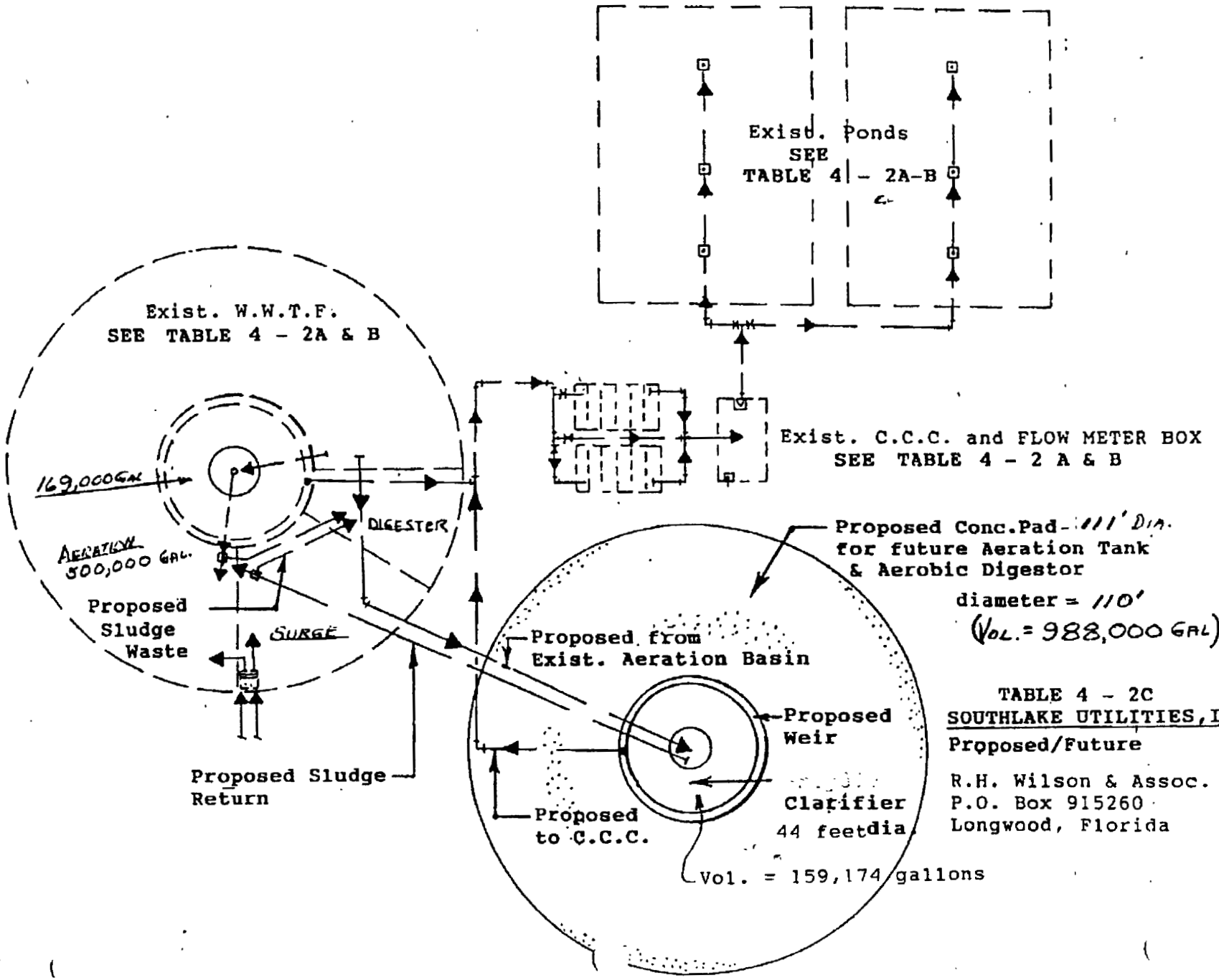


TABLE 4 - 2C
SOUTHLAKE UTILITIES, INC.
Proposed/Future

R.H. Wilson & Assoc.
P.O. Box 915260
Longwood, Florida

13

1-4

1.2.2 WWTP Potable water supply for Service Wash down Water meets the FDEP requirement for a Reduced Pressure Zone (RPZ) Backflow Preventer.

1.3 EFFLUENT QUALITY

The secondary treated effluent leaving the chlorine contact chamber must meet the effluent limitations as found in the WWTP operating permit FLA010634. The preceding **SUMMARY SHEET** presents the WWTP performance for the 12 month period, Sept. 1999 through August 2000. The information is a summary of the MORs.

The **WWTF COMPARISON CHART** is a composite evaluation of the **SUMMARY SHEET** showing FDEP Permit Limitations and the WWTP performance results.

1.4 WWTP UNIT PROCESS EVALUATION

The SOUTHLAKE UTILITIES 0.550* MGD extended aeration activated sludge WWTP with welded and or high-strength bolt steel construction, produces secondary treated effluent, which is chlorinated and discharged onto the 2 evapo-perco ponds, total bottom area of 3.088 acres (R001). The plant is protected from surge flows by a flow equalization unit and a 75,000 gallon aerated Anti-Surge system (10 % of design flow). The flow equalization unit was designed to provide ADF to the aeration basin; screen and dry rags, trash, etc. from influent, provide grit removal in the surge tank and return excess flow to the steel surge tank. The composite influent sampling unit is located here.

The aeration basin, 542,000 gallons, provides a total detention time of 16 +/- hours for a flow of 833,000 GPD. See the FLOW DIAGRAM. Two clarifiers, No. 1 at 169,000 gallons and No. 2 at 159,174 gallons receive the flow from the aeration basin. Each unit is summarized on the following page. The units have mechanical sludge collectors.

The two 7,084 gallon chlorine contact basins provide 41 min. detention time at 347 GPM and approximately 20 min. at 700 GPD. The combined flow from the CCCs enters the Stevens Flow Recorder Basin prior to discharge to the two 1.544 acre evaporation-percolation ponds, total area of ROO1 is 3.088 acres. The effluent composite sampler is located here. The gas chlorinators are by Capital Controls – 200 systems.

Reuse area R001 was tested and is presently approved for an application rate of 6.56" per day or 0.550 MGD. Presently we are asking for a AADF of 0.755 MGD, an application rate of nine (9) inches per day.

RAS eductor sludge is wasted to the aerated sludge digester, equipped with diffused air, 12,000 CF capacity, (89,760 GAL), and will provide 1.55 CF/Cap at 0.75 MGD.

The air supply system, in good condition and consists of the following:

SECONDARY CLARIFIERS

EXISTING CLARIFIER N0. 1

ITEM	@ 250,000 GPD	@ 500,000 GPD	@ 750,000 GPD	@ 1 MGD
ADF	174 GPM	347 GPM	520 GPM	694 GPM
Diameter	46'	46'	46'	46'
Surface Area	1662 SF	1662 SF	1662 SF	1662 SF
S. L. R.	150 gpf/sf	300 gpd/sf	451 gpd/sf	602 gpd/sf
Volune(Gal.)	169,000	169,000	169,000	169,000
(CF)	22,600	22,600	22,600	22,600
Detention Time	16.2 hours	8.1 Hours	5.4 Hours	4.1 Hours
Weir Length	260'	260'	260'	260'
W. O. L.	961 g/lf	1,923 g/lf	2,885 g/lf	3,846 g/lf

EXISTING CLARIFIER NO. 2

ITEM	@ 500,000 GPD	@ 750,000 GPD	@ 956,000 GPD
ADF	347 GPM	520 GPM	664 gpm
Diameter	44'	44'	44'
Surface Area	1,520 SF	1,520 SF	1,520 SF
S. L. R.	329 G/SF	493 G/SF	629 G/SF
Volume(Gal.)	159,174	159,174	159,174
(CF)	21,280	21,280	21,280
Detention Time	7.65 hours	5.1 hours	4.0 hours
Weir Length	132'	132'	132'
W. O. L.	3,788 g/lf	5,682 g/lf	7,576 g/lf

NOTE: Clarifier No. 2 can be rated at 0.956 MGD with 4.0 hours detention time and with Clarifier No. 1 off-line may have a rated capacity of 1.275 MGD(0.956/0.75%).

The air supply system, in good condition and consists of the following:

A. Three 50 h.p. centrifigal blowers have been installed on the north side of the plant. See the air calculations shown in the APPENDIX

The current average annual flow of 0.186 MGD is 34 percent of the permitted capacity of 0.550 MGD. Based. This plant is currently operating within the FDEP criteria set forth in the current permit.

The 2 evaporation–percolation ponds, R001 at 3.088 acres, are operated within permit conditons. The ponds and berms are mowed bi-monthly or as required to maintain a grass height of no more the 6". The pond bottoms are disced quarterly to prevent blinding of the surface area.

1.5 RESIDUALS TREATMENT & DISPOSAL

1.5 1. RESIDUALS TREATMENT

The waste activated sludge is pumped from the clarifier(s) eductors into the waste stream discharge pipe discharging into the aerobic digester. Aeration continues to reduce the wasted sludge. As the digester becomes more full, the diffused air is turned off to allow separation of the solids. The clear supernatant is then transferred to aeration. This activity is repeated weekly to age the residuals and concentrate the solids. The 30 plus days of stabilization of the residuals provides for a thicker sludge for transfer to Shelly's tankers for stabilization and land application on their FDEP approved Ag Use Sites. See copy of AGREEMENT in the APPENDIX.

1.5.2 ANNUAL SLUDGE ANALYSIS REPORT SUMMARY

The Sludge Analysis Reports for the residuals may be found at SHELLY'S. The applicble rules in the F. A. S. indicate no samples of the digestor sludge are to be taken by Southlake Utilities at the WWTP. **Note:** None of the parameters were exceeded in previous sludge analysis of quarterly samples.

2.0 FUTURE FLOW PROJECTIONS

2.1 Wastewater Treatment Plant Flow Comparisons:

a. Wastewater Flow projections from 1995 indicated a 2000 influent flow of 1.5 mgd. The 1995 flow projections were based upon a developer survey in October 1995 and a copy is provided at the APPENDIX. The peak monthly flow for August 2000 was 0.245 MGD, one sixth of the projected flow. The major factor impacting flow projections has been the land developer completes a Land Zoning Change for a new Planned Unit Development (PUD) within this PSC Franchised Area. The actual sales of the internal land uses, i.e., multifamily units, single family units and commercial/tourist oriented development were much slower than the projections of the developers. The start of the permitting/construction also lagged. Today, actual construction is about 35 % of 1995 projections.

2.2 UNIT RATES OF FLOW

The Average Annual Daily Flow, from Section 1.2, was 0.186 MGD or 620 ERU's (1 ERU = 300 GPD). The permitted capacity equates to 1,833 residential ERUs.

2.3 FUTURE FLOW PROJECTIONS

The approximate number of service connections at the end of September 2000 was 840. This number includes multifamily apartments, (i.e. – SARAH'S PLACE, 330 units and NELSON PARK, 358 units, each on two master meters. SOUTHLAKE APARTMENTS, 434 units and SUMMER BAY Time Share, 250 Units currently, are connected at 12 units per meter, +/-). COMMERCIAL Centers with Publix, Winn Dixie, U.S. Post Office, Banks, Strip Stores, restaurants and all Single Family Housing(weekly rental and homeowners) are on single meters, 5/8" to 4". The projected flows in the following chart are todays best estimates.

PROJECTED UNITS – 1994 To 2005

PROJECT	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
SOUTHLAKE	434	0	0	0	272	150	300	400	400	400
SUMMER BAY	60	30	59	77	80	210	320	300	270	340
WOODRIDGE	26	60	420	200	120	82	0	0	0	0
WALKER HEIGHTS	0	0	0	0	0	360	80	70	70	8
GLENNBROOK	0	0	0	0	125	280	90	76	55	0
ORLANDO RESORT	0	0	0	0	0	0	183	0	0	0
KARST PROPERTY	0	0	0	0	0	0	0	30	35	35
MISC. UNITS - US 27 & 192	0	1	9	6	3	3	2	1	2	2
EXIST. & UNITS PER YEAR	520	91	488	283	600	1,082	975	877	832	785
ACCUMULATIVE TOTAL	520	611	1,099	1,382	1,982	3,064	4,039	4,916	5,748	6,533
Annual Avg. Daily Flow(mgd)	0.086*	0.076*	0.106*	0.163*	0.190*	*0.354*	*0.478*	*0.650*	*0.890*	*1.125*

* ACTUAL FLOWS --------- 2001 Through 2005 have been estimated.

CURRENT

Annual Average Daily WWTF FLOW ---------- 0.190 MGD

PROJECTED

Annual Average Daily WWTF for December 2005 --- 1.125 MGD or 3,750 ERUs

3.0 SUMMARY & CONCLUSI ONS

The existing wastewater treatment and effluent disposal system was designed and permitted for an annual average daily wastewater flow of 0.550 MGD. The limiting factor for capacity is the application rate for the evapo-perco ponds. The projected AADF effluent disposal capacity for this facility in 2003 and 2004 is 0.65 MGD and 0.89 MGD respectively, on each side of the requested 0.755 MGD. The next five (5) year permit renewal period is November 2001.

SOUTHLAKE UTILITIES, INC.

CAPACITY ANALYSIS REPORT

OCTOBER 2000

APPENDIX

1. FDEP DISCHARGE MONITORING REPORTS (SEPT. 1999 – AUG. 2000)
2. WASTEWATER TREATMENT FACILITY DESIGN CALCULATIONS
3. RESIDUALS MANAGEMENTS AGREEMENT; MOD. TO FDEP PERMIT
4. POPULATION PROJECTIONS - 1995 AND 2000

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

hen Completed mail this report to: Department of Environmental Protection, Central District, 3319 Maguire Boulevard Suite 232, Orlando, FL 32803-3767

MITTEE NAME:	Southlake Utilities, Inc	PERMIT NUMBER	FLA010634		
ILING ADDRESS:	900 South U.S. Highway 27	MONITORING PERIOD From:	Sept. 1st	To	September 30th, 1995
	Clermont, FL 34711	LIMIT:	Final	REPORT	Monthly
		CLASS SIZE:	minor	GROUP:	Domestic
ILITY:	Southlake Utilities WWTF	FACILITY ID:	FLA010634	WAFR SITE NO	-203
CATION	U.S. Highway 27 South	GMS ID NO.:	3035P05827	GMS TEST SITE NO	3035X17269
	Clermont, FL	DISCHARGE POINT NUMBER:	R001		
NTY	Lake	PLANT SIZE/TREATMENT TYPE:	IIC		

Parameter		Quantity or Loading		Units	Quality or Concentration		Units	No Ex.	Frequency of Analysis	Sample Type
ow	Sample Measurement	.131	0.158	MGD						
RET No. 50050 Y n Site No. EFF-1	Permit Measurement	0.55 (An.Ave.)	Report (Mo.Ave.)	mgd					Continuous	Flow meters
OD5	Sample Measurement				1.9		MG/L		Monthly	Grab
RET No. 80082 Y n Site No. EFA-1	Permit Measurement				20.0 (An.Ave.)		mg/L		Weekly	8-hour FPC
OD5	Sample Measurement				1.2	1.2	MG/L		Monthly	Grab
RET No. 80082 n Site No. EFA-1	Permit Measurement				30.0 (Mo.Ave.)	60.0 (Max.)	mg/L		Weekly	8-hour FPC
	Sample Measurement				4.2		MG/L		Monthly	Grab
RET No. 00530 Y n Site No. EFA-1	Permit Measurement				20.0 (An.Ave.)		mg/L		Weekly	8-hour FPC
	Sample Measurement				4.2	4.2	MG/L		Monthly	Grab
RET No. 00530 Site No. EFA-1	Permit Measurement				30.0 (Mo.Ave.)	60.0 (Max.)	mg/L		Weekly	8-hour FPC
	Sample Measurement				7.4	7.6	SU		5days wk	Grab
RET No. 00400 Site No. EFA-1	Permit Measurement				6.0 (Min.)	8.5 (Max.)	S.U.		5 Days/Week	Grab

nder penalty of law that I have personally examined and am familiar with the information submitted herein; and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the ed information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

TYPED OR PRINTED NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (YY/MM/DD)
ard W. Post, Pres., Southeast Utilities, Inc.	Richard W. Post	407-889-9755	10/01/95

ENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):

8

Permit Number FLA010634
Month/Year

Three-month Average Daily Flow .179
Daily Flow % of Permitted Capacity 33%

Days of the Months September, 1999

Parameter/Unit/Monitoring Location Site Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Flow (mgd), EFF-1	.146	.178	.172	.058	.058	.058	.174	.174	.174	.164	.170	.170	.170	.084	.180	.169	.162	.175	.175	.175	.170	.168	.160	.162	.169	.169	.169	.170	.168	.165
BOD5 (mg/L), EFA-1	12																													
BOD5 (mg/L), INF-1	409																													
TSS (mg/L), EFA-1	4.2																													
TSS (mg/L), INF-1	241																													
pH (std. units), EFA-1	7.6	7.6	7.6		7.6	7.6	7.6	7.6	7.6		7.6	7.6	7.6	7.6	7.6				7.6	7.6	7.4	7.4	7.4			7.4	7.4	7.4	7.4	
Fecal Coliform Bacteria (#/100 mL), EFA-1	21																													
Cl2 (For Disinfection) (mg/L), EFA-1	1.1	1.3	1.1		1.4	1.3	1.4	2.8	2.7		2.4	2.7	2.4	2.2	2.1				2.0	1.7	1.1	1.4	1.0			1.8	1.7	1.8	1.7	
Nitrate as N) (mg/L), EFA-1																														

Staffing:

Shift Operator	Class C	Certificate No 4-10		Name	Norman Langevin
ng Shift Operator	Class	Certificate No		Name	
Shift Operator	Class	Certificate No		Name	
Operator	Class	Certificate No		Name	

Effluent Disposal or Reclaimed Water Reuse Perc Pond

Wet Weather Discharge Activated: Yes ___ No X Not Applicable ___ If Yes, cumulative days of wet weather discharge ___

If additional sheets necessary to list all certified operators necessary for required operations

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed mail this report to: Department of Environmental Protection, Central District, 3319 Maguire Boulevard Suite 232, Orlando, FL 32803-3767

PERMITTEE NAME:	Southlake Utilities, Inc	PERMIT NUMBER:	FLA010634		
MAILING ADDRESS:	300 South U.S. Highway 27	MONITORING PERIOD From:	October 1st, 1999	To	October 31st, 1999
	Clermont, FL 34711	LIMIT:	Final	REPORT	Monthly
		CLASS SIZE:	minor	GROUP:	Domestic
FACILITY:	Southlake Utilities WWTF	FACILITY ID:	FLA010634	WATER SITE NO	4203
LOCATION:	U.S. Highway 27 South	GMS ID NO.:	3035P05827	GMS TEST SITE NO	3035X17259
	Clermont, FL	DISCHARGE POINT NUMBER:	R001		
COUNTY:	Lake	PLANT SIZE/TREATMENT TYPE:	IIC		

Parameter		Quantity or Loading		Units	Quality or Concentration		Units	No Ex.	Frequency of Analysis	Sample Type
Flow	Sample Measurement	.134	0.172	MGD						
STORET No. 50050 Y	Permit Measurement	0.55 (An.Avg.)	Report (Mo.Avg.)	mgd					Continuous	Flow meters
BOD5	Sample Measurement				2.1		mg/L		Monthly	Grab
STORET No. 80082 Y	Permit Measurement				20.0 (An.Avg.)		mg/L		Weekly	8-hour FPC
BOD5	Sample Measurement				3.4	3.4	mg/L		Monthly	Grab
STORET No. 80082 I	Permit Measurement				30.0 (Mo.Avg.)	60.0 (Max.)	mg/L		Weekly	8-hour FPC
SS	Sample Measurement				4.3		mg/L		Monthly	Grab
STORET No. 00530 Y	Permit Measurement				20.0 (An.Avg.)		mg/L		Weekly	8-hour FPC
SS	Sample Measurement				4.2	4.2	mg/L		Monthly	Grab
STORET No. 00530 I	Permit Measurement				30.0 (Mo.Avg.)	60.0 (Max.)	mg/L		Weekly	8-hour FPC
pH	Sample Measurement				7.6	7.8	S.U.		5 days wk	Grab
STORET No. 00400 I	Permit Measurement				6.0 (Min.)	8.5 (Max.)	S.U.		5 Days/Week	Grab

