



October 15, 2015

VIA E-FILING

Carlotta S. Stauffer, Commission Clerk  
Office of Commission Clerk  
Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, FL 32399

RE: Docket No. 150102-SU; Application for an increase in wastewater rates in Charlotte County by Utilities, Inc. of Sandalhaven  
Our File No. 30057.221

Dear Ms. Stauffer:

The following are the responses of Utilities, Inc. of Sandalhaven, ("Utility") to the Staff's Fourth Data Request dated October 7, 2015:

1. In Staff's Second Data Request, Question No. 17, the utility was asked to provide a list of all general service customers by meter size. In response, the utility provided a list that identified the general service customers by meter size as either "256 Sandalhaven Wastewater General Service" or "256 Sandalhaven Wastewater Multi-Residential". For the list provided by the utility in its response, please specify the names and addresses of the general service and multi-residential customers. For multi-residential customers, please indicate the number of units.

**RESPONSE:** See Revised List of Sandalhaven GS customers Spreadsheet – Attachment "4-1".

2. For each general service and multi-residential customer, please provide the test year gallons associated with the respective customer.

**RESPONSE:** See Revised List of Sandalhaven GS customers Spreadsheet – Attachment "4-1".

3. Please provide the name and address of the general service customer that requested to down-size its meter from 1.5" to 5/8" x 3/4".

**RESPONSE:** Ace Hardware of Cape Haze Inc. - 8501 Placida Rd. Unit 5, Placida, FL, 33946.

4. In Staff's Second Data Request, Question No. 14, the utility was asked to provide a schedule showing the number of equivalent residential connections (ERCs) connected, to date, by year since the implementation of the Allowance for Funds Prudently Invested (AFPI) charges established by Charlotte County. The Utility provided a table indicating the number of ERCs at year end from 2010 through 2014. Please provide a response to the following questions in regards to the table.

- a. The year-end number of ERCs for 2010 was indicated as 1,006.5. The note provided in Table 24 of the Charlotte County recommended rate report indicated the number of existing ERCs

as of December 31, 2010 were 1,123, which included the Reserve Capacity ERCs. Please explain the difference in the number of ERCs.

**RESPONSE:** The 1,006.5 number of ERCs previously provided did not include Reserve Capacity ERCs.

- b. The year end number of ERCs for 2012 decreased from the year end number for 2011. The number of ERCs would not decrease when evaluating the ERCs for AFPI. AFPI charges are a one-time charge paid per ERC at the time of an initial connection. Therefore, the number of ERCs would increase over time. However, when counting ERCs based on existing customers, the number may fluctuate. Please explain why the number of ERCs provided for purposes of AFPI fluctuated.

**RESPONSE:** The number of ERCs provided were based on year end existing customers. However, upon further review, the table did not include inactive accounts which should be counted for AFPI purposes. See Attachment "4-4b"

- c. Please provide the number of ERCs remaining to build out.

**RESPONSE:** The master sewer plan, as provided to the staff as Exhibit 2.25 in response to SDR #2, identifies the buildout flow as 938,000 gpd. Based on an average flow of 200 gpd/ERC, the number of ERC's at buildout would be  $938,000 \text{ gpd} / 200 \text{ gpd/ERC} = 4,690$  ERC's. Therefore, the number of ERC's remaining at buildout