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein; and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO.	DATE (MM/DD/YY)
Richard W. Post, Pres., Southeast Utilities, Inc.	Richard W. Post	407-889-9755	11/03/99

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):

2

Permit Number: FLA010634
Month/Year:

Three-month Average Daily Flow: .175
Daily Flow % of Permitted Capacity: 32%

Days of the Months October, 1999	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Parameter/Unit/Monitoring Location Site Number																														
Flow (mgd), EFF-1	.164	.168	.168	.165	.176	.172	.160	.174	.175	.175	.175	.168	.166	.172	.170	.179	.179	.179	.170	.166	.168	.174	.177	.177	.177	.170	.140	.140	.228	.175
BOD5 (mg/L), EFA-1				34																										
BOD5 (mg/L), INF-1				267																										
TSS (mg/L), EFA-1				4.2																										
TSS (mg/L), INF-1				194																										
pH (std. units), EFA-1	7.5			7.4	7.6	7.6	7.6	7.6			7.6	7.6	7.5	7.8	7.6			7.5	7.4	7.4	7.6	7.7			7.6	7.7	7.6	7.6	7.6	
Fecal Coliform Bacteria (#/100 mL), EFA-1				21																										
Cl2 For Disinfection (mg/L), EFA-1	1.4			1.7	1.8	2.2	2.0	2.8			2.8	2.2	2.4	2.4	2.3			2.2	2.4	2.2	2.2	2.0			2.2	2.0	2.1	2.0	2.2	
Nitrate (as N) (mg/L), EFA-1				<0.05																										

Staffing:

Shift Operator	Class C	Certificate No 2219	Name	Norman Langevin	
ng Shift Operator	Class	Certificate No	Name		
Shift Operator	Class	Certificate No	Name		
Operator	Class	Certificate No	Name		

Effluent Disposal or Reclaimed Water Reuse: Perc Pond

Wet Weather Discharge Activated: Yes ___ No X Not Applicable ___ If yes, cumulative days of wet weather discharge ___

If additional sheets necessary to list all certified operators necessary for required operations

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed mail this report to: Department of Environmental Protection, Central District, 3319 Maguire Boulevard Suite 232, Orlando, FL 32803-3767

PERMITTEE NAME: Southlake Utilities, Inc
MAILING ADDRESS: 300 South U.S. Highway 27
Clermont, FL 34711

PERMIT NUMBER: FLA010634
MONITORING PERIOD From: November 1st, 1999 To: November 30th, 1999
LIMIT: Final
CLASS SIZE: minor
REPORT: Monthly
GROUP: Domestic

FACILITY: Southlake Utilities WWTF
LOCATION: U.S. Highway 27 South
Clermont, FL

FACILITY ID: FLA010634
GMS ID NO.: 3035P05827
DISCHARGE POINT NUMBER: R001
PLANT SIZE/TREATMENT TYPE: IIIC
WAFR SITE NO: 4203
GMS TEST SITE NO.: 3035X17259

COUNTY: Lake

Parameter		Quantity or Loading		Units	Quality or Concentration		Units	No Ex	Frequency of Analysis	Sample Type
Flow	Sample Measurement	.142	0.172	MGD						
STORET No. 50050 Mon.Site No. EFF-1	Permit Requirement	0.55 (Ann.Ave.)	Report (Mo.Ave.)	mgd					Continuous	Flow meters
CBOD5	Sample Measurement				2.1		MG/L		Monthly	Grab
STORET No. 80082 Mon.Site No. EFA-1	Permit Requirement				20.0 (Ann.Ave.)		mg/L		Weekly	8-hour FPC
CBOD5	Sample Measurement				1.6	1.6	MG/L		Monthly	Grab
STORET No. 80082 Mon.Site No. EFA-1	Permit Requirement				30.0 (Mo.Ave.)	60.0 (Max.)	mg/L		Weekly	8-hour FPC
TSS	Sample Measurement				4.5		MG/L		Monthly	Grab
STORET No. 00530 Mon.Site No. EFA-1	Permit Requirement				30.0 (Ann.Ave.)		mg/L		Weekly	8-hour FPC
TSS	Sample Measurement				5.8	5.8	MG/L		Monthly	Grab
STORET No. 00530 Mon.Site No. EFA-1	Permit Requirement				30.0 (Mo.Ave.)	60.0 (Max.)	mg/L		Weekly	8-hour FPC
pH	Sample Measurement				7.6	7.7	SU		5days wk	Grab
STORET No. 00400 Mon.Site No. EFA-1	Permit Requirement				6.0 (Min.)	8.5 (Max.)	S.U.		5 Days/Week	Grab

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein; and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO.	DATE (YY/MM/DD)
Richard W. Post, Pres., Southeast Utilities, Inc.	Richard W. Post	407-889-9755	12/04/99

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):

2C

Month/Year Nov. 1999

Three-month Average Daily Flow .167

Daily Flow % of Permitted Capacity 30%

Days of the Months	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Parameter/Unit/Monitoring Location Site Number																														
Flow (mgd), EFF-1	.198	.184	.162	.164	.162	.164	.168	.165	.164	.166	.163	.192	.195	.195	.195	.165	.168	.158	.162	.178	.178	.178	.172	.180	.180	.182	.176	.176	.176	.160
CBOD5 (mg/L), EFA-1	1.6																													
CBOD5 (mg/L), INF-1	150																													
TSS (mg/L), EFA-1	5.8																													
TSS (mg/L), INF-1	160																													
pH (std. units), EFA-1	7.6	7.6	7.6	7.6	7.6	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.6	7.6	7.6	7.7	7.7	7.7	7.6	7.6	7.7	7.7	7.7	7.7	7.7	7.7	7.7
Fecal Coliform Bacteria (#/100 mL), EFA-1	21																													
Cl2 (For Disinfection) (mg/L), EFA-1	1.3	1.1	1.5	1.5	1.5	1.7	1.8	2.4	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Nitrate as N (mg/L), EFA-1	6.6																													

Staffing:

Chief Operator	Class C	Certificate No 4419	Name	Norman Langevin	
Shift Operator	Class	Certificate No	Name		
Shift Operator	Class	Certificate No	Name		
Operator	Class	Certificate No	Name		

Effluent Disposal or Reclaimed Water Reuse: Perc Pond

Wet Weather Discharge Activated: Yes ___ No X Not Applicable ___ If yes, cumulative days of wet weather discharge ___

Additional sheets necessary to list all certified operators necessary for required operations.

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed mail this report to: Department of Environmental Protection, Central District, 3319 Maguire Boulevard Suite 232, Orlando, FL 32803-3767

PERMITTEE NAME: Southlake Utilities, Inc
MAILING ADDRESS: 900 South U.S. Highway 27
Clermont, FL 34711

PERMIT NUMBER: FLA010634
MONITORING PERIOD From: Dec. 1st, 1999 To: Dec. 31st, 1999
LIMIT: Final
CLASS SIZE: minor
REPORT: Monthly
GROUP: Domestic

FACILITY: Southlake Utilities WWTF
LOCATION: U.S. Highway 27 South
Clermont, FL

FACILITY ID: FLA010634
GMS ID NO.: 3035P05827
DISCHARGE POINT NUMBER: R001
PLANT SIZE/TREATMENT TYPE: IIC
WAFR SITE NO: 4203
GMS TEST SITE NO.: 3035X17269

COUNTY: Lake

Parameter		Quantity or Loading		Units	Quality or Concentration		Units	No Ex.	Frequency of Analysis	Sample Type
Flow	Sample Measurement	.146	0.163	MGD						
STORET No. 50050 Y	Permit Measurement	0.55 (An.Ave.)	Report (Mo.Ave.)	mgd					Continuous	Flow meter
CBOD5	Sample Measurement				2.1		MG/L		Monthly	Grab
STORET No. 80082 Y	Permit Measurement				30.0 (An.Ave.)		mg/L		Weekly	8-hour FPC
CBOD5	Sample Measurement				< 1	< 1	MG/L		Monthly	Grab
STORET No. 80082 I	Permit Measurement				30.0 (Mo.Ave.)	60.0 (Max.)	mg/L		Weekly	8-hour FPC
TSS	Sample Measurement				5.0		MG/L		Monthly	Grab
STORET No. 00530 Y	Permit Measurement				20.0 (An.Ave.)		mg/L		Weekly	8-hour FPC
TSS	Sample Measurement				8.4	8.4	MG/L		Monthly	Grab
STORET No. 00530 I	Permit Measurement				30.0 (Mo.Avg.)	60.0 (Max.)	mg/L		Weekly	8-hour FPC
pH	Sample Measurement				7.5	7.8	SU		5 days wk	Grab
STORET No. 00400 I	Permit Measurement				6.0 (Min.)	8.5 (Max.)	S.U.		5 Days/Week	Grab

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein; and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

NAME TYPED OR PRINTED TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO.	DATE (YY/MM/DD)
Richard W. Post, Pres., Southeast Utilities, Inc.	Richard W. Post	407-889-9755	1/03/00

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):

2
6

Permit Number: FLA010634

Month/Year: December 1999

Three-month Average Daily Flow: .169

Daily Flow % of Permitted Capacity: 3/90

Days of the Months	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Parameter/Unit/Monitoring Location Site Number																														
Flow (mgd), EFF-1	.16	.15	.15	.15	.15	.15	.15	.15	.15	.14	.15	.15	.15	.14	.14	.15	.14	.15	.15	.15	.14	.16	.16	.15	.22	.22	.22	.18	.20	.18
CBOD5 (mg/L), EFA-1	<1																													
CBOD5 (mg/L), INF-1	159																													
TSS (mg/L), EFA-1	8.4																													
TSS (mg/L), INF-1	140																													
pH (std. units), EFA-1	7.5	7.6	7.6		7.7	7.7	7.6	7.6	7.6		7.6	7.7	7.6	7.6	7.6					7.6	7.6	7.7	7.6	7.6			7.6	7.8	7.7	7.8
Fecal Coliform Bacteria (#/100 mL), EFA-1	<1																													
TRC For Disinfection (mg/L), EFA-1	1.2	1.1	1.0		1.4	1.7	1.8	1.8	1.3		0.7	2.8	2.8	2.8	2.8					2.8	2.8	2.4	2.4	2.8			2.8	2.8	2.4	2.8
Nitrate (as N) (mg/L), EFA-1	0.05																													

Staffing:

Shift Operator Class C Certificate No 4419 Name Norman Langevin

Lng Shift Operator Class _____ Certificate No _____ Name _____

Shift Operator Class _____ Certificate No _____ Name _____

Operator Class _____ Certificate No _____ Name _____

Of Effluent Disposal or Reclaimed Water Reuse: Perc Pond

Wet Weather Discharge Activated: Yes ___ No X Not Applicable ___ If yes, cumulative days of wet weather discharge _____

If additional sheets necessary to list all certified operators necessary for required operations

2

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed mail this report to: Department of Environmental Protection, Central District, 3319 Maguire Boulevard Suite 232, Orlando, FL 32803-3767

PERMITTEE NAME: Southlake Utilities, Inc
MAILING ADDRESS: 900 South U.S. Highway 27
Clermont, FL 34711

PERMIT NUMBER: FLA010634
MONITORING PERIOD From: Jan. 1st. To: Jan 31st, 2000
LIMIT: Final
CLASS SIZE: minor
REPORT: Monthly
GROUP: Domestic

FACILITY LOCATION: Southlake Utilities WWTF
U.S. Highway 27 South
Clermont, FL

FACILITY ID: FLA010634
GMS ID NO.: 3035P05827
DISCHARGE POINT NUMBER: R001
PLANT SIZE/TREATMENT TYPE: IIIC
WAFR SITE NO: 4203
GMS TEST SITE NO.: 3035X17269

COUNTY: Lake

Parameter		Quantity or Loading	Units	Quality or Concentration		Units	No. Ex.	Frequency of Analysis	Sample Type
Flow	Sample Measurement	[illegible]	MGD						
STORET No. 50050 Y Mon.Site No. EFF-1	Permit: 0.5 Measurement: [illegible]	Report	mgd					Continuous	Flow meter
CBOD5	Sample Measurement			1.7		MG/L		Monthly	Grab
STORET No. 80082 Y Mon.Site No. EFA-1	Permit Measurement			20.0 (An.Avg.)		mg/L		Weekly	8-hour FPC
CBOD5	Sample Measurement			4 1	4 1	MG/L		Monthly	Grab
STORET No. 80082 Y Mon.Site No. EFA-1	Permit Measurement			30.0 (Mo.Avg.)	60.0 (Max.)	mg/L		Weekly	8-hour FPC
S	Sample Measurement			5.2		MG/L		Monthly	Grab
STORET No. 00530 Y Mon.Site No. EFA-1	Permit Measurement			20.0 (An.Avg.)		mg/L		Weekly	8-hour FPC
S	Sample Measurement			4.8	4.8	MG/L		Monthly	Grab
STORET No. 00530 Y Mon.Site No. EFA-1	Permit Measurement			30.0 (Mo.Avg.)	60.0 (Max.)	mg/L		Weekly	8-hour FPC
d	Sample Measurement			7.6	7.8	SU		5 days wk	Grab
STORET No. 00400 P Mon.Site No. EFA-1	Permit Measurement			6.0 (Min.)	8.5 (Max.)	S.U.		5 Days/Week	Grab

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein; and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | TELEPHONE NO. | DATE (YY/MM/DD)

Richard W. Post, Pres., Southeast Utilities, Inc. | Richard W. Post | 407-889-9755 | 2/03/00

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):

2

Permit Number FLA010634

Three-Month Average Daily Flow .175

Daily Flow % of Permitted Capacity 32%

Month/Year January 2003

Days of the Months	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Parameter/Unit/Monitoring Location Site Number																														
Flow (mgd), EFF-1	.195	.195	.195	.182	.186	.180	.162	.162	.162	.162	.164	.154	.150	.154	.160	.160	.160	.198	.142	.240	.250	.164	.164	.162	.154	.154	.154	.154	.162	.162
BOD5 (mg/L), EFA-1				4																										
BOD5 (mg/L), INF-1				99																										
TSS (mg/L), EFA-1				145																										
TSS (mg/L), INF-1				139																										
pH (std. units), EFA-1			7.7	7.6	7.6	7.6	7.6			7.6	7.7	7.6	7.7	7.6			7.7	7.6	7.8	7.7	7.8			7.7	7.7	7.7	7.6	7.6		7
Fecal Coliform Bacteria (#/100 mL), EFA-1				41																										
TRC (For Disinfection) (mg/L), EFA-1			2.4	2.2	2.4	2.8	2.8			2.8	2.8	2.8	2.8	2.8			2.8	2.7	2.8	2.8	2.8			2.4	2.2	2.0	2.3	2.8		0
Nitrate (as N) (mg/L), EFA-1				1.85																										

Staffing:

Shift Operator	Class C	Certificate No	4419	Name	Norman Langevin
Lng Shift Operator	Class	Certificate No		Name	
Shift Operator	Class	Certificate No		Name	
Operator	Class	Certificate No		Name	

Effluent Disposal or Reclaimed Water Reuse Perc Pond

Wet Weather Discharge Activated: Yes ____ No X Not Applicable ____ If yes, cumulative days of wet weather discharge ____

Additional sheets necessary to list all certified operators necessary for required operations

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed mail this report to: Department of Environmental Protection, Central District, 3319 Maguire Boulevard Suite 232, Orlando, FL 32803-3767

PERMITTEE NAME:	Southlake Utilities, Inc	PERMIT NUMBER:	FLA010634		
MAILING ADDRESS:	900 South U.S. Highway 27	MONITORING PERIOD From:	February 1st.	To	February 29th, 2000
	Clermont, FL 34711	LIMIT:	Final	REPORT	Monthly
		CLASS SIZE:	minor	GROUP:	Domestic
FACILITY:	Southlake Utilities WWTF	FACILITY ID:	FLA010634	WAFR SITE NO	4203
LOCATION:	U.S. Highway 27 South	GMS ID NO.:	3035P05827	GMS TEST SITE NO.	3035X17269
	Clermont, FL	DISCHARGE POINT NUMBER:	R001		
COUNTY:	Lake	PLANT SIZE/TREATMENT TYPE:	IIIC		

Parameter		Quantity or Loading		Units	Quality or Concentration		Units	No Ex.	Frequency of Analysis	Sample Type
Flow	Sample Measurement	.154	0.172	MGD						
STORET No. 50050 Y Mon.Site No. EFF-1	Permit Measurement	0.55 (30-Ave.)	Report (Mo.Ave.)	mgd					Continuous	Flow meter
CBOD5	Sample Measurement				1.7		MG/L		Monthly	Grab
STORET No. 80082 Y Mon.Site No. EFA-1	Permit Measurement				20.0 (An.Avg.)		mg/L		Weekly	8-hour FPC
CBOD5	Sample Measurement				1.2	1.2	MG/L		Monthly	Grab
STORET No. 80082 Y Mon.Site No. EFA-1	Permit Measurement				30.0 (Mo.Ave.)	60.0 (Max.)	mg/L		Weekly	8-hour FPC
TSS	Sample Measurement				5.0		MG/L		Monthly	Grab
STORET No. 00530 Y Mon.Site No. EFA-1	Permit Measurement				20.0 (An.Avg.)		mg/L		Weekly	8-hour FPC
TSS	Sample Measurement				1.1	1.1	MG/L		Monthly	Grab
STORET No. 00530 Y Mon.Site No. EFA-1	Permit Measurement				30.0 (Mo.Avg.)	60.0 (Max.)	mg/L		Weekly	8-hour FPC
pH	Sample Measurement				7.6	7.7	SU		5days wk	Grab
STORET No. 00400 Y Mon.Site No. EFA-1	Permit Measurement				6.0 (Min.)	8.5 (Max.)	S.U.		5 Days/Week	Grab

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein; and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (YY/MM/DD)
Richard W. Post, Pres., Southeast Utilities, Inc.	Richard W. Post	407-889-9755	3/03/2000

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):

8

Permit Number: FLA010634

Month/Year: February 2020

Three-month Average Daily Flow: .169

Daily Flow % of Permitted Capacity: 31%

Days of the Months	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Parameter/Unit/Monitoring Location Site Number																														
Flow (mgd), EFF-1	.154	.164	.156	.164	.169	.169	.169	.148	.181	.164	.164	.170	.170	.170	.164	.196	.186	.160	.163	.165	.165	.178	.182	.196	.198	.192	.192	.198	.178	
CBOD5 (mg/L), EFA-1									1.2																					
CBOD5 (mg/L), INF-1									203																					
TSS (mg/L), EFA-1									1.1																					
TSS (mg/L), INF-1									149																					
pH (std. units), EFA-1	7.6	7.6	7.7	7.7		7.7	7.6	7.6	7.7	7.6			7.7	7.7	7.7	7.7	7.7			7.7	7.6	7.6	7.7	7.6			7.7	7.7		
Fecal Coliform Bacteria (#/100 mL), EFA-1									< 1																					
TRC (For Disinfection) (mg/L), EFA-1	2.8	2.8	2.8	2.8		2.8	2.9	2.9	2.8	2.8			2.8	2.8	2.8	2.8	2.8			2.1	2.0	2.2	2.0	2.0			2.0	2.2		
Nitrate (as N) (mg/L), EFA-1									0.70																					

Staffing:

Shift Operator	Class C	Certificate No	4419	Name	Norman Langevin
ing Shift Operator	Class	Certificate No		Name	
Shift Operator	Class	Certificate No		Name	
Operator	Class	Certificate No		Name	

Effluent Disposal or Reclaimed Water Reuse: Perc Pond

Wet Weather Discharge Activated: Yes ___ No X Not Applicable ___ If yes, cumulative days of wet weather discharge ___

Attach additional sheets necessary to list all certified operators necessary for required operations.

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed mail this report to: Department of Environmental Protection, Central District, 3319 Maguire Boulevard Suite 232, Orlando, FL 32803-3767

PERMITTEE NAME:	Southlake Utilities, Inc	PERMIT NUMBER:	FLA010634		
MAILING ADDRESS:	300 South U.S. Highway 27 Clermont, FL 34711	MONITORING PERIOD From:	March 1st, 2000	To March 31st, 2000	
		LIMIT:	Final	REPORT	Monthly
		CLASS SIZE:	minor	GROUP:	Domestic
FACILITY:	Southlake Utilities WWTF	FACILITY ID:	FLA010634	WAFR SITE NO	4203
LOCATION	U.S. Highway 27 South Clermont, FL	GMS ID NO.:	3035P05827	GMS TEST SITE NO	3035X17269
		DISCHARGE POINT NUMBER:	R001		
COUNTY	Lake	PLANT SIZE/TREATMENT TYPE:	IIIC		

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No Ex.	Frequency of Analysis	Sample Type
Flow	Sample Measurement	.158	0.187	MGD							
STORET No. 50050 Y Mon.Site No. EFF-1	Permit Measurement	0.55 (An.Ave.)	Report (Mo.Ave.)	mgd						Continuous	Flow meters
CBOD5	Sample Measurement				1.6			mg/L		Monthly	Grab
STORET No. 80082 Y Mon.Site No. EFA-1	Permit Measurement				20.0 (An.Ave.)			mg/L		Weekly	8-hour FPC
CBOD5	Sample Measurement				<1	<1		mg/L		Monthly	Grab
STORET No. 80082 Y Mon.Site No. EFA-1	Permit Measurement				30.0 (Mo.Ave.)	60.0 (Max.)		mg/L		Weekly	8-hour FPC
TSS	Sample Measurement				5.0			mg/L		Monthly	Grab
STORET No. 00530 Y Mon.Site No. EFA-1	Permit Measurement				20.0 (An.Ave.)			mg/L		Weekly	8-hour FPC
TSS	Sample Measurement				4.0	4.0		mg/L		Monthly	Grab
STORET No. 00530 Y Mon.Site No. EFA-1	Permit Measurement				30.0 (Mo.Avg.)	60.0 (Max.)		mg/L		Weekly	8-hour FPC
pH	Sample Measurement				7.5	7.8		SU		5days wk	Grab
STORET No. 00400 Y Mon.Site No. EFA-1	Permit Measurement				6.0 (Min.)	8.5 (Max.)		S.U.		5 Days/Week	Grab

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein; and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (YY/MM/DD)
Richard W. Post, Pres., Southeast Utilities, Inc.	Richard W. Post	407-889-9755	4/04/2000

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):

23

Permit Number: FLA010634

Month/Year: March 2000

Three-month Average Daily Flow: .177

Daily Flow % of Permitted Capacity: 3290

Days of the Months	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Parameter/Unit/Monitoring Location Site Number																														
Flow (mgd), EFF-1	.192	.254	.092	.196	.196	.196	.188	.186	.180	.179	.195	.195	.195	.188	.194	.194	.194	.198	.198	.198	.196	.188	.180	.174	.192	.192	.192	.196	.184	.188
CBOD5 (mg/L), EFA-1	21																													
CBOD5 (mg/L), INF-1	213																													
TSS (mg/L), EFA-1	4.0																													
TSS (mg/L), INF-1	293																													
pH (std. units), EFA-1	7.7	7.7	7.7		7.6	7.6	7.6	7.7	7.6		7.7	7.7	7.6	7.7	7.6		7.6	7.8	7.7	7.7	7.6		7.6	7.5	7.6	7.6				
Fecal Coliform Bacteria (#/100 mL), EFA-1	21																													
Cl2 For Disinfection) (mg/L), EFA-1	2.2	2.0	1.9		1.8	1.7	1.9	1.9	2.4		2.2	2.4	2.2	2.5	2.2		1.5	2.1	2.0	2.2	1.8		1.4	1.0	0.8	2.5				
Nitrate as N) (mg/L), EFA-1	0.54																													

Staffing:

Shift Operator	Class C	Certificate No 4419	Name: Norman Langevin		
Lg Shift Operator	Class	Certificate No	Name		
Shift Operator	Class	Certificate No	Name		
Operator	Class	Certificate No	Name		

Effluent Disposal or Reclaimed Water Reuse: Perc Pond

Wet Weather Discharge Activated: Yes ___ No X Not Applicable ___ If yes, cumulative days of wet weather discharge ___

Additional sheets necessary to list all certified operators necessary for required operations

33

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed mail this report to: Department of Environmental Protection, Central District, 3319 Maguire Boulevard Suite 232, Orlando, FL 32803-3767

PERMITTEE NAME: Southlake Utilities, Inc
MAILING ADDRESS: 800 South U.S. Highway 27
Clermont, FL 34711

PERMIT NUMBER: FLA010634
MONITORING PERIOD From: April 1st To: April 30th, 2000
LIMIT: Final
CLASS SIZE: minor
REPORT: Monthly
GROUP: Domestic

FACILITY: Southlake Utilities WWTF
LOCATION: U.S. Highway 27 South
Clermont, FL

FACILITY ID: FLA010634
GMS ID NO.: 3035P05827
DISCHARGE POINT NUMBER: R001
PLANT SIZE/TREATMENT TYPE: IIIC
WAFR SITE NO. 4203
GMS TEST SITE NO 3035X17269

COUNTY: Lake

Parameter		Quantity or Loading		Units	Quality or Concentration		Units	No Ex.	Frequency of Analysis	Sample Type
Flow	Sample Measurement	.166	0.198	MGD						
STORET No. 50050 Y Mon Site No. EFF-1	Permit Measurement	0.55 (An Ave)	Report (Mo Ave)	mgd					Continuous	Flow meter
CBOD5	Sample Measurement				1.4		MG/L		Monthly	Grab
STORET No. 80082 Y Mon Site No. EFA-1	Permit Measurement				20.0 (An Ave)		mg/L		Weekly	8-hour FPC
CBOD5	Sample Measurement				1.3	1.3	MG/L		Monthly	Grab
STORET No. 80082 I Mon Site No. EFA-1	Permit Measurement				30.0 (Mo Ave)	60.0 (Max)	mg/L		Weekly	8-hour FPC
NS	Sample Measurement				4.8		MG/L		Monthly	Grab
STORET No. 00530 Y Mon Site No. EFA-1	Permit Measurement				20.0 (An Ave)		mg/L		Weekly	8-hour FPC
TSS	Sample Measurement				1.9	1.9	MG/L		Monthly	Grab
STORET No. 00530 I Mon Site No. EFA-1	Permit Measurement				30.0 (Mo Ave)	60.0 (Max)	mg/L		Weekly	8-hour FPC
pH	Sample Measurement				2.0	2.9	SU		5 days wk	Grab
STORET No. 00400 I Mon Site No. EFA-1	Permit Measurement				6.0 (Min)	8.5 (Max)	S.U.		5 Days/Week	Grab

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein; and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

NAME TYPED OR PRINTED OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (YY/MM/DD)
Richard W. Post, Pres., Southeast Utilities, Inc.	Richard W. Post	407-889-9755	5/02/2000

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):

32

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed mail this report to: Department of Environmental Protection, Central District, 3319 Maguire Boulevard Suite 232, Orlando, FL 32803-3767

PERMITTEE NAME:	Southlake Utilities, Inc	PERMIT NUMBER:	FLA010634		
MAILING ADDRESS:	300 South U.S. Highway 27 Clermont, FL 34711	MONITORING PERIOD From:	May 1st	To: May 31st, 2000	
		LIMIT:	Final	REPORT:	Monthly
		CLASS SIZE:	minor	GROUP:	Domestic
FACILITY:	Southlake Utilities WWTF	FACILITY ID:	FLA010634	WAFR SITE NO:	4203
LOCATION	U.S. Highway 27 South Clermont, FL	GMS ID NO.:	3035P05827	GMS TEST SITE NO.:	3035X17269
		DISCHARGE POINT NUMBER:	R001		
		PLANT SIZE/TREATMENT TYPE:	IIC		
COUNTY:	Lake				

Parameter		Quantity or Loading		Units	Quality or Concentration		Units	No Ex.	Frequency of Analysis	Sample Type
Flow	Sample Measurement	.174	0.190	MGD						
STORET No. 50050 Y Mon.Site No. EFF-1	Permit Measurement	0.55 (An.Ave.)	Report (Mo.Ave.)	mgd					Continuous	Flow meter
CBOD5	Sample Measurement				1.4		MG/L		Monthly	Grab
STORET No. 80082 Y Mon.Site No. EFA-1	Permit Measurement				20.0 (An.Ave.)		mg/L		Weekly	8-hour FPC
CBOD5	Sample Measurement				2.1	2.1	MG/L		Monthly	Grab
STORET No. 80082 Y Mon.Site No. EFA-1	Permit Measurement				30.0 (Mo.Ave.)	60.0 (Max.)	mg/L		Weekly	8-hour FPC
TSS	Sample Measurement				5.0		MG/L		Monthly	Grab
STORET No. 00530 Y Mon.Site No. EFA-1	Permit Measurement				20.0 (An.Ave.)		mg/L		Weekly	8-hour FPC
TSS	Sample Measurement				11.4	11.4	MG/L		Monthly	Grab
STORET No. 00530 Y Mon.Site No. EFA-1	Permit Measurement				30.0 (Mo.Avg.)	60.0 (Max.)	mg/L		Weekly	8-hour FPC
pH	Sample Measurement				7.6	7.8	SU		5days wk	Grab
STORET No. 00400 Y Mon.Site No. EFA-1	Permit Measurement				6.0 (Min.)	8.5 (Max.)	S.U.		5 Days/Week	Grab

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein; and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (YY/MM/DD)
Richard W. Post, Pres., Southeast Utilities, Inc.	Richard W. Post	407-889-9755	6/01/2000

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):

53

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed mail this report to: Department of Environmental Protection, Central District, 3319 Maguire Boulevard Suite 232, Orlando, FL 32803-3767

PERMITTEE NAME:	Southlake Utilities, Inc	PERMIT NUMBER:	FLA010634		
MAILING ADDRESS:	800 South U.S. Highway 27 Clermont, FL 34711	MONITORING PERIOD From:	June 1st	To:	June 30th 2006
		LIMIT:	Final	REPORT	Monthly
		CLASS SIZE:	minor	GROUP:	Domestic
FACILITY:	Southlake Utilities WWTF	FACILITY ID:	FLA010634	WAFR SITE NO.	4203
LOCATION:	U.S. Highway 27 South Clermont, FL	GMS ID NO.:	3035P05827	GMS TEST SITE NO.:	3035X17269
		DISCHARGE POINT NUMBER:	R001		
COUNTY:	Lake	PLANT SIZE/TREATMENT TYPE:	IIIC		

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Flow	Sample Measurement	.181	0.207	MGD							
STORET No. 50050 Y Mon.Site No. EFF-1	Permit: Measurement	0.53 (An.Avg.)	Report (Max.Val.)	mgd						Continuous	Flow-meter
CBOD5	Sample Measurement				1.8			MG/L		Monthly	Grab
STORET No. 80082 Y Mon.Site No. EFA-1	Permit: Measurement				20.0 (Mo.Avg.)			mg/L		Weekly	8-hour FPC
CBOD5	Sample Measurement				5.6	5.6		MG/L		Monthly	Grab
STORET No. 80082 L Mon.Site No. EFA-1	Permit: Measurement				30.0 (Mo.Avg.)	60.0 (Max.)		mg/L		Weekly	8-hour FPC
TSS	Sample Measurement				5.7			MG/L		Monthly	Grab
STORET No. 00530 Y Mon.Site No. EFA-1	Permit: Measurement				20.0 (An.Avg.)			mg/L		Weekly	8-hour FPC
TSS	Sample Measurement				11.3	11.3		MG/L		Monthly	Grab
STORET No. 00530 L Mon.Site No. EFA-1	Permit: Measurement				30.0 (Mo.Avg.)	60.0 (Max.)		mg/L		Weekly	8-hour FPC
pH	Sample Measurement				7.3	7.9		SU		5 days wk	Grab
STORET No. 00400 L Mon.Site No. EFA-1	Permit: Measurement				6.0 (Min.)	8.5 (Max.)		S.U.		5 Days/Week	Grab

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein; and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO.	DATE (YY/MM/DD)
Richard W. Post, Pres., Southeast Utilities, Inc.	Richard W. Post	407-889-9755	06/07/06

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):

36

Permit Number: FLA010634

Month/Year: June 2000

Three-month Average Daily Flow: .198

Daily Flow % of Permitted Capacity: 36%

Days of the Months / Parameter/Unit/Monitoring Location Site Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Flow (mgd), EFF-1	.198	.188	.198	.198	.198	.208	.208	.208	.198	.208	.208	.208	.208	.208	.176	.178	.248	.248	.238	.258	.25	.258	.210	.218	.218	.218	.208	.216	.218	.218
CBOD5 (mg/L), EFA-1	5.6																													
CBOD5 (mg/L), INF-1	133																													
TSS (mg/L), EFA-1	11.3																													
TSS (mg/L), INF-1	159																													
pH (std. units), EFA-1	7.8	7.8		7.7	7.7	7.8	7.8	7.7		7.7	7.8	7.8	7.7	7.6				7.7	7.9	7.8	7.8	7.7			7.5	7.6	7.6	7.7	7.7	
Fecal Coliform Bacteria (#/100 mL), EFA-1	<1																													
TRC (For Disinfection) (mg/L), EFA-1	2.3	2.2		2.6	2.4	2.3	2.4	2.2		2.7	2.3	1.9	1.1	1.0				3.2	4.0	4.0	0.7	0.6			1.0	1.3	1.4	1.8	2.2	
Nitrate (as N) (mg/L), EFA-1	9.0																													

Staffing:

Shift Operator — Class C — Certificate No 4419 — Name Norman Langevin

ing Shift Operator — Class ____ — Certificate No. ____ — Name ____

Shift Operator — Class ____ — Certificate No ____ — Name: ____

Operator — Class ____ — Certificate No. ____ — Name ____

of Effluent Disposal or Reclaimed Water Reuse: Perc Pond

ed Wet Weather Discharge Activated: Yes ___ No X Not Applicable ___ if yes, cumulative days of wet weather discharge ____

n additional sheets necessary to list all certified operators necessary for required operations.

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

en Completed mail this report to: Department of Environmental Protection, Central District, 3319 Maguire Boulevard Suite 232, Orlando, FL 32803-3767

UNITEE NAME.	Southlake Utilities, Inc	PERMIT NUMBER:	FLA010634		
LING ADDRESS.	300 South U.S. Highway 27	MONITORING PERIOD From:	July 1st, 2	To.	July 31st, 2
	Clermont, FL 34711	LIMIT:	Final	REPORT	Monthly
		CLASS SIZE.	minor	GROUP	Domestic
LITY	Southlake Utilities WWTF	FACILITY ID:	FLA010634	WAFR SITE NO.	4203
ATION.	U.S. Highway 27 South	GMS ID NO.:	3035P05827	GMS TEST SITE NO.	3035XC17269
	Clermont, FL	DISCHARGE POINT NUMBER:	2001		
NTY	Lake	PLANT SIZE/TREATMENT TYPE:	IIC		

Parameter		Quantity or Loading		Units	Quality or Concentration		Units	No Ex.	Frequency of Analysis	Sample Type
	Sample Measurement	.183	0.211	MGD						
RET No. 50050 Y Site No. EFF-1	Permit Measurement	0.55 (An.Ave.)	Report (Mo.Ave.)	mgd					Continuous	Flow meters
01	Sample Measurement				1.9		MG/L		Monthly	Grab
RET No. 80082 Y Site No. EFA-1	Permit Measurement				20.0 (An.Ave.)		mg/L		Weekly	8-hour FPC
01	Sample Measurement				2.1	2.1	MG/L		Monthly	Grab
RET No. 80082 Y Site No. EFA-1	Permit Measurement				30.0 (Mo.Ave.)	60.0 (Max.)	mg/L		Weekly	8-hour FPC
	Sample Measurement				5.8		MG/L		Monthly	Grab
RET No. 00530 Y Site No. EFA-1	Permit Measurement				20.0 (An.Ave.)		mg/L		Weekly	8-hour FPC
	Sample Measurement				5.3	5.3	MG/L		Monthly	Grab
RET No. 00530 Y Site No. EFA-1	Permit Measurement				30.0 (Mo.Ave.)	60.0 (Max.)	mg/L		Weekly	8-hour FPC
	Sample Measurement				7.6	8.0	SU		5 days wk	Grab
RET No. 00400 P Site No. EFA-1	Permit Measurement				6.0 (Min.)	8.5 (Max.)	S.U.		5 Days/Week	Grab

Under penalty of law that I have personally examined and am familiar with the information submitted herein; and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE SIGNED
ard W. Post, Pres., Southeast Utilities, Inc.	Richard W. Post	407-889-9755	08/08/9

IT AND EXPLANATION OF ANY VIOLATIONS Reference all attachments here:

82

Permit Number: FLA010634

Month/Year: July 2000

Three-month Average Daily Flow: .202

Daily Flow % of Permitted Capacity: 37%

Days of the Month: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30/31

Parameter/Unit/Monitoring Location Site Number:

- Flow (mgd), EFF-1: .220 .220 .220 .224 .210 .206 .210 .219 .219 .219 .210 .214 .212 .140 .148 .148 .176 .226 .192 .126 .320 .187 .187 .187 .257 .247 .226 .231 .247 | .242 | .24?
- CBOD5 (mg/L), EFA-1: 2.1
- CBOD5 (mg/L), INF-1: 166
- TSS (mg/L), EFA-1: 5.3
- TSS (mg/L), INF-1: 209
- pH (std. units), EFA-1: 7.7 7.7 7.8 7.7 7.7 — 7.7 7.9 7.9 7.8 7.8 — 7.6 7.7 7.7 7.8 7.8 7.8 — 7.7 8.0 7.9 8.0 7.9 — 7.8
- Fecal Coliform Bacteria (#/100 mL), EFA-1: <1
- TRC For Disinfection (mg/L), EFA-1: 1.9 2.0 1.8 4.0 4.0 — 3.1 2.9 3.0 3.0 3.1 — 3.0 2.5 2.0 2.0 3.0 2.2 — 2.8 3.2 4.0 4.0 4.0 — 4.0
- Nitrate (as N) (mg/L), EFA-1: 5.3

Staffing:

Day Shift Operator — Class C — Certificate No. [illegible] — Name: Norman Langevin

Evening Shift Operator — Class ____ — Certificate No. ____ — Name ____

Night Shift Operator — Class ____ — Certificate No. ____ — Name ____

Lead Operator — Class ____ — Certificate No. ____ — Name ____

Type of Effluent Disposal or Reclaimed Water Reuse: Perc Pond

Was Wet Weather Discharge Activated: Yes____ No X Not Applicable____ If yes, cumulative days of wet weather discharge ____

Attach additional sheets necessary to list all certified operators necessary for required operations

59

3

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed mail this report to: Department of Environmental Protection, Central District, 3319 Maguire Boulevard Suite 232, Orlando, FL 32803-3767

PERMITTEE NAME: Southlake Utilities, Inc
MAILING ADDRESS: 300 South U.S. Highway 27
Clermont, FL 34711

PERMIT NUMBER: FLA010634
MONITORING PERIOD From: August 1st To: August 31st, 2003
LIMIT: Final
CLASS SIZE: Minor
REPORT: Monthly
GROUP: Domestic

FACILITY: Southlake Utilities WWTF
LOCATION: U.S. Highway 27 South
Clermont, FL

FACILITY ID: FLA010634
GMS ID NO.: 3035P05827
DISCHARGE POINT NUMBER: R001
PLANT SIZE/TREATMENT TYPE: IIC

WAFR SITE NO: 4203
GMS TEST SITE NO.: 3035X17269

COUNTY: Lake

Parameter		Quantity or Loading		Units	Quality or Concentration		Units	No Ex.	Frequency of Analysis	Sample Type
Flow	Sample Measurement	.186	0.235	mgd						
STORET No. 50050 Y Mon.Site No. EFA-1	Permit Measurement	0.55 (An.Ave.)	Report (Mo.Ave.)	mgd					Continuous	Flow meters
CBOD5	Sample Measurement				1.9		MG/L		Monthly	Grab
STORET No. 80082 Y Mon.Site No. EFA-1	Permit Measurement				20.0 (An.Ave.)		mg/L		Weekly	8-hour FPC
CBOD5	Sample Measurement				<1	<1	MG/L		Monthly	Grab
STORET No. 80082 Y Mon.Site No. EFA-1	Permit Measurement				30.0 (Mo.Ave.)	60.0 (Max.)	mg/L		Weekly	8-hour FPC
TSS	Sample Measurement				5.5		MG/L		Monthly	Grab
STORET No. 00530 Y Mon.Site No. EFA-1	Permit Measurement				20.0 (An.Ave.)		mg/L		Weekly	8-hour FPC
TSS	Sample Measurement				3.1	3.1	MG/L		Monthly	Grab
STORET No. 00530 Y Mon.Site No. EFA-1	Permit Measurement				30.0 (Mo.Avg.)	60.0 (Max.)	mg/L		Weekly	8-hour FPC
pH	Sample Measurement				7.6	8.0	SU		5 days/wk	Grab
STORET No. 00400 Y Mon.Site No. EFA-1	Permit Measurement				6.0 (Min.)	8.5 (Max.)	S.U.		5 Days/Week	Grab

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein; and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO.	DATE SIGNED
Richard W. Post, Pres., Southeast Utilities, Inc.	Richard W. Post	407-889-9755	Sept. 03-2003

COMMENT AND EXPLANATION OF ANY VIOLATIONS Reference all attachments here:

5

Permit Number: FLA010634

Month/Year: August 2000

Three-month Average Daily Flow: .217

Daily Flow % of Permitted Capacity: 39%

Days of the Month / Parameter/Unit/Monitoring Location Site Number	Values (days 1–29, in order)
Flow (mgd), EFF-1	.228 .226 .230 .232 .264 .269 .264 .260 .194 .246 .230 .253 .251 .255 .260 .232 .231 .259 .212 .212 .214 .232 .226 .222 .220 .233 .239 .233 .226
CBOD5 (mg/L), EFA-1	<1
CBOD5 (mg/L), INF-1	60
TSS (mg/L), EFA-1	3.1
TSS (mg/L), INF-1	196
pH (std. units), EFA-1	7.9 7.9 7.9 7.8 7.8 / 7.7 7.8 7.7 7.8 7.7 / 7.8 7.8 7.7 7.7 7.8 7.8 / 8.0 7.7 7.8 7.6 7.7 / 7.7 7.8 7.1
Fecal Coliform Bacteria (#/100 mL), EFA-1	<1
TRC (For Disinfection) (mg/L), EFA-1	4.0 4.0 4.0 4.0 / 4.0 4.0 4.0 4.0 4.0 / 4.0 4.0 4.0 4.0 4.0 / 4.0 4.0 4.0 4.0 4.0 / 4.0 4.0 4.0
Nitrate (as N) (mg/L), EFA-1	3.2

Plant Staffing:

	Class	Certificate No.	Name
Day Shift Operator			Norman Langevin
Evening Shift Operator			
Night Shift Operator			
Lead Operator			

Type of Effluent Disposal or Reclaimed Water Reuse: Perc Pond

Permitted Wet Weather Discharge Activated: Yes ___ No ___ Not Applicable ___ If yes, cumulative days of wet weather discharge ______

Attach additional sheets necessary to list all certified operators necessary for required operations.

41

APPENDIX

2. WASTEWATER TREATMENT FACILITY DESIGN CALCULATIONS

TABLE 4-4

AERATION BASIN DESIGN
SOUTHLAKE UTILITIES, INC. - Existing & Future

Q (Average Daily Flow)	0.50 MGD, existing; 0.5 MGD, future(1998/1999*)
Peaking Factor	1.0 (ADF to WWTP = 350 GPM for 0.5 MGD)
Organic Loading Rate	13.6 Pounds 5 day CBOD per 1000 CF
Hydraulic Detention Time	21.9 Hours (460,000 gallons; 61,500 CF)
F/M Ratio	0.0952
Side Water Depth	15.0 Feet Minimum
Mixed Liquor Volatile SS	2,100 mg/l
Mixed Liquor SS (high) estimated	4,000 mg/l
Mixed Liquor SS (low) estimated	2,500 mg/l
Sludge Production, estimated	0.3 pounds/#TSS/# CBOD removed
Tank Volume	460,000 gal.; 61,500 CF
Carbonaceous Oxygen Demand Rate	1.4 pounds of Oxygen/pound CBOD removed
Carbonaceous Oxygen Demand	1,051 pounds
Nitrogenous Oxygen Demand Rate	4.3 pounds of Oxygen per pound, TKN
Nitrogenous Oxygen Demand	0
Standard Process Oxygen Required	1,051 pounds/day
Standard Process Air Required	1,136 SCFM
Minimum Mixing Air Requirements	1,230 SCFM
Controlling Air Requirement	1,806 SCFM for Exist. & Proposed 0.5 MGD Units
Influent 5 Day CBOD	200 mg/l
Effluent 5 Day CBOD	20 mg/l
Solids Retention Time	10 days minimum
Soluble Effluent 5Day CBOD Concentration	20 mg/l
Influent NH3-N	10 mg/l
Effluent NH3-N	10 mg/l
Theoretical Nitrogen Max Grow Rate	1.999 mg/l
Nitrogen-Max. Spec. Growth Rate	0.761 mg/l
Theoretical Sludge Age	1.5 days
Design Sludge Age	3.5 days
Controlling SRT	26 days
Organic Removal Rate	0.515(#BOD removed/3#MLSS/Day)
Alkalinity Constant	7 #CaCO3 Consolidated/#NH3-N Oxidated
Influent Alkalinity Concentration	75 to 150 mg/l
Alkalinity left over as CaCO3	10 Pounds +/-
Alkalinity Residual Concentration (CaCO3)	100 to 150 mg/l

NOTE: See TABLE 4-5 for PROCESS CALCULATIONS; TABLE 4-6 for AIR DESIGN CALCULATIONS; and TABLE 4-7 for ACTUAL AIR REQUIREMENTS.

TABLE 4-5
SOUTHLAKE UTILITIES, INC. - EXISTING AND FUTURE 0.5 mgd Units
PROCESS CALCULATIONS

1. ORGANIC LOADING RATE (OLR) AT ADF (Each unit at 0.5 MGD)

   BOD Mass = Flow(MGD) /Concentration (mg/l) X 8.34 #/gal. =
   = 0.50 MGD/200 mg/l X 8.34 #/gal. = 834 pounds

   ORL(#CBOD /1000 CF/Day = CBOD MASS (#CBOD/Day)/ Volume/1,000 CF

   ORL = 834 # CBOD/ 61,500 CF/1000 CF = 13.6 pounds CBOD5 per 1000 CF aeration

2. HYDRAULIC DETENTION TIME (HDT)

   HDT in Hours = Volume (Gallons)/ Flow (Gallons Per Day)

   HDT = 460,000 gal./ 500,000 GPD = 21.9 hours

3. F to M RATIO

   Assume Minimum MLVSS = 2,100 mg/l and CBOD5 load is 834 #

   F to M Ration = 834 # / 2100 mg/l / 8.34 #/gal. / 0.5 MGD = 0.0952

4. SOLIDS RETENTION TIME (SRT)

   SRT = Mass In Aeration Basin(s) (#)/ Mass Wasted(#/day) and using low est. MLSS

   Mass in Aeration Basin = MLSS X Volume 8.34 = 1,900 mg/l X 0.5 MGD X 8.34#/gal.
   = 7,923 (# TSS)
   Mass wasted = (Inf. CBOD - Eff. CBOD) X 8.34 #/Gal X 0.5 MGD
   = (200mg/l - 20 mg/l) X 8.34 3/gal. X 0.5 MGD
   = 792 #/day (Each 0.5 mgd Unit)

   SRT = 7,923 #TSS / 792 #TSS = 10

TABLE 4-6
SOUTHLAKE UTILITIES, INC. - EXISTING AND FUTURE

AIR DESIGN CALCULATIONS

1. CARBONACEOUS OXYGEN DEMAND - CO2D

BOD MASS = FLOW(MGD) X 8.34#/GAL. X (Inf. CBOD - Eff. CBOD)
= 0.5 MGD X 8.34 #/gal. X 180 = 750.6

CBOD5 Demand = 1.4 # O2/pound of CBOD5 or pound of TKN
= 1.4 X 750.6 = 1,051 pounds O2/Day

2. NITROGENOUS OXYGEN DEMAND - NO2-D

Influent NH3-N = 10 mg/l

NH3-N Mass = (Inf. - Eff.) X 8.34 #/gal. X Flow

= (10 - 10) X 8.34 X 0.5 = 0

Nitrogenous Oxygen Demand = 4.3 #/# of TKN X 0 = 0

3. TOTAL OXYGEN DEMAND - AOD

Carbonaceous O2 Demand = 1,051 pounds O2
Nitrogenous O2 Demand = 0 " "
ACTUAL OXYGEN DEMAND = 1,051 pounds/day

4. ACTUAL TO STANDARD CONVERSION -

Theta	1.024
Alpha	0,600 (Coarse Bubbles)
Beta	0.95
Pf	30" Mercury @ Jobsite
P MSL	30" Mercury @ MSL
DO f	2 mg/l @ Jobsite
T	25 degrees Centigrade
C sat. 20	9.55 (Coarse Bubble)
Surface C sat. 20	9.09
Surface C sat. T	8.27
C sat. T	8.68

Actual Oxygen Required / Standard Process Oxygen Required = 0.395

SOR = 1051 / 0.395 = 2,260 pounds O2/day

TABLE 4-7

SOUTHLAKE UTILITIES, INC. - EXISTING & FUTURE 0.5 UNITS ACTUAL AIR REQUIREMENTS

1. ACTUAL OPERATING CONDITIONS -

Actual Temperature	90 Degrees F
Actual Pressure	14.7 psig
Assumed Percent Air By Weight	23.2%
Density of Air @ Standard Conditions	0.0749 Pounds/CF

Standard Air Required = SOR / Density / % Air / OTE / 1440 min./day
= 2,660 #/day / 0.0749 / 0.232 / 0.0975 / 1,440 min./day
= 1,090 CFM

Actual Air Required = SCFM X 14.7 / P1 X t1 / 528 Where
t1 @ Blower Inlet = 550 Degrees Rankin; P1 @ Blower Inlet = 14.7 psig

Then AAR = 1,090 SCFM X (14.7 psig/14.7 psig) X (550/528)

ACTUAL AIR REQUIRED = 1,136 SCFM

2. MIXING REQUIREMENTS -

Minimum Mixing Design (Coarse Bubbles) = 20 SCFM per 1,000 CF (Aeration)
Minimum Mixing Air Required = 20 SCFM X (61,500 CF / 1,000)
= 1,230 SCFM *critical number*
Minimum Air Req'd. Per WPCE Mopp 8 = $\frac{1.0 \text{ X } 2000 \text{ CFM X } 834 \text{ \# CBOD/day}}{1,440 \text{ min./day}}$
Minimum Air Required Per MOPP 8 = 1,160 SCF

3. AIR LIFTS, SLUDGE HOLDING & SURGE AERATION -

Sludge Air Lifts = Q / 1,440 min/day X 0.33 = 500,000 / 1,440 X 0.33 = 116 SCFM

Sludge Holding = 3 CFM / 100 CF Vol. = 3 CFM X $\frac{12,000 \text{ CF}}{100 \text{ CF}}$ = 360 SCFM

Surge Aeration = 1 CFM / 100 CF Vol. = 1 CFM X $\frac{10,027 \text{ CF}}{100 \text{ CF}}$ = 100 SCFM

Sub-Total = 116 + 360 + 100 = 576 SCFM required

TOTAL AERATION = 1,230 SCFM + 576 SCFM = 1,806 SCFM

TABLE 4-9

SOUTHLAKE UTILITIES, INC.
CHLORINE CONTACT BASINS - EXISTING

DESCRIPTION	VALUE
Number of Basins (Flow to WWTP is @ ADF or 347 GPM for 0.5 MGD)	2
Pre-Chlorination	0
Volume of each Basin, gallons	7,084
Cubic Feet	947
TOTAL VOLUME, gallons	14,168
Working Depth, feet	9
Total Depth, feet	10
Total surface area = 2 (8.4' X 12.5), Square Feet	210
Detention Time (minutes) @ ADF of 347 GPM, each side	41
Detention Time (minutes) with one side out of service	20.5
Chlorine dosage (mg/l)	3 to 5

NOTE: F. A. C., Section 17-600.440(c)2.a - The product of the total chlorine residual used for design and the contact time will be at least 40 (3 mg/l X 20.5 min. = 61.5).

APPENDIX

RESIDUALS MANAGEMENT AGREEMENT - MOD TO FDEP PERMIT

Shelley's Septic Tanks

104 E. Ponkan Rd.
Apopka, Florida 32712
(407) 889-8042 • Lake County Residents call (352) 383-5775

"Ain't no Smelly with Shelley's"

CONTRACT
HAULING, TREATMENT AND DISPOSAL OF DOMESTIC WASTE WATER RESIDUALS

This contract, by and between Shelley's Septic Tanks, Inc., hereinafter called S.S.T. and hereinafter referred to as the "PLANT" and, SOUTHLAKE UTILITIES hereinafter referred to as the "GENERATOR". Permit number: FLA 010634

S.S.T. is the owner and operator of a lime stabilization facility and disposal site, and Whereas, said treatment and disposal site has been approved and is operating under a Florida Department of Environmental Protection (FDEP) permit, and

Whereas, the GENERATOR owns and operates a domestic waste water treatment plant known as Southlake Utilities located at 800 S. Highway 27, Clermont, Florida 34711 Florida, and has a need to dispose of the waste water residuals generated by the PLANT, and

Whereas, the GENERATOR is responsible for the maintaining and operation of the PLANT in compliance with Chapter 17-600 and compliance to the full extent of all Rules and Regulations applicable by Federal, State and local governing bodies, and

Whereas, as a condition precedent to the obtaining a valid operating permit for the PLANT, FDEP requires the GENERATOR to file an Agricultural Use Plan whereby the GENERATOR certifies that his residuals shall be applied only on sites for which an Agricultural Use Plan has been approved by the FDEP.

Now therefore, and in consideration of the mutual terms, covenants and conditions to be complied with on the part of the respective parties hereto, it is agreed as follows:

1. Nothing in this Contract shall supersede or take precedence over the obligations and responsibilities of each party to operate and maintain his individual plant in compliance with the rules of the State of Florida.

2. The GENERATOR hereby covenants and agrees:

   A. To provide a chemical analysis of the wastewater residual proposed to be treated prior to the initial delivery, and to provide updated and additional residuals analysis in compliance with the frequency and schedule stated in Chapter 62-640, Rules of the State of Florida.

   B. To pay a fee for designated in Exhibit "A" Contract for transport, treatment and disposal.

   C. To deliver a wastewater residual that are within the chemical criteria as stated in Chapter 62-640 and any and all Federal and State Requirements.

   D. The GENERATOR warrants that the residuals delivered to S.S.T. shall not contain any hazardous, toxic or radioactive waste or substances as defined by applicable Federal, State and local laws or restrictions.

3. S.S.T. hereby agrees to accept all responsibility for:

   A. To maintain, monitor and operate the lime stabilization plant and residuals application sites in compliance with Chapter 62-640, F.A.C.

   B. To accept all responsibility for the proper measurement, stabilization, and land application and for the proper application of the residuals as required by Chapter 62-640, F.A.C.

Department of Environmental Protection

Jeb Bush
Governor

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

David B. Struhs
Secretary

CERTIFIED MAIL
Z 368 919 696

SOUTHLAKE UTILITIES INC
800 SOUTH HIGHWAY 27
CLERMONT FL 34711

ATTENTION ROBERT CHAPMAN
PRESIDENT

Lake County - DW
Southlake WWTF
Wastewater Permit No. FLA010634
Modification of Conditions

Dear Mr. Chapman

The Department is in receipt of your request to modify the conditions of the permit referenced above. The conditions are changed as follows:

II. RESIDUALS MANAGEMENT REQUIREMENTS

1. The method of residuals use or disposal by this facility is transport, by agreement, to Shelley's Septic Tanks Residuals Management Facility. The Department shall be notified at least thirty (30) days prior to termination of this agreement.

2. The permittee shall be responsible for proper treatment, management, use, and land application or disposal of its residuals. *[62-640.300(5), 3-30-98]*

3. The permittee shall not be held responsible for treatment, management, use, or land application violations that occur after its residuals have been accepted by a permitted residuals management facility with which the source facility has an agreement in accordance with Rule 62-640.880(1)(c), F.A.C., for further treatment, management, use or land application. *[62-640.300(5), 3-30-98]*

4. Disposal of residuals, septage, and other solids in a solid waste landfill, or disposal by placement on land for purposes other than soil conditioning or fertilization, such as at a monofill, surface impoundment, waste pile, or dedicated site, shall be in accordance with Chapter 62-701, F.A.C. *[62-640.100(6)(k)3 & 4, 3-30-98]*

5. If the permittee intends to accept residuals from other facilities, a permit revision is required pursuant to Rule 62-640.880(2)(d), F.A.C. *[62-640.880(2)(d), 3-30-98]*

6. The permittee shall keep hauling records to track the transport of residuals between facilities. The hauling records shall contain the following information:

Source Facility	Residuals Management Facility or Treatment Facility
1. Date and Time Shipped	1. Date and Time Received
2. Amount of Residuals Shipped	2. Amount of Residuals Received
3. Degree of Treatment (if applicable)	3. Name and ID Number of Source Facility
4. Name and ID Number of Residuals Management Facility or Treatment Facility	4. Signature of Hauler
	5. Signature of Responsible Party at Residuals Management Facility or Treatment Facility

These records shall be kept for five years and shall be made available for inspection upon request by the Department. A copy of the hauling records information maintained by the source facility shall be provided upon delivery of the residuals to the residuals management facility or treatment facility. The permittee shall report to the Department within 24 hours of discovery any discrepancy in the quantity of residuals leaving the source facility and arriving at the residuals management facility or treatment facility. *[62-640.880(4), 3-30-98]*

7. Storage of residuals or other solids at the permitted facility shall require prior written notification to the Department. *[62-640.300(4), 3-30-98]*

This letter must be attached to Wastewater Permit No. FLA010634 and becomes a part of and subject to all conditions of that permit.

The Department's proposed agency action shall become final unless a timely petition for an administrative hearing is filed under sections 120.569 and 120.57 of the Florida Statutes before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received by the clerk) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000.

Petitions by the applicant or any of the parties listed below must be filed within fourteen days of receipt of this written notice. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the notice or within fourteen days of receipt of the written notice, whichever occurs first.

Under section 120.60(3) of the Florida Statutes, however, any person who has asked the Department for notice of agency action may file a petition within fourteen days of receipt of such notice, regardless of the date of publication.

The petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 of the Florida Statutes. Any subsequent intervention (in a proceeding initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information:

(a) The name, address, and telephone number of each petitioner; the name, address, and telephone number of the petitioner's representative, if any; the Department permit identification number and the county in which the subject matter or activity is located;
(b) A statement of how and when each petitioner received notice of the Department action;
(c) A statement of how each petitioner's substantial interests are affected by the Department action;
(d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
(e) A statement of facts that the petitioner contends warrant reversal or modification of the Department action;
(f) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief; and
(g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the Department to take.

A petition that does not dispute the material facts on which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by rule 28-106.301.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that 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 such final decision of the Department have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation under section 120.573 of the Florida Statutes is not available for this proceeding.

This action is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above. 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 under section 120.68 of the Florida Statutes, by the filing of a notice of appeal under rule 9.110 of the Florida Rules of Appellate Procedure with the Clerk of the Department in the Office of General Counsel, Mail Station 35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000; 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 when the final order is filed with the Clerk of the Department.

Executed in Orlando, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

Christianne C. Ferraro

Christianne C. Ferraro, P.E.
Program Administrator
Water Facilities
3319 Maguire Boulevard Suite 232
Orlando, FL 32803-3767
Phone (407) 894-7555
Date: 3/22/00

53

FILING AND ACKNOWLEDGMENT

FILED, on this date, under Section 120.52(7), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Theresa Baulsin 3/22/00
Clerk Date

CCF/dj/cs

cc: Richard Post
David Shelley

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this MODIFICATION OF CONDITIONS and all copies were mailed by certified mail before the close of business on 3/22/00 to the listed persons by C. Stafford.

54

APPENDIX

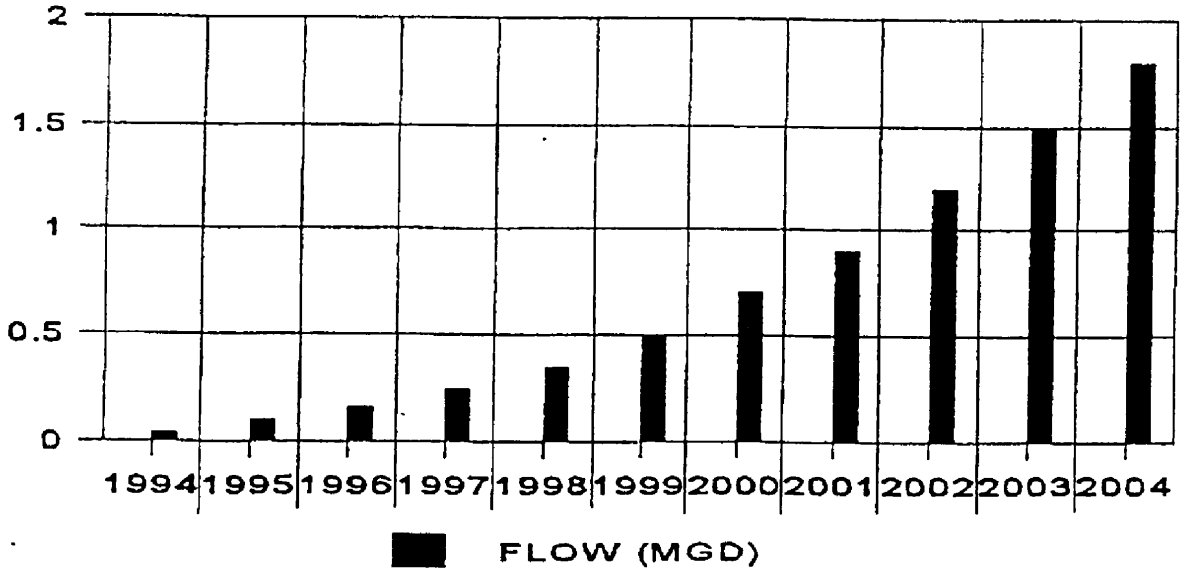
4 POPULATION PROJECTIONS – 1995 AND 2000

TABLE 4 - PROJECTED FLOWS (ERC'S) - 1994 TO 2003

PROJECT	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
SOUTHLAKE	340	-----	300	600	600	600	600	600	600	400	400
SUMMER BAY	0	20	40	100	100	100	100	100	100	100	100
WOODRIDGE	0	19	26	45	78	78	78	78	78	78	0
WESTLAKE	0	0	69	92	161	276	276	276	276	276	276
WALKER HTS.	0	0	17	23	41	70	70	70	70	70	70
KARST	0	0	4	5	9	15	15	15	15	15	15
GLENBROOK	0	0	22	17	39	67	67	67	67	67	67
ARROYO	0	0	22	30	52	90	90	90	90	90	90
DIXIE OIL	-	-	-	1	-	-	-	-	-	-	-
ORLANDO RESORT		-	-	-	183	-	-	-	-	-	-
TOTALS	340	39	500	913	1,263	1,296	1,296	1,296	1,296	1,096	1,018
GPD(MGD)	0.102	0.012	0.15	0.274	0.379	0.389	0.389	0.389	0.389	0.329	0.305
CUM(MGD)	0.102	0.114	0.26	0.538	0.917	1.306	1.695	2.084	2.473	2.802	3.107

The Estimates are subject to funding and demand.

TABLE 5 - ADJUSTED PROJECTED FLOWS



SOUTHLAKE UTILITIES, INC.

PROPOSED WATER AND WASTEWATER PROJECTIONS

EAST OF US HWY. 27 & NORTH OF WOODRIDGE PROPERTIES

			WATER		WASTEWATER	
Developer & Dev. Type	Acres	# Units	gpd/unit	Total	gpd/unit	Total
GLENBROOK PUD	110	-				
Single Family Res.	70	300	350	105,000	300	90,000
Multi Family Res.	20	359	250	89,750	200	71,800
Commercial N of 474	20	200,000 SF	100 gpd/	20,000	100 gpd/	20,000
Commercial S of 474	10	100,000 SF	1000 SF	10,000	1000 SF	10.000
TOTAL FLOWS				224,750 gpd		191,800 gpd
eru's				642		

Contact - Bob Gardner (407) 679-1748

			WATER		WASTEWATER	
Developer & Dev. Type	Acres	# Units	gpd/unit	Total	gpd/unit	Total
WALKER PUD						
Single Family Res.	67+/-	286	350	100,100	300	85,800
Multi Family Res.	21+/-	374	250	93,500	200	74,800
Commercial	10	100,000SF	100 gpd/ 1000 SF	10,000	100 gpd/ 1000 SF	10,000
TOTAL FLOWS				203,600 gpd		170.600 gpd
eru's				582		

Contact - LANCE WALKER, Sr.
407-645-0500

TOTAL eru's --- 1,224

R. H. WILSON & ASSOCIATES
Ronald H. Wilson, P.E.
23 April 1998

57

h wilson
&associates engineers

SOUTHLAKE UTILITIES, INC. :

DEVELOPMENT AREA - FPSC FRANCHISED AREA, LAKE COUNTY

1. SUMMER BAY PUD - 2,701 TOTAL UNITS, 280,000 SF Commercial

a. Time Share Units - 3 Bed Room ---------(72 under const.) ----	281
b. SF House Time Share Units ---------- 3 Bed Room ----------	17
c. Holiday Inn Express, 238 rooms, Phase 1, 88 units ----------	88
d. Executive Office & Marketing Center - 6,000 GPD W & WW	-
e. Laundry & Maintenance Facility -- 10,000 GPD W & WW	-
Units through 2000 plus 16,000 GPD W & WW ----------	386
f. Future Time Share Units through 2005 ----------	400
g. Weekly or Monthly Rental Apartments through 2005 ----------	580
h. HIEx. Phase 2, 150 units & Hotel, 248 units; by 2005 ----------	398
Projected for completion, 2000 through 2005 ----------	1,378

2. SOUTHLAKE FQD - 8,000 Total units by 2015

a. Southlake Foundation Apartments ----------	434
b. Cagan Crossings Apartments under construction, Phase 1 ------	298
Current units through 2,000 ----------	732
c. Cagan Crossings Apartments, Phase 2, completed 2001----------	298
d. Southlake Rental Apartments, Phase 3 & 4, through 2005 -----	600
e. Southlake Townhomes and Condominiums through 2005 -------	900
Projected for completion 2000 through 2005----------	1,798

3. WOODRIDGE PUD with 190,000 SF Commercial

a.	Single Family houses constructed ----------	302
b.	Single Family Houses scheduled for completion, 2001--------	28
c.	Sarah's Place Apartments ----------	330
d.	Weekly Rental, Single Family Houses (Clear Creek-248 units)	205
e.	Weekly Rental, scheduled for completion in 2001 ----------	43
	Current units occupied or scheduled for construction --------	908
f.	WINN DIXIE Shopping Center, Post Office & Bank on line with ADF of 9,000 GPD, Water & Wastewater	

4. SUNRISE LAKES PUD with 100,000 SF Commercial

a.	Single Family Housing under construction, built out 2002 --	275
b.	Raintree Apartments, construction completion in 2,001 ------	313
	Current total units under or approved for construction ------	588

58

P.O. Box 915260 Longwood, FL 32791-5260 • Ph: (407) 330-5291 • Fax: (407) 330-5267

5. GLENNBROOK PUD with 120, 000 SF Commercial

a.	Nelson Park Apartments, 358 units, completed in 2000 ------	240
b.	Nelson Park Apts., units completed in 2001 ----------	118
c.	Glennbrook SF Subdivision, built out by 2003 ----------	268
	Current total units under or approved for construction -------	626

6. HIGH GROVE

a.	Single Family Residential, weekly rental -completed 2002 ----	160

TOTAL UNITS - Completed by 2000 -------	2,195	(from 1994 through 2000)
Completed by 2005 -------	4,381	(from 2001 through 2005)
Projected Units 31 December 2005 ----------	6,576	

Estimated Population: 2000 for 2,195 units @ 2.50 persons per unit -- 5,487
2005 for 6,576 units @ 2.25 persons per unit -- 14,795

CERTIFIED BY:

Ronald H. Wilson, P.E.
Date: 04-13-00

Exhibit JCB-26

Year 2000 Building Permit Data Obtained From Lake County Building Services

Sections 25, 26, 27, 35 and 36; Township 24S; Range 26E

Data Obtained February 20, 2001

Memorandum

To: File
Boyd Environmental Engineering, Inc.

From: Nancy Huyck

Date: 2/20/01

Re: Year 2000 Lake County Building Permits

BOYD
ENVIRONMENTAL
ENGINEERING, INC

A copy of all Lake County Building Permits issued in the Year 2000 was provided by Ms. Carmen Carroll of the Lake County Building Services Department on February 20, 2001 for the following sections:

- Section 25, Township 24 South, Range 26 East
- Section 26, Township 24 South, Range 26 East
- Section 27, Township 24 South, Range 26 East
- Section 35, Township 24 South, Range 26 East
- Section 36, Township 24 South, Range 26 East

According to Ms. Carroll, there were no building permits issued in Section 34, Township 24 South, Range 26 East during the Year 2000.

The first column on the report lists the permit number. The second column indicates the date that the permit was issued. The third column is the alt key designation used by Lake County and the fourth column provides an abbreviation for the type of permit issued. A Maintenance Permitting/ Permit Types Report was provided by Ms. Carroll to help identify the type of permit issued.

166 Lookout Place • Suite 200 • Maitland, Florida 32751
Phone (407) 645-3888 FAX (407) 645-1199

Official Receipt - Lake County Board of County Commissioners

CDPR1103 - Official Receipt

Trans Number	Date	Post Date	Payment Slip Nbr
128368	2/20/01 1:19:05 PM	2/20/01	MS 15441

CUSTOMER

Payor : CUSTOMER

Fee Information

Fee Code	Description	GL Account	Amount	Waived
COPIES	XEROX COPIES PER SHEET	001.10048110.000.7349300	$3.30	
		Total	$3.30	

Payments

Payment Code	Account/Check Number	Amount
CASH		$3.30

Total Cash	$3.30
Total Non-Cash	$0.00
Total Paid	$3.30

Memo:
22 COPIES

Cashier/location: BLD85 / 1
User: BLD85

ALT_KEY	RANGE	TWNSHIP	SECTION
1999120384	01/13/2000	3783208	SF
1999120385	01/13/2000	3783208	EL
1999120386	01/13/2000	3783208	PL
2000011120	01/20/2000	3782502	RP
2000010192	01/26/2000	3783228	EL
2000010194	01/26/2000	3783228	MC
2000010198	01/26/2000	3783202	EL
2000010200	01/26/2000	3783202	MC
2000010204	01/26/2000	3783230	EL
2000010203	01/26/2000	3783230	SF
2000010315	01/26/2000	3783268	PL
2000010314	01/26/2000	3783268	EL
2000010313	01/26/2000	3783268	SF
2000010212	01/26/2000	3783229	MC
2000010211	01/26/2000	3783229	PL
2000010210	01/26/2000	3783229	EL
2000010209	01/26/2000	3783229	SF
2000010206	01/26/2000	3783230	MC
2000011229	01/26/2000	3783227	PL
2000011228	01/26/2000	3783227	EL
2000011227	01/26/2000	3783227	SF
2000010381	01/26/2000	3783222	MC
2000010380	01/26/2000	3783222	PL
2000010379	01/26/2000	3783222	EL
2000010378	01/26/2000	3783222	SF
2000010316	01/26/2000	3783268	MC
2000010138	01/28/2000	3783216	RD
2000010137	01/28/2000	3783213	RD
2000010130	01/28/2000	3783212	RD
2000010129	01/28/2000	3783207	RD
2000010128	01/28/2000	3784627	RD
2000011678	01/27/2000	3783231	RP
2000011675	01/27/2000	3783221	RP
2000011300	01/26/2000	3783200	MC
2000021670	02/22/2000	3783202	EL
2000021669	02/22/2000	3783202	RP
2000020878	02/11/2000	3740882	RD
2000011296	02/03/2000	3789039	MC
2000011295	02/03/2000	3789039	PL
2000011294	02/03/2000	3789039	EL
2000011293	02/03/2000	3789039	SF
2000011268	02/03/2000	3783198	MC
2000022048	02/28/2000	3783225	EL
2000022047	02/28/2000	3783225	RP
2000022046	02/28/2000	3783223	EL
2000022044	02/28/2000	3783223	RP
2000022041	02/28/2000	3783227	EL
2000022040	02/28/2000	3783227	RP
2000022005	02/25/2000	3783222	EL
2000021998	02/25/2000	3783202	EL
2000030680	03/10/2000	1031656	EL
2000030679	03/10/2000	1031656	RP
2000030678	03/10/2000		EL
2000030677	03/10/2000		RP
2000030671	03/10/2000	1031656	EL
2000030670	03/10/2000	1031656	RP
2000030668	03/10/2000	1031656	EL

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2000030667	03/10/2000	1031656		RP
2000030717	03/10/2000	3783200		EL
2000030716	03/10/2000	3783200		RP
2000030715	03/10/2000	3783208		EL
2000030714	03/10/2000	3783208		RP
2000030711	03/10/2000	3783230		EL
2000030710	03/10/2000	3783230		RP
2000030707	03/10/2000	3783274		EL
2000030706	03/10/2000	3783274		RP
2000040398	04/11/2000	3783280		PL
2000040397	04/11/2000	3783280		EL
2000040396	04/11/2000	3783280		SF
2000040391	04/11/2000	3789009		MC
2000040390	04/11/2000	3789009		PL
2000040389	04/11/2000	3789009		EL
2000040388	04/11/2000	3789009		SF
2000040375	04/11/2000	3783278		MC
2000040374	04/11/2000	3783278		PL
2000040373	04/11/2000	3783278		EL
2000040372	04/11/2000	3783278		SF
2000030384	03/22/2000	3783282		MC
2000030383	03/22/2000	3783282		PL
2000030382	03/22/2000	3783282		EL
2000030381	03/22/2000	3783282		SF
2000030380	03/22/2000	3783279		MC
2000030379	03/22/2000	3783279		PL
2000030378	03/22/2000	3783279		EL
2000030377	03/22/2000	3783279		SF
2000030376	03/22/2000	3789006		MC
2000030375	03/22/2000	3789006		PL
2000030374	03/22/2000	3789006		EL
2000030373	03/22/2000	3789006		SF
2000030372	03/22/2000	3783226		MC
2000030371	03/22/2000	3783226		PL
2000030370	03/22/2000	3783226		EL
2000030369	03/22/2000	3783226		SF
2000030244	03/22/2000	3783270		MC
2000030243	03/22/2000	3783270		PL
2000030242	03/22/2000	3783270		EL
2000030241	03/22/2000	3783270		SF
2000030240	03/22/2000	3783277		MC
2000030239	03/22/2000	3783277		PL
2000030238	03/22/2000	3783277		EL
2000030237	03/22/2000	3783277		SF
2000030236	03/22/2000	3783276		MC
2000030235	03/22/2000	3783276		PL
2000030234	03/22/2000	3783271		MC
2000030233	03/22/2000	3783276		EL
2000030232	03/22/2000	3783271		PL
2000030231	03/22/2000	3783276		SF
2000030230	03/22/2000	3783271		EL
2000030229	03/22/2000	3783271		SF
2000030228	03/22/2000	3789011		MC
2000030227	03/22/2000	3789011		PL
2000030226	03/22/2000	3789011		EL
2000030225	03/22/2000	3789011		SF
2000030224	03/22/2000	3783272		MC
2000030223	03/22/2000	3783272		PL
2000030222	03/22/2000	3783272		EL

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2000030221	03/22/2000	3783272		SF
2000030220	03/22/2000	3783275		MC
2000030219	03/22/2000	3783275		PL
2000030218	03/22/2000	3783275		EL
2000030217	03/22/2000	3783275		SF
2000030216	03/22/2000	3789012		MC
2000030215	03/22/2000	3789012		PL
2000030214	03/22/2000	3789012		EL
2000030213	03/22/2000	3789012		SF
2000030204	03/22/2000	3783281		MC
2000030203	03/22/2000	3783281		PL
2000030202	03/22/2000	3783281		EL
2000030201	03/22/2000	3783281		SF
2000031019	03/15/2000	3783232		RD
2000052011	05/31/2000	3789012		EL
2000052010	05/31/2000	3789012		RP
2000052008	05/31/2000	3789011		EL
2000052007	05/31/2000	3789011		RP
2000052004	05/31/2000	3783199		EL
2000052003	05/31/2000	3783199		RP
2000052002	05/31/2000	3783201		EL
2000052001	05/31/2000	3783201		RP
2000052000	05/31/2000	3783209		EL
2000051999	05/31/2000	3783209		RP
2000051998	05/31/2000	3789006		EL
2000051997	05/31/2000	3789006		RP
2000050868	05/17/2000	3788992		MC
2000050867	05/17/2000	3788992		PL
2000050866	05/17/2000	3788992		EL
2000050865	05/17/2000	3788992		SF
2000051075	05/16/2000	3783226		EL
2000051074	05/16/2000	3783226		RP
2000051072	05/16/2000	3783217		EL
2000051071	05/16/2000	3783217		RP
2000051069	05/16/2000	3783277		EL
2000051068	05/16/2000	3783277		RP
2000051067	05/16/2000	3783270		EL
2000051066	05/16/2000	3783270		RP
2000051065	05/16/2000	3783278		EL
2000051064	05/16/2000	3783278		RP
2000051063	05/16/2000	3783280		EL
2000051062	05/16/2000	3783280		RP
2000050717	05/11/2000	3783279		RD
2000050712	05/11/2000	3783200		RD
2000050710	05/11/2000	3783272		RD
2000050708	05/11/2000	3783282		RD
2000050707	05/11/2000	3783281		RD
2000050704	05/11/2000	3783276		RD
2000050701	05/11/2000	3783198		RD
2000050696	05/11/2000	3783275		RD
2000050694	05/11/2000	3783274		RD
2000050206	05/09/2000	3783209		MC
2000050205	05/09/2000	3783209		PL
2000050204	05/09/2000	3783209		EL
2000050203	05/09/2000	3783209		SF
2000050202	05/09/2000	3788998		MC
2000050201	05/09/2000	3788998		PL
2000050200	05/09/2000	3788998		EL
2000050199	05/09/2000	3788998		SF

ALT_KEY	RANGE	TWNSHIP	SECTION	
2000050198	05/09/2000	3788999		MC
2000050197	05/09/2000	3788999		PL
2000050196	05/09/2000	3788999		EL
2000050195	05/09/2000	3788999		SF
2000050194	05/09/2000	3789000		MC
2000050193	05/09/2000	3789000		PL
2000050192	05/09/2000	3789000		EL
2000050191	05/09/2000	3789000		SF
2000050186	05/09/2000	3788997		MC
2000050185	05/09/2000	3788997		PL
2000050184	05/09/2000	3788997		EL
2000050183	05/09/2000	3788997		SF
2000050162	05/09/2000	3789002		MC
2000050161	05/09/2000	3789002		PL
2000050160	05/09/2000	3789002		EL
2000050159	05/09/2000	3789002		SF
2000050146	05/09/2000	3789004		MC
2000050145	05/09/2000	3789004		PL
2000050144	05/09/2000	3789004		EL
2000070542	07/19/2000	3783280		RD
2000070539	07/19/2000	3783199		RD
2000070536	07/19/2000	3783201		RD
2000070084	07/11/2000	3789060		SF
2000070083	07/11/2000	3789043		SF
2000070081	07/11/2000	3789023		SF
2000070079	07/11/2000	3789023		SF
2000070140	07/07/2000	3783278		RD
2000070139	07/07/2000	3783271		RD
2000070107	07/06/2000	3788992		RP
2000062979	06/28/2000	3783209		RD
2000062974	06/28/2000	3783270		RD
2000062972	06/28/2000	3783217		RD
2000062970	06/28/2000	3783226		RD
2000062969	06/28/2000	3783277		RD
2000062968	06/28/2000	3789012		RD
2000061842	06/23/2000	3789036		MC
2000061841	06/23/2000	3789036		PL
2000061840	06/23/2000	3789036		EL
2000061839	06/23/2000	3789036		SF
2000061834	06/23/2000	3789020		MC
2000061833	06/23/2000	3789020		PL
2000061832	06/23/2000	3789020		EL
2000061831	06/23/2000	3789020		SF
2000061830	06/23/2000	3789062		MC
2000061829	06/23/2000	3789062		PL
2000061828	06/23/2000	3789062		EL
2000061827	06/23/2000	3789062		SF
2000061826	06/23/2000	3789116		MC
2000061825	06/23/2000	3789116		PL
2000061824	06/23/2000	3789116		EL
2000061823	06/23/2000	3789116		SF
2000061392	06/14/2000	3789004		EL
2000061391	06/14/2000	3789004		RP
2000061387	06/14/2000	3789010		EL
2000061386	06/14/2000	3789010		RP
2000061383	06/14/2000	3789002		EL
2000061382	06/14/2000	3789002		RP
2000060708	06/07/2000	3789009		EL
2000060707	06/07/2000	3789009		RP

ALT_KEY	RANGE	TWNSHIP	SECTION	
2000060706	06/07/2000	3789008		EL
2000060705	06/07/2000	3789008		RP
2000060702	06/07/2000	3783271		EL
2000060701	06/07/2000	3783271		RP
2000060700	06/07/2000	3789007		EL
2000060698	06/07/2000	3789007		RP
2000060336	06/06/2000	3783206		MC
2000060335	06/06/2000	3783206		PL
2000060334	06/06/2000	3783206		EL
2000060333	06/06/2000	3783206		SF
2000060113	06/06/2000	3789003		MC
2000060112	06/06/2000	3789003		PL
2000060111	06/06/2000	3789003		EL
2000060110	06/06/2000	3789003		SF
2000060109	06/06/2000	3783273		MC
2000060108	06/06/2000	3783273		PL
2000060107	06/06/2000	3783273		EL
2000060106	06/06/2000	3783273		SF
2000050143	05/09/2000	3789004		SF
2000050244	05/08/2000			MC
2000050243	05/08/2000			PL
2000050242	05/08/2000			EL
2000050241	05/08/2000			SF
2000050217	05/08/2000			EL
2000050216	05/08/2000	3783201		SF
2000050292	05/03/2000	3783227		RD
2000050291	05/03/2000	3783268		RD
2000050289	05/03/2000	3783230		RD
2000050284	05/03/2000	3783225		RD
2000042021	04/25/2000	3783223		RD
2000042016	04/25/2000	3783222		RD
2000042015	04/25/2000	3783229		RD
2000041940	04/24/2000	3783275		EL
2000041939	04/24/2000	3783275		RP
2000041938	04/24/2000	3783272		EL
2000041937	04/24/2000	3783272		RP
2000041936	04/24/2000	3783282		EL
2000041935	04/24/2000	3783282		RP
2000041934	04/24/2000	3783279		EL
2000041933	04/24/2000	3783279		RP
2000041926	04/24/2000	3783281		EL
2000041925	04/24/2000	3783281		RP
2000041924	04/24/2000	3783276		EL
2000041923	04/24/2000	3783276		RP
2000041641	04/21/2000	3782493		RD
2000041638	04/21/2000	3782486		RD
2000041422	04/19/2000	3783221		RD
2000041421	04/19/2000	3783231		RD
2000041418	04/19/2000	3783210		RD
2000041417	04/19/2000	3783269		RD
2000041401	04/19/2000	3783220		RD
2000041399	04/19/2000	3783228		RD
2000041397	04/19/2000	3783224		RD
2000041395	04/19/2000	3783208		RD
2000041394	04/19/2000	3783202		RD
2000040383	04/14/2000	3789005		MC
2000040382	04/14/2000	3789005		PL
2000040381	04/14/2000	3789005		EL
2000040380	04/14/2000	3789005		SF

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ALT_KEY	RANGE	TWNSHIP	SECTION	
2000022124	04/14/2000	3783199		MC
2000022123	04/14/2000	3783199		PL
2000022122	04/14/2000	3783199		EL
2000022121	04/14/2000	3783199		SF
2000040898	04/11/2000	3783268		EL
2000040897	04/11/2000	3783268		RP
2000040427	04/11/2000	3789007		MC
2000040426	04/11/2000	3789007		PL
2000040425	04/11/2000	3789007		EL
2000040424	04/11/2000	3789007		SF
2000040419	04/11/2000	3789010		MC
2000040418	04/11/2000	3789010		PL
2000040417	04/11/2000	3789010		EL
2000040416	04/11/2000	3789010		SF
2000040415	04/11/2000	3783217		MC
2000040414	04/11/2000	3783217		PL
2000040413	04/11/2000	3783217		EL
2000040412	04/11/2000	3783217		SF
2000040407	04/11/2000	3789008		MC
2000040406	04/11/2000	3789008		PL
2000040405	04/11/2000	3789008		EL
2000040404	04/11/2000	3789008		SF
2000040399	04/11/2000	3783280		MC
2000110225	11/07/2000	3789001		RD
2000110224	11/07/2000	3789018		RD
2000110223	11/07/2000	3789017		RD
2000110221	11/07/2000	3789020		RD
2000100982	10/27/2000	3789036		RD
2000100895	10/27/2000	3789113		SF
2000100660	10/25/2000	3789127		SF
2000100659	10/25/2000	3789094		SF
2000100682	10/19/2000	3789117		RP
2000100679	10/19/2000	3789087		RP
2000100678	10/19/2000	3789088		RP
2000100676	10/19/2000	3789115		RP
2000100674	10/19/2000	3788995		RP
2000100673	10/19/2000	3789052		RP
2000091088	10/18/2000	3789112		SF
2000100439	10/13/2000	3789116		RD
2000100438	10/13/2000	3783273		RD
2000100428	10/13/2000	3789001		RP
2000100427	10/13/2000	3789023		RP
2000100426	10/13/2000	3789039		RP
2000100425	10/13/2000	3789023		RP
2000100424	10/13/2000	3789050		RP
2000100423	10/13/2000	3788988		RP
2000100252	10/13/2000	3789092		SF
2000091089	10/04/2000	3789015		SF
2000091087	10/04/2000	3789120		SF
2000091065	10/04/2000	3782503		RD
2000100077	10/03/2000	3788998		RD
2000100076	10/03/2000	3788997		RD
2000100075	10/03/2000	3789000		RD
2000100074	10/03/2000	3788992		RD
2000100073	10/03/2000	3788999		RD
2000100072	10/03/2000	3788996		RD
2000100041	10/03/2000	3789046		RP
2000100040	10/03/2000	3789057		RP
2000100039	10/03/2000	3789017		RP

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2000100036	10/03/2000	3789016		RP
2000100035	10/03/2000	3789043		RP
2000090893	09/22/2000	3789004		RD
2000090892	09/22/2000	3789003		RD
2000090879	09/22/2000			RD
2000090709	09/22/2000	3789115		SF
2000090472	09/22/2000	3789022		SF
2000090467	09/22/2000	3789048		SF
2000090462	09/22/2000	3789089		SF
2000090279	09/22/2000	3789019		SF
2000090891	09/22/2000	3789002		RD
2000090466	09/20/2000	3789118		SF
2000090465	09/20/2000	3789021		SF
2000090644	09/18/2000	3741421		RP
2000090598	09/18/2000	3782482		RP
2000090596	09/18/2000	3782485		RP
2000090594	09/18/2000	3783237		RP
2000090592	09/18/2000	3783238		RP
2000090590	09/18/2000	3783239		RP
2000090585	09/18/2000	1031656		RP
2000080732	09/14/2000	3789117		SF
2000090401	09/13/2000	3789011		RD
2000090395	09/13/2000	3789010		RD
2000090393	09/13/2000	3789008		RD
2000090351	09/12/2000	3789018		RP
2000090350	09/12/2000	3783273		RP
2000090349	09/12/2000	3789060		RP
2000080731	08/30/2000	3789087		SF
2000080720	08/22/2000	3789007		RD
2000080717	08/22/2000	3789005		RD
2000080716	08/22/2000	3789009		RD
2000080714	08/22/2000	3789006		RD
2000080418	08/14/2000	3789036		RP
2000080416	08/14/2000	3789116		RP
2000080414	08/14/2000	3788997		RP
2000080413	08/14/2000	3789062		RP
2000080410	08/14/2000	3789020		RP
2000080411	08/14/2000	3788996		RP
2000080242	08/14/2000	3789057		SF
2000080240	08/14/2000	3789050		SF
2000080238	08/14/2000	3789046		SF
2000080239	08/14/2000			SF
2000080237	08/14/2000	3789052		SF
2000070926	08/04/2000	3788989		SF
2000070924	08/04/2000	3788993		SF
2000070923	08/04/2000	3788991		SF
2000070922	08/04/2000	3788990		SF
2000070921	08/04/2000	3788988		SF
2000070920	08/04/2000	3788995		SF
2000070919	08/04/2000	3788994		SF
2000070679	08/04/2000	3789018		SF
2000070673	08/04/2000	3789016		SF
2000070671	08/04/2000	3789017		SF
2000070672	08/04/2000	3789001		SF
2000070794	07/26/2000	3783205		RP
2000070793	07/26/2000	3789003		RP
2000070791	07/26/2000	3788998		RP
2000070789	07/26/2000	3789005		RP
2000070788	07/26/2000	3789000		RP

ALT_KEY	RANGE	TWNSHIP	SECTION	
2000070787	07/26/2000	3788999		RP
2000120617	12/28/2000	3788986		SF
2000120562	12/22/2000	3789099		SF
2000120489	12/14/2000	3789092		RP
2000120488	12/14/2000	3788989		RP
2000120359	12/12/2000	3789088		RD
2000120353	12/12/2000	3783281		RD
2000120246	12/08/2000	3789015		RP
2000120243	12/08/2000	3789013		RP
2000120105	12/05/2000	3783206		RD
2000120086	12/05/2000	3788994		RP
2000120083	12/05/2000	3789019		RP
2000120081	12/05/2000	3789089		RP
2000120080	12/05/2000	3789048		RP
2000120078	12/05/2000	3789118		RP
2000110875	12/01/2000	3788984		SF
2000110874	12/01/2000	3788982		SF
2000110432	11/20/2000	3789096		SF
2000110431	11/20/2000	3789013		SF
2000110611	11/17/2000	3789117		RD
2000110609	11/17/2000	3789039		RD
2000110610	11/17/2000	3789052		RD
2000110612	11/17/2000	3789115		RD
2000110608	11/17/2000	3789050		RD
2000110396	11/13/2000	3788988		RD
2000110394	11/13/2000	3789057		RD
2000110392	11/13/2000	3789043		RD
2000110389	11/13/2000	3789046		RD
2000110386	11/13/2000	3789062		RD
2000110383	11/13/2000	3789023		RD
2000110382	11/13/2000	3789060		RD
2000110379	11/13/2000	3789023		RD
2000110243	11/07/2000	3789022		RP
2000110242	11/07/2000	3789021		RP
2000110226	11/07/2000	3789016		RD
2000031017	03/15/2000	3783233		RD
2000031014	03/15/2000	3783205		RD
2000031012	03/15/2000	3783203		RD
2000031011	03/15/2000	3782502		RD
2000031010	03/15/2000	3783219		RD
2000031009	03/15/2000	3783211		RD
2000030723	03/10/2000	3783198		EL
2000030722	03/10/2000	3783198		RP
2000030704	03/10/2000			EL
2000030703	03/10/2000			RP
2000030698	03/10/2000			EL
2000030697	03/10/2000			RP
2000030696	03/10/2000	1031656		EL
2000030695	03/10/2000	1031656		RP
2000030686	03/10/2000	1031656		EL
2000030685	03/10/2000	1031656		RP
2000030665	03/10/2000			EL
2000030664	03/10/2000			RP
2000030656	03/10/2000			EL
2000030655	03/10/2000			RP
2000030652	03/10/2000	1031656		EL
2000030651	03/10/2000	1031656		RP
2000022050	02/28/2000	3783224		EL
2000022049	02/28/2000	3783224		RP

ALT_KEY	RANGE	TWNSHIP	SECTION	
2000021997	02/25/2000	3783228		EL
2000021996	02/25/2000	3783229		EL
2000021682	02/22/2000	3783229		EL
2000021681	02/22/2000	3783229		RP
2000021678	02/22/2000	3783222		EL
2000021677	02/22/2000	3783222		RP
2000021674	02/22/2000	3783228		EL
2000021673	02/22/2000	3783228		RP
2000011267	02/03/2000	3783198		PL
2000011266	02/03/2000	3783198		EL
2000011265	02/03/2000	3783198		SF
2000011245	02/03/2000	3783274		MC
2000011244	02/03/2000	3783274		PL
2000011243	02/03/2000	3783274		EL
2000011242	02/03/2000	3783274		SF
2000020290	02/02/2000	3783220		RP
2000011299	01/26/2000	3783200		PL
2000011298	01/26/2000	3783200		EL
2000011297	01/26/2000	3783200		SF
2000011292	01/26/2000	3783225		MC
2000011291	01/26/2000	3783225		PL
2000011290	01/26/2000	3783225		EL
2000011289	01/26/2000	3783225		SF
2000011272	01/26/2000	3783223		MC
2000011271	01/26/2000	3783223		PL
2000011270	01/26/2000	3783223		EL
2000011269	01/26/2000	3783223		SF
2000011235	01/26/2000	3783224		MC
2000011234	01/26/2000	3783224		PL
2000011233	01/26/2000	3783224		EL
2000011232	01/26/2000	3783224		SF
2000011230	01/26/2000	3783227		MC
2000010144	01/28/2000	3782501		RD
2000010143	01/28/2000	3783285		RD
2000010139	01/28/2000	3783284		RD
2000010205	01/26/2000	3783230		PL
2000010199	01/26/2000	3783202		PL
2000010197	01/26/2000	3783202		SF
2000010191	01/26/2000	3783228		SF
2000011122	01/20/2000	3783232		RP
1999120387	01/13/2000	3783208		MC
2000010193	01/26/2000	3783228		PL
	26	24	25	Total for Section **512**

ALT_KEY	RANGE	TWNSHIP	SECTION
1999121291	01/05/2000	3784402	SF
2000063312	06/30/2000	3478908	PL
2000063311	06/30/2000	3478908	EL
2000063310	06/30/2000	3478908	FF
2000063309	06/30/2000	3478908	FF
2000063237	06/30/2000	2839856	EL
2000063236	06/30/2000	2839856	RP
2000063214	06/30/2000	3784437	MC
2000063213	06/30/2000	3784437	PL
2000063212	06/30/2000	3784437	EL
2000063211	06/30/2000	3784437	SF
2000063158	06/30/2000	1595142	AL
2000063157	06/30/2000	1595142	AL
2000063156	06/30/2000	1595142	AL
2000063155	06/30/2000	1595142	AL
2000063154	06/30/2000	1595142	AL
2000063153	06/30/2000	1595142	AL
2000063152	06/30/2000	1595142	AL
2000063151	06/30/2000	1595142	AL
2000063150	06/30/2000	1595142	AL
2000063149	06/30/2000	1595142	AL
2000063148	06/30/2000	1595142	AL
2000063147	06/30/2000	1595142	AL
2000063146	06/30/2000	1595142	AL
2000063139	06/30/2000	1595142	AL
2000063136	06/30/2000	1595142	AL
2000063133	06/30/2000	1595142	AL
2000063101	06/30/2000	1595142	AL
2000063095	06/30/2000	1595142	AL
2000063085	06/30/2000	1595142	AL
2000063080	06/30/2000	1595142	AL
2000063048	06/29/2000	3740238	EL
2000063047	06/29/2000	3740238	RP
2000062536	06/29/2000	3784416	MC
2000062535	06/29/2000	3784416	PL
2000062534	06/29/2000	3784416	EL
2000062533	06/29/2000	3784416	SF
2000062524	06/29/2000	3784437	MC
2000062523	06/29/2000	3784437	PL
2000062522	06/29/2000	3784437	EL
2000062521	06/29/2000	3784437	SF
2000062920	06/28/2000	3785439	EL
2000062919	06/28/2000	3785439	RP
2000062918	06/28/2000	3785439	EL
2000062917	06/28/2000	3785439	RP
2000062916	06/28/2000	3785439	EL
2000062915	06/28/2000	3785439	RP
2000062857	06/27/2000	1595142	FS
2000062520	06/27/2000	1595142	FS
2000062515	06/27/2000	1595142	FS
2000062510	06/27/2000	1595142	FS
2000062509	06/27/2000	1595142	FS
2000062508	06/27/2000	1595142	FS
2000062507	06/27/2000	1595142	FS
2000062506	06/27/2000	1595142	FS
2000062505	06/27/2000	1595142	FS
2000062504	06/27/2000	1595142	FS

ALT_KEY	RANGE	TWNSHIP	SECTION	
2000062503	06/27/2000	1595142		FS
2000062502	06/27/2000	1595142		FS
2000062501	06/27/2000	1595142		FS
2000062496	06/27/2000	1595142		FS
2000062495	06/27/2000	1595142		FS
2000062490	06/27/2000	1595142		FS
2000062489	06/27/2000	1595142		FS
2000062483	06/27/2000	1595142		FS
2000110070	11/02/2000	3784438		RP
2000101069	10/31/2000	3784416		RP
2000101067	10/31/2000	3784405		RP
2000100966	10/26/2000	3751370		RP
2000100830	10/24/2000	3795545		RP
2000100828	10/24/2000	3795514		RP
2000100827	10/24/2000	3795543		RP
2000100651	10/20/2000	1595142		DM
2000100436	10/13/2000	2722193		RD
2000100354	10/11/2000	1595193		DM
2000091156	10/09/2000	3773528		RD
2000090927	10/09/2000	3726014		RD
2000100088	10/03/2000	3785439		RP
2000070301	07/25/2000	3788857		SF
2000070299	07/25/2000	3788586		SF
2000070297	07/25/2000	3788592		SF
2000070298	07/25/2000	3788582		SF
2000070294	07/25/2000	3788583		SF
2000070395	07/17/2000	3781733		PL
2000070004	07/11/2000	3785439		SF
2000070150	07/07/2000	2839856		RD
2000070075	07/05/2000	3781806		RP
2000063378	06/30/2000	3478908		CC
2000063375	06/30/2000	3478908		MC
2000063374	06/30/2000	3478908		PL
2000063373	06/30/2000	3478908		PL
2000063372	06/30/2000	3478908		MC
2000063371	06/30/2000	3478908		EL
2000063369	06/30/2000	3478908		EL
2000063364	06/30/2000	3478908		NR
2000063368	06/30/2000	3478908		MC
2000063367	06/30/2000	3478908		PL
2000063366	06/30/2000	3478908		FF
2000063365	06/30/2000	3478908		EL
2000063363	06/30/2000	3478908		NR
2000063362	06/30/2000	3478908		FF
2000063361	06/30/2000	3478908		PL
2000063360	06/30/2000	3478908		MC
2000063355	06/30/2000	3478908		NR
2000063359	06/30/2000	3478908		EL
2000063357	06/30/2000	3478908		PL
2000063356	06/30/2000	3478908		MC
2000063354	06/30/2000	3478908		PL
2000063353	06/30/2000	3478908		EL
2000063352	06/30/2000	3478908		MC
2000063351	06/30/2000	3478908		MC
2000063350	06/30/2000	3478908		PL
2000063349	06/30/2000	3478908		FF
2000063348	06/30/2000	3478908		EL
2000063347	06/30/2000	3478908		PL
2000063343	06/30/2000	3478908		FF

ALT_KEY	RANGE	TWNSHIP	SECTION	
2000063346	06/30/2000	3478908		PL
2000063345	06/30/2000	3478908		MC
2000063344	06/30/2000	3478908		EL
2000063333	06/30/2000	3478908		FF
2000063322	06/30/2000	3478908		FF
2000063342	06/30/2000	3478908		MC
2000063341	06/30/2000	3478908		PL
2000063340	06/30/2000	3478908		EL
2000063339	06/30/2000	3478908		FF
2000063338	06/30/2000	3478908		MC
2000063337	06/30/2000	3478908		PL
2000063336	06/30/2000	3478908		EL
2000063334	06/30/2000	3478908		MC
2000063331	06/30/2000	3478908		EL
2000063330	06/30/2000	3478908		MC
2000063329	06/30/2000	3478908		PL
2000063328	06/30/2000	3478908		PL
2000063327	06/30/2000	3478908		EL
2000063326	06/30/2000	3478908		EL
2000063324	06/30/2000	3478908		FF
2000063325	06/30/2000	3478908		EL
2000063323	06/30/2000	3478908		FF
2000063320	06/30/2000	3478908		FF
2000063321	06/30/2000	3478908		AR
2000063319	06/30/2000	3478908		FF
2000063313	06/30/2000	3478908		MC
2000120759	12/28/2000	3795544		RD
2000120016	12/21/2000	3740238		PL
2000120362	12/12/2000	3786213		EL
2000120291	12/11/2000	3795527		RD
2000120006	12/01/2000	3795550		RD
2000110649	11/30/2000	3789073		SF
2000110838	11/28/2000	3786213		MC
2000080686	11/27/2000	1595142		NR
2000110533	11/22/2000	3784420		SF
2000110532	11/22/2000	3784386		SF
2000110471	11/22/2000	3795522		SF
2000110583	11/16/2000	1595142		EL
2000080742	11/14/2000	1595142		SB
2000110220	11/13/2000	3751248		SF
2000100103	11/08/2000	3793451		SF
2000091235	09/29/2000	3786213		SN
2000091155	09/28/2000	3784426		RD
2000090703	09/28/2000	3785439		SF
2000090694	09/28/2000	3785439		SF
2000090518	09/27/2000	2839856		SF
2000091051	09/26/2000	3751493		RD
2000090702	09/26/2000	3785439		SF
2000090931	09/25/2000	3785439		RD
2000090930	09/25/2000	3785439		RD
2000090926	09/25/2000	3785439		RD
2000090688	09/22/2000	3788588		RD
2000090794	09/20/2000	3785439		RP
2000090790	09/20/2000	3785439		RD
2000090787	09/20/2000	3785439		RD
2000090749	09/20/2000	3772339		RD
2000090676	09/19/2000	3784413		RD
2000090671	09/19/2000	3739914		RD
2000090292	09/19/2000	3784398		SF

ALT_KEY	RANGE	TWNSHIP	SECTION	
2000090117	09/19/2000	3784405		SF
2000090587	09/18/2000	3741412		RP
2000090499	09/15/2000	3751388		RD
2000090412	09/15/2000	3751825		RD
2000090258	09/15/2000	3751400		RD
2000080983	09/12/2000	3773528		PL
2000090250	09/07/2000	3785439		RD
2000090171	09/07/2000	3785439		RD
2000090167	09/07/2000	3785439		RD
2000090161	09/07/2000	3785439		RD
2000062736	09/07/2000	3786213		FT
2000062298	09/07/2000	3786213		SB
2000062202	09/07/2000	3786213		CC
2000062106	09/07/2000	3786213		SN
2000080699	09/06/2000	3785439		SF
2000080056	09/06/2000	1595142		CP
2000080988	08/30/2000	3789031		RD
2000080347	08/29/2000	3793451		SF
2000080343	08/29/2000	3793451		SF
2000062546	08/24/2000	3786213		SN
2000080705	08/22/2000	3784407		RD
2000080448	08/22/2000	3785439		SF
2000080244	08/21/2000	3789075		SF
2000080598	08/18/2000	3609247		RD
2000062203	08/18/2000	3786213		SR
2000080545	08/17/2000	3616511		EL
2000080494	08/16/2000	3789033		RD
2000080395	08/14/2000	3785439		RP
2000070293	08/10/2000	3789056		SF
2000070354	08/08/2000	3789070		SF
2000080116	08/03/2000	2722193		RP
2000070353	07/31/2000	3789069		SF
2000070351	07/31/2000	3788590		SF
2000070565	07/28/2000	3785439		SF
2000070769	07/26/2000	3788577		RD
2000070766	07/26/2000	3781733		RD
2000070300	07/25/2000	3788581		SF
2000062475	06/27/2000	1595142		FS
2000062003	06/22/2000	1595142		MC
2000062002	06/22/2000	1595142		PL
2000061980	06/22/2000	1595142		EL
2000061241	06/21/2000	3781866		MC
2000061240	06/21/2000	3781866		PL
2000061239	06/21/2000	3781866		EL
2000061238	06/21/2000	3781866		SF
2000061906	06/20/2000	3789033		RP
2000061358	06/14/2000	3751434		MC
2000061357	06/14/2000	3751434		PL
2000061356	06/14/2000	3751434		EL
2000061354	06/14/2000	3751434		SF
2000060308	06/14/2000	3788585		MC
2000060307	06/14/2000	3788585		PL
2000060306	06/14/2000	3788585		EL
2000060305	06/14/2000	3788585		SF
2000060304	06/14/2000	3789072		MC
2000060303	06/14/2000	3789072		PL
2000060302	06/14/2000	3789072		EL
2000060300	06/14/2000	3789072		SF
2000060288	06/14/2000	3789055		MC

ALT_KEY	RANGE	TWNSHIP	SECTION	
2000060287	06/14/2000	3789055		PL
2000060286	06/14/2000	3789055		EL
2000060285	06/14/2000	3789055		SF
2000060280	06/14/2000	3788866		MC
2000060279	06/14/2000	3788866		PL
2000060278	06/14/2000	3788866		EL
2000060277	06/14/2000	3788866		SF
2000060268	06/14/2000	3788591		MC
2000060267	06/14/2000	3788591		PL
2000060266	06/14/2000	3788591		EL
2000060265	06/14/2000	3788591		SF
2000060510	06/06/2000	3781733		EL
2000060509	06/06/2000	3781733		RP
2000060507	06/06/2000	3788577		EL
2000060506	06/06/2000	3788577		RP
2000060201	06/02/2000	3784994		SB
2000060153	06/02/2000	3784407		EL
2000060152	06/02/2000	3784407		RP
2000052014	06/01/2000	3741463		RP
2000051921	05/30/2000	3791599		EL
2000051920	05/30/2000	2741285		RP
2000051540	05/23/2000	3788572		CC
2000050846	05/17/2000	3784433		MC
2000050845	05/17/2000	3784433		PL
2000050844	05/17/2000	3784433		EL
2000050843	05/17/2000	3784433		SF
2000050983	05/16/2000	3785439		MC
2000050982	05/16/2000	3785439		PL
2000050981	05/16/2000	3785439		EL
2000050980	05/16/2000	3785439		SF
2000050975	05/16/2000	3785439		MC
2000050974	05/16/2000	3785439		PL
2000050973	05/16/2000	3785439		EL
2000050972	05/16/2000	3785439		SF
2000050951	05/16/2000	3785439		MC
2000050950	05/16/2000	3785439		PL
2000050949	05/16/2000	3785439		EL
2000050948	05/16/2000	3785439		SF
2000050667	05/10/2000	3751493		EL
2000050666	05/10/2000	3751493		RP
2000050618	05/10/2000	3720288		GA
2000050521	05/09/2000	3751485		RD
2000020526	02/15/2000	3789067		SF
2000020490	02/15/2000	3789026		MC
2000020489	02/15/2000	3789026		PL
2000020488	02/15/2000	3789026		EL
2000020487	02/15/2000	3789026		SF
2000020939	02/14/2000	3726081		CC
2000020569	02/14/2000	3788884		MC
2000020568	02/14/2000	3788884		PL
2000020567	02/14/2000	3788884		EL
2000020566	02/14/2000	3788884		SF
2000020537	02/14/2000	3788588		MC
2000020536	02/14/2000	3788588		PL
2000020535	02/14/2000	3788588		EL
2000020534	02/14/2000	3788588		SF
2000020533	02/14/2000	3789045		MC
2000020532	02/14/2000	3789045		PL
2000020531	02/14/2000	3789045		EL

ALT_KEY	RANGE	TWNSHIP	SECTION	
2000020530	02/14/2000	3789045		SF
2000020525	02/14/2000	3788576		MC
2000020524	02/14/2000	3788576		PL
2000020523	02/14/2000	3788576		EL
2000020522	02/14/2000	3788576		SF
2000020519	02/14/2000	3789051		MC
2000020518	02/14/2000	3789051		PL
2000020517	02/14/2000	3789051		EL
2000020516	02/14/2000	3789051		SF
2000020511	02/14/2000	3789049		MC
2000020510	02/14/2000	3789049		PL
2000020509	02/14/2000	3789049		EL
2000020508	02/14/2000	3789049		SF
2000020486	02/14/2000	3788879		MC
2000020485	02/14/2000	3788879		PL
2000020484	02/14/2000	3788879		EL
2000020483	02/14/2000	3788879		SF
2000020482	02/14/2000	3789047		MC
2000020481	02/14/2000	3789047		PL
2000020480	02/14/2000	3789047		EL
2000020479	02/14/2000	3789047		SF
2000020781	02/10/2000	3726014		RD
2000020713	02/09/2000	3751485		RD
2000020095	02/04/2000	3784394		MC
2000020094	02/04/2000	3784394		PL
2000020093	02/04/2000	3784394		EL
2000020092	02/04/2000	3784394		SF
2000020081	02/04/2000	3784409		MC
2000020080	02/04/2000	3784409		PL
2000020079	02/04/2000	3784409		EL
2000020078	02/04/2000	3784409		SF
2000011493	01/28/2000	3789040		MC
2000011000	01/27/2000	3784435		MC
2000010999	01/27/2000	3784435		PL
2000010997	01/27/2000	3784435		EL
2000010995	01/27/2000	3784435		SF
2000010992	01/27/2000	3784425		MC
2000010991	01/27/2000	3784425		PL
2000010990	01/27/2000	3784425		EL
2000010989	01/27/2000	3784425		SF
1999121292	01/05/2000	3784402		EL
1999121293	01/05/2000	3784402		PL
1999121294	01/05/2000	3784402		MC
1999121507	01/05/2000	3784401		SF
1999121508	01/05/2000	3784401		EL
2000010494	01/11/2000	3739914		RD
2000010567	01/12/2000	3781726		RD
2000050052	05/01/2000	3609395		RD
2000041616	04/21/2000	3788883		RD
2000041473	04/20/2000	2839856		RD
2000041464	04/20/2000	3725611		EL
2000041463	04/20/2000	3725611		RP
2000041378	04/19/2000	3726081		RD
2000040736	04/12/2000	3785439		MC
2000040735	04/12/2000	3785439		PL
2000040734	04/12/2000	3785439		EL
2000040733	04/12/2000	3785439		SF
2000040728	04/12/2000	3785439		MC
2000040727	04/12/2000	3785439		PL

ALT_KEY	RANGE	TWNSHIP	SECTION	
2000040726	04/12/2000	3785439		EL
2000040725	04/12/2000	3785439		SF
2000040703	04/11/2000	3788593		MC
2000040702	04/11/2000	3788593		PL
2000040701	04/11/2000	3788593		EL
2000040700	04/11/2000	3788593		SF
2000040683	04/11/2000	3788580		MC
2000040682	04/11/2000	3788580		PL
2000040681	04/11/2000	3788580		EL
2000040680	04/11/2000	3788580		SF
2000040671	04/11/2000	3789074		MC
2000040670	04/11/2000	3789074		PL
2000040669	04/11/2000	3789074		EL
2000040668	04/11/2000	3789074		SF
2000040662	04/11/2000	3788589		MC
2000040661	04/11/2000	3788589		PL
2000040660	04/11/2000	3788589		EL
2000040659	04/11/2000	3788589		SF
2000040658	04/11/2000	3784426		MC
2000040657	04/11/2000	3784426		PL
2000040656	04/11/2000	3784426		EL
2000040655	04/11/2000	3784426		SF
2000040780	04/10/2000	3751752		MC
2000040768	04/10/2000	3785439		RP
2000040766	04/10/2000	3785439		RP
2000040762	04/10/2000	3751752		SF
2000030997	04/04/2000	3789054		MC
2000030996	04/04/2000	3789054		PL
2000030995	04/04/2000	3789054		EL
2000030994	04/04/2000	3789054		SF
2000030963	04/04/2000	3789071		MC
2000030962	04/04/2000	3789071		PL
2000030961	04/04/2000	3789071		EL
2000030960	04/04/2000	3789071		SF
2000030945	04/04/2000	3788853		MC
2000030944	04/04/2000	3788853		PL
2000030943	04/04/2000	3788853		EL
2000030942	04/04/2000	3788853		SF
2000030933	04/04/2000	3788881		MC
2000030932	04/04/2000	3788881		PL
2000030931	04/04/2000	3788881		EL
2000030930	04/04/2000	3788881		SF
2000030925	04/04/2000	3788870		MC
2000030924	04/04/2000	3788870		PL
2000030923	04/04/2000	3788870		EL
2000030922	04/04/2000	3788870		SF
2000030917	04/04/2000	3789053		MC
2000030916	04/04/2000	3789053		PL
2000030915	04/04/2000	3789053		EL
2000030914	04/04/2000	3789053		SF
2000032087	03/29/2000	3725824		RD
2000031135	03/23/2000	3789014		MC
2000031134	03/23/2000	3789014		PL
2000031133	03/23/2000	3789014		EL
2000031132	03/23/2000	3789014		SF
2000030959	03/22/2000	3788859		MC
2000030958	03/22/2000	3788859		PL
2000030957	03/22/2000	3788859		EL
2000030956	03/22/2000	3788859		SF

ALT_KEY	RANGE	TWNSHIP	SECTION	
2000030955	03/22/2000	3788573		MC
2000030954	03/22/2000	3788573		PL
2000030953	03/22/2000	3788579		MC
2000030952	03/22/2000	3788579		PL
2000030951	03/22/2000	3788579		EL
2000030950	03/22/2000	3788579		SF
2000030949	03/22/2000	3788573		EL
2000030948	03/22/2000	3788573		SF
2000030941	03/22/2000	3788584		MC
2000030940	03/22/2000	3788584		PL
2000030939	03/22/2000	3788584		EL
2000030938	03/22/2000	3788584		SF
2000030937	03/22/2000	3789068		MC
2000030936	03/22/2000	3789068		PL
2000030935	03/22/2000	3789068		EL
2000030934	03/22/2000	3789068		SF
2000030929	03/22/2000	3788594		MC
2000030928	03/22/2000	3788594		PL
2000030927	03/22/2000	3788594		EL
2000030926	03/22/2000	3788594		SF
2000030840	03/22/2000	3784407		MC
2000030839	03/22/2000	3784407		PL
2000030838	03/22/2000	3784407		EL
2000030837	03/22/2000	3784407		SF
2000030835	03/22/2000	3784397		MC
2000030834	03/22/2000	3784397		PL
2000030833	03/22/2000	3784397		EL
2000030832	03/22/2000	3784397		SF
2000030975	03/15/2000	3773536		SB
2000030626	03/10/2000	3739566		RD
2000030429	03/07/2000	3786213		RF
1999081211	03/01/2000	1595142		AR
1999081210	03/01/2000	1595142		MC
1999081209	03/01/2000	1595142		PL
1999081208	03/01/2000	1595142		EL
1999081207	03/01/2000	1595142		FF
1999081206	03/01/2000	1595142		MC
1999081205	03/01/2000	1595142		PL
1999081204	03/01/2000	1595142		EL
1999081202	03/01/2000	1595142		FF
1999081201	03/01/2000	1595142		MC
1999081200	03/01/2000	1595142		PL
1999081195	03/01/2000	1595142		EL
1999081193	03/01/2000	1595142		FF
1999081191	03/01/2000	1595142		MC
1999081190	03/01/2000	1595142		PL
1999081188	03/01/2000	1595142		EL
1999081187	03/01/2000	1595142		FF
1999081182	03/01/2000	1595142		MC
1999081181	03/01/2000	1595142		PL
1999081180	03/01/2000	1595142		EL
1999081179	03/01/2000	1595142		FF
1999081140	03/01/2000	1595142		MC
1999081139	03/01/2000	1595142		PL
1999081138	03/01/2000	1595142		EL
1999081132	03/01/2000	1595142		FF
1999081127	03/01/2000	1595142		MC
1999081126	03/01/2000	1595142		PL
1999081124	03/01/2000	1595142		EL

ALT_KEY	RANGE	TWNSHIP	SECTION	
1999081123	03/01/2000	1595142		FF
1999081122	03/01/2000	1595142		MC
1999081121	03/01/2000	1595142		PL
1999081120	03/01/2000	1595142		EL
1999081115	03/01/2000	1595142		FF
1999081100	03/01/2000	1595142		MC
1999081099	03/01/2000	1595142		PL
1999081098	03/01/2000	1595142		EL
1999081097	03/01/2000	1595142		FF
1999081092	03/01/2000	1595142		MC
1999081091	03/01/2000	1595142		PL
1999081090	03/01/2000	1595142		EL
1999081087	03/01/2000	1595142		FF
1999081085	03/01/2000	1595142		MC
1999081084	03/01/2000	1595142		PL
1999081083	03/01/2000	1595142		EL
1999081082	03/01/2000	1595142		FF
1999081081	03/01/2000	1595142		MC
1999081080	03/01/2000	1595142		PL
1999081079	03/01/2000	1595142		EL
1999081078	03/01/2000	1595142		FF
1999081077	03/01/2000	1595142		MC
1999081076	03/01/2000	1595142		PL
1999081075	03/01/2000	1595142		EL
1999081074	03/01/2000	1595142		FF
1999081073	03/01/2000	1595142		MC
1999081072	03/01/2000	1595142		PL
1999081071	03/01/2000	1595142		EL
1999081070	03/01/2000	1595142		FF
1999081065	03/01/2000	1595142		MC
1999081064	03/01/2000	1595142		PL
1999081063	03/01/2000	1595142		EL
1999081062	03/01/2000	1595142		FF
1999081061	03/01/2000	1595142		MC
1999081060	03/01/2000	1595142		PL
1999081059	03/01/2000	1595142		EL
1999081058	03/01/2000	1595142		FF
1999080976	03/01/2000	1595142		MC
1999080975	03/01/2000	1595142		PL
1999080974	03/01/2000	1595142		EL
1999080969	03/01/2000	1595142		FF
1999080968	03/01/2000	1595142		MC
1999080967	03/01/2000	1595142		PL
1999080966	03/01/2000	1595142		EL
1999080965	03/01/2000	1595142		FF
1999080964	03/01/2000	1595142		MC
1999080963	03/01/2000	1595142		PL
1999080958	03/01/2000	1595142		EL
1999080957	03/01/2000	1595142		FF
2000022118	02/29/2000	3739892		RD
2000022077	02/28/2000	1595142		EL
2000022023	02/28/2000	3784439		RD
2000022021	02/28/2000	3784400		RD
2000021116	02/16/2000	3784394		PL
2000021115	02/16/2000	3784425		PL
2000021080	02/16/2000	3739540		RD
2000020529	02/15/2000	3789067		MC
2000020528	02/15/2000	3789067		PL
2000020527	02/15/2000	3789067		EL

ALT_KEY	RANGE	TWNSHIP	SECTION		
2000010938	01/19/2000	3616511		EL	
2000010791	01/14/2000	3785439		RP	
2000010790	01/14/2000	3785439		RP	
2000010788	01/14/2000	3785439		RP	
2000010786	01/14/2000	3785439		RP	
2000010566	01/12/2000	3772335		RD	
2000010390	01/10/2000	3788883		RP	
1999121509	01/05/2000	3784401		PL	
2000011492	01/28/2000	3789040		PL	
2000011491	01/28/2000	3789040		EL	
2000011490	01/28/2000	3789040		SF	
1999121510	01/05/2000	3784401		MC	
	26	24	26		Total for Section **541**
2000010167	01/05/2000	3786629		RD	
2000011273	01/24/2000	1031672		SF	
2000011275	01/24/2000	1031672		PL	
2000011277	01/24/2000	1031672		SF	
2000031414	03/21/2000	1031672		RD	
2000030007	03/09/2000	3786641		RD	
2000030014	03/01/2000	3786624		RD	
2000022025	02/29/2000	1031672		RD	
2000022022	02/29/2000	3689666		RD	
2000021665	02/22/2000	1031672		RP	
2000011883	01/31/2000	1031672		RP	
2000011869	01/31/2000	1031672		RP	
2000060801	06/08/2000	3786619		RD	
2000060800	06/08/2000	3786644		RD	
2000050703	05/11/2000	1031672		EL	
2000050702	05/11/2000	1031672		RP	
2000042084	04/26/2000	1048109		MC	
2000042083	04/26/2000	1048109		PL	
2000042081	04/26/2000	1048109		EL	
2000042080	04/26/2000	1048109		SF	
2000041434	04/19/2000	3786644		EL	
2000041433	04/19/2000	3786644		RP	
2000120114	12/05/2000	3786623		RP	
2000110174	11/06/2000	3786631		RD	
2000100089	10/03/2000	3786631		RP	
2000080646	08/21/2000	3786616		RD	
2000070850	07/28/2000	3786622		RD	
2000070644	07/21/2000	1031672		RP	
2000070309	07/13/2000	3786622		RP	
2000011279	01/24/2000	1031672		PL	
2000011280	01/24/2000	1031672		MC	
2000011278	01/24/2000	1031672		EL	
2000011276	01/24/2000	1031672		MC	
2000011274	01/24/2000	1031672		EL	
2000010170	01/05/2000	3786634		RD	
	26	24	27		Total for Section **35**

ALT_KEY	RANGE	TWNSHIP	SECTION
1999080818	01/13/2000	1412528	FF
1999080819	01/13/2000	1412528	FF
1999081266	02/08/2000	1412528	MC
1999081265	02/08/2000	1412528	PL
1999081264	02/08/2000	1412528	EL
1999081263	02/08/2000	1412528	MC
1999081262	02/08/2000	1412528	PL
1999081261	02/08/2000	1412528	EL
1999081260	02/08/2000	1412528	MC
1999080799	02/08/2000	1412528	FF
1999080840	01/13/2000	1412528	FF
1999080841	01/13/2000	1412528	FF
1999080846	01/13/2000	1412528	FF
1999081267	01/13/2000	1412528	EL
1999081268	01/13/2000	1412528	PL
1999081269	01/13/2000	1412528	MC
1999081270	01/13/2000	1412528	EL
2000041033	04/13/2000	3459717	PL
2000041032	04/13/2000	3459717	EL
2000041030	04/13/2000	3459717	SB
2000041018	04/13/2000	1412528	FS
2000041013	04/13/2000	1412528	FS
2000041012	04/13/2000	1412528	FS
2000041011	04/13/2000	1412528	FS
2000041010	04/13/2000	1412528	FS
2000041005	04/13/2000	1412528	FS
2000041004	04/13/2000	1412528	FS
2000041002	04/13/2000	1412528	FS
2000041001	04/13/2000	1412528	FS
2000040999	04/13/2000	1412528	FS
2000040976	04/13/2000	1412528	FS
2000061904	07/14/2000	1412528	AL
2000061903	07/14/2000	1412528	AL
2000061901	07/14/2000	1412528	AL
2000061899	07/14/2000	1412528	AL
2000061898	07/14/2000	1412528	AL
2000061897	07/14/2000	1412528	AL
2000061896	07/14/2000	1412528	AL
2000061891	07/14/2000	1412528	AL
2000090614	10/05/2000	3459717	EL
2000080314	08/10/2000	1412528	PL
2000062636	08/10/2000	1412528	EL
2000061737	08/10/2000	1412528	CP
2000080227	08/08/2000	1412528	EL
2000080225	08/08/2000	1412528	EL
2000070885	07/28/2000	3786318	EL
2000070242	07/14/2000	1412528	EL
2000070241	07/14/2000	1412528	EL
2000061911	07/14/2000	1412528	AL
2000061908	07/14/2000	1412528	AL
2000061905	07/14/2000	1412528	AL
2000061890	07/14/2000	1412528	AL
2000061888	07/14/2000	1412528	AL
2000070209	07/11/2000	1412528	PL
2000070208	07/11/2000	1412528	PL
2000063199	06/30/2000	1412528	MC
2000062387	06/23/2000	3563808	PW

ALT_KEY	RANGE	TWNSHIP	SECTION	
2000050527	05/11/2000	1412528		EL
2000050526	05/11/2000	1412528		CP
1999081251	02/08/2000	1412528		SB
1999081245	02/08/2000	1412528		NR
1999080853	02/08/2000	1412528		NR
1999080851	02/08/2000	1412528		NR
1999080811	02/08/2000	1412528		FF
1999080804	02/08/2000	1412528		FF
1999080803	02/08/2000	1412528		FF
1999080802	02/08/2000	1412528		FF
1999081259	02/08/2000	1412528		PL
1999081258	02/08/2000	1412528		EL
1999081257	02/08/2000	1412528		MC
1999081256	02/08/2000	1412528		PL
1999081255	02/08/2000	1412528		EL
1999081254	02/08/2000	1412528		MC
1999081253	02/08/2000	1412528		PL
1999081252	02/08/2000	1412528		EL
1999081271	01/13/2000	1412528		PL
1999081272	01/13/2000	1412528		MC
1999081273	01/13/2000	1412528		EL
1999081274	01/13/2000	1412528		PL
1999081275	01/13/2000	1412528		MC
1999081280	01/13/2000	1412528		EL
1999081281	01/13/2000	1412528		PL
1999081282	01/13/2000	1412528		MC
1999081283	01/13/2000	1412528		EL
1999081285	01/13/2000	1412528		PL
1999081286	01/13/2000	1412528		MC
	26	24	35	

Total for Section	**86**

ALT_KEY	RANGE	TWNSHIP	SECTION	
2000021977	02/25/2000	1595428		RP
2000021978	02/25/2000	1595428		EL
2000042232	05/01/2000	3653980		EL
2000042234	05/01/2000	3653980		MC
2000042302	05/01/2000	3653980		EL
2000042301	05/01/2000	3653980		FF
2000061743	06/21/2000	3653980		FS
2000061742	06/21/2000	3653980		FS
2000061614	06/21/2000	3653980		FS
2000061744	06/19/2000	3653980		PL
2000050510	05/09/2000	1595428		RD
2000050509	05/09/2000	1595428		RD
2000050508	05/09/2000	1595428		RD
2000042304	05/01/2000	3653980		MC
2000070622	08/30/2000	3619013		SN
2000070621	08/30/2000	3619013		SN
2000070619	08/30/2000	3619013		SN
2000070618	08/30/2000	3619013		SN
2000070194	08/21/2000	3619013		FS
2000080561	08/17/2000	1595428		SR
2000080278	08/14/2000	1595428		SR
2000070337	07/20/2000	3653980		AL
2000090325	12/20/2000	3619013		CD
2000110590	11/20/2000	1595428		PL
2000090977	10/24/2000	2720662		HM
2000090801	10/24/2000	2720662		HM
2000090391	09/13/2000	3619013		SN
2000070623	08/30/2000	3619013		SN
2000070444	07/18/2000	1595428		EL
2000063142	06/30/2000	3619013		MC
2000063140	06/30/2000	3619013		PL
2000063138	06/30/2000	3619013		EL
2000063132	06/30/2000	3619013		CD
2000051460	06/29/2000	3653980		PL
2000051459	06/29/2000	3653980		MC
2000051458	06/29/2000	3653980		EL
2000042303	05/01/2000	3653980		PL
2000042233	05/01/2000	3653980		PL
2000042230	05/01/2000	3653980		FF
2000021979	02/25/2000	1595428		RP
2000021981	02/25/2000	1595428		EL
2000021982	02/25/2000	1595428		RP
2000021983	02/25/2000	1595428		EL
	26	24	36	

Total for Section	**43**
GRAND TOTAL	**1,217**

Maintenance Permitting / Permit Types Report

CDPR9025 - Maintenance Permitting/Permit Types

PERMIT TYPE / PERMIT DESCRIPTION	MINIMUM FEE	EXPIRATION DAYS	INDICATORS PROJECT	RADON	CO IND	CONC IND
AL ALARM SYSTEMS	75.00	180.00	N	N	N	N
AM MOBILE HOME ADDITIONS	75.00	180.00	N	Y	Y	N
AR AMUSEMENT/SOCIAL/RECREATION	150.00	180.00	N	Y	Y	N
CC CONCRETE,DRIVEWAY/PATIO	75.00	180.00	N	N	N	N
CD NONRESD. & NONHOUSEKEEPING	150.00	180.00	N	Y	Y	N
CP COMMERCIAL POOL	200.00	180.00	N	N	N	N
CR CHURCHES - OR RELIGOUS BLDG.	150.00	180.00	N	Y	Y	N
CU CHANGE OF USE	150.00	180.00	N	N	N	N
DM DEMOLITION-STRUCTURE	110.00	180.00	N	N	N	N
EL ELECTRICAL SERVICES	75.00	180.00	N	N	N	N
FD FOUNDATION ONLY		180.00	N	N	N	N
FF FIVE OR MORE FAMILY BLDG.	150.00	180.00	N	Y	Y	N
FS FIRE SPRINKLERS		180.00	N	N	N	N
FT FUEL TANKS	150.00	180.00	N	N	N	N
GA RESD. ADDITIONS GARAGES/CARPORTS	75.00	180.00	N	Y	N	N
HI HOSPITAL/INSTITUTION	150.00	180.00	N	Y	Y	N
HM HOTEL/MOTEL ACCOM.	150.00	180.00	N	Y	Y	N
IB INDUSTRIAL BLDG.	150.00	180.00	N	Y	Y	N
MC MECHANICAL	75.00	180.00	N	N	N	N
MH MOBILE HOMES	270.00	180.00	N	N	Y	N
MK USED MOBILE HOME PRE-CHECK	100.00	180.00	N	N	N	N
MP MASTER PLAN REVIEW		180.00	N	N	N	N
MV MOVE/RELOCATE BLDG.	100.00	180.00	N	N	Y	N

25

PERMIT TYPE / PERMIT DESCRIPTION	MINIMUM FEE	EXPIRATION DAYS	INDICATORS PROJECT	RADON	CO IND	CONC IND
NR OTHER NONRESDENTIAL BLDG.		180.00	N	Y	Y	N
OB OFFICES/BANKS/PROFESSIONAL	150.00	180.00	N	Y	Y	N
OS OTHER NONHOUSEKEEPING SHELTER	150.00	180.00	N	Y	Y	N
PG PARKING GARAGES	150.00	180.00	N	Y	Y	N
PL PLUMBING	75.00	180.00	N	N	N	N
PR POOL REPAIR	75.00	180.00	N	N	N	N
PW PUBLIC WORKS/UTILITIES	150.00	180.00	N	Y	Y	N
RD RESIDENTIAL ADDITIONS/ALT.	75.00	180.00	N	Y	Y	N
RF ROOF-REROOF		180.00	N	N	N	N
RP RESIDENTIAL POOL	225.00	180.00	N	N	N	N
SA SINGLE FAMILY RES.ATTACHED		180.00	N	Y	Y	N
SB STRUCTURES OTHER BLDGS.		180.00	N	N	Y	N
SE SCHOOLS/EDUCATIONAL	150.00	180.00	N	Y	Y	N
SF SINGLE FAMILY RESIDENCE	75.00	180.00	N	Y	Y	N
SN SIGNS		180.00	N	N	N	N
SR STORES/CUSTOMER SERVICES	150.00	180.00	N	Y	Y	N
SS SERVICE STATION/REPAIRS	150.00	180.00	N	Y	Y	N
TF TWO FAMILY BLDG.	75.00	180.00	N	Y	Y	N
TR THREE/FOUR FAMILY BLDG.	75.00	180.00	N	Y	Y	N

26

Brief Resume
James C. Boyd, P.E.

Name of Firm:
Boyd Environmental Engineering, Inc.

Title:
President

Years experience: With This Firm: 8 years **With Other Firms:** 12 years

Education: Degree(s)/Year/Specialization:
B.S. Environmental Engineering, University of Florida, 1980 (With Honors)
M.S. Environmental Engineering, University of Central Florida, 1986
M.B.A., Rollins College, 1989 (With Honors)

Active Registration: Year First Registered/Discipline:
1985, Registered Professional Engineer No. 35480, FL

Summary of Experience and Qualifications:

Mr. Boyd has over 20 years of experience exclusively dedicated to environmental engineering within the state of Florida. He has been involved in all aspects of utility master planning, design, permitting and construction administration. Projects types in the potable water field include water conservation planning; lead and copper sampling programs; cross-connection control programs; wells and raw water pumping; water treatment, storage and high service pumping; water transmission and distribution systems; corrosion control facilities; consumptive use permitting; and FDEP permitting. Wastewater engineering experience includes sanitary sewer collection and transmission systems; pre-treatment systems; process studies; wastewater treatment facilities; effluent disposal and reclaimed water systems; and FDEP permitting. Mr. Boyd also provides specialized expertise in utility management and operations, including policy development, resource management, and compliance management programs. Mr. Boyd routinely makes public presentations in support of various projects and has authored numerous articles in the environmental engineering field. He founded Boyd Environmental Engineering in 1992 and has had the privilege of serving a number of Florida utilities including the Florida Water Services Corporation, Alafaya Utilities, City of Altamonte Springs, Lake Utility Services, Florida Governmental Utility Authority, City of Ormond Beach, Park Manor Waterworks, Seminole County and the Harmony CDD.

EXHIBIT
tabbies JCB-27

James C. Boyd, P.E. Examples of Recent Project Experience

a. Project Name & Location	b. Project Description	c. Project Owner's Name & Address	d. Completion Date (actual or estimated)
Harmony Macro CDP, Preliminary Wastewater Treatment Master Plan, Osceola County, FL	Developed Preliminary Wastewater Treatment Master Plan for this new Community Development District located southeast of St. Cloud in Osceola County, Florida. Services included the development of process designs, preliminary site plans and construction cost estimates for a 99,000 gpd Phase 1A, a 400,000 gpd Phase 1B, and a 800,000 gpd Phase 2 facility (average day capacity).	Birchwood Acres L.P. 4305 Neptune Road St. Cloud, FL 34769	2000
Harmony Macro CDP, Preliminary Water Treatment Master Plan, Osceola County, FL	Developed Preliminary Water Treatment Master Plan for this new Community Development District located southeast of St. Cloud in Osceola County, Florida. Services included the development of process designs, preliminary site plans, and construction cost estimates for a 1,000,000 gpd Phase 1 and a 2,000,000 gpd Phase 2 facility (maximum day capacity).	Birchwood Acres L.P. 4305 Neptune Road St. Cloud, FL 34769	2000

a. Project Name & Location	b. Project Description	c. Project Owner's Name & Address	d. Completion Date (actual or estimated)
Alafaya Utilities, Reclaimed Water System, Oviedo, FL	Providing hydraulic modeling, permitting, design and construction administration for this comprehensive reuse project that will provide reclaimed water service to the Alafaya Utilities service area. Project components include upgrading the 2.4 mgd WWTP; large diameter transmission mains (12 - 20 -inch); and a reuse pumping and storage facility.	Alafaya Utilities, Inc. 200 Weathersfield Ave. Altamonte Springs, FL 32714	2002
Florida Governmental Utility Authority, Poinciana WWTP No.1 Expansion, Poinciana, FL	Providing design, permitting and construction administration for this 0.5 mgd plant expansion. The WWTP improvements will enable the production of reclaimed water for disposal at the City of Kissimmee's reuse facilities. Project components include expansion and upgrading of the WWTP; a large diameter transmission main (24-inch); and a reuse pumping facility.	Florida Governmental Utility Authority 315 S. Calhoun Street #860 Tallahassee, FL 32301 Note: Project is being constructed by Avatar Properties and will be deeded to the Florida Governmental Utility Authority.	2001

a. Project Name & Location	b. Project Description	c. Project Owner's Name & Address	d. Completion Date (actual or estimated)
Florida Governmental Utility Authority, Poinciana WTP #2 and WTP #3 Expansion, Poinciana, FL	Providing design, permitting and construction administration services for expansion of these two water treatment plants that serve a combined territory. Each plant will have a maximum day capacity of 2.592 mgd. Project components include wells; yard piping; ground storage tanks; and high service pumping facilities.	Florida Governmental Utility Authority 315 S. Calhoun Street #860 Tallahassee, FL 32301 Note: Project is being constructed by Avatar Properties and will be deeded to the Florida Governmental Utility Authority.	2001
Lake Utility Services, Vistas WTP Expansion, Poinciana, FL	Providing design, permitting and construction administration services for the water treatment plant expansion. The expanded plant will have a maximum day capacity of 1.56 mgd. Project components include two wells; yard piping; a ground storage tank; a high service pumping facility; and a hydropneumatic tank system.	Lake Utility Services 200 Weathersfield Ave. Altamonte Springs, FL 32714	2001

James C. Boyd, P.E. Examples of Recent Project Experience (Continued)

a. Project Name & Location	b. Project Description	c. Project Owner's Name & Address	d. Completion Date (actual or estimated)
Florida Water Services, Palm Coast Consumptive Use Permit, Palm Coast, Florida	Prepared consumptive use permit application for the Palm Coast area. Water sources include a shallow aquifer system served by a lime softening plant, and a Floridan aquifer system served by a membrane softening plant. Services included permit application preparation; well inventory; water use forecasting; water conservation planning; water use accounting; and water auditing.	Florida Water Services P.O. Box 609520 Orlando, FL 32860	2000
Florida Water Services, Palm Coast Cross-Connection Control Program, Palm Coast, Florida	Modified the existing cross-connection control policy to bring it into compliance with contemporary FDEP and AWWA standards. Addressed commercial, industrial and institutional customers as a priority item. Also addressed backflow prevention retrofitting for residential customers; inventory and tracking mechanisms; and annual testing program.	Florida Water Services P.O. Box 609520 Orlando, FL 32860 Note: This work was originally completed for the Palm Coast Utility Corporation, which has since been acquired by the Florida Water Services Corporation.	1998

James C. Boyd, P.E. Examples of Recent Project Experience (Continued)

a. Project Name & Location	b. Project Description	c. Project Owner's Name & Address	d. Completion Date (actual or estimated)
City of Altamonte Springs, Reclaimed Water Management Plan, Altamonte Springs, FL	Developed a Reclaimed Water Management Plan for the City's Project Apricot. System elements included a rain sensor pilot program; the estimation of reclaimed water storage requirements; and the identification of additional reclaimed water storage facilities. Coordination was also provided with the St. Johns River Water Management District.	City of Altamonte Springs 225 Newburyport Avenue Altamonte Springs, FL 32714	1996
City of Altamonte Springs, Reclaimed Water Conservation Plan, Altamonte Springs, FL	Developed a Water Conservation Plan for the City. Plan elements included water auditing; leak detection; water treatment plant technologies; water use monitoring; indoor and outdoor water conservation activities; rate structure; ordinance development; and public education. Also prepared related water conservation progress reports.	City of Altamonte Springs 225 Newburyport Avenue Altamonte Springs, FL 32714	1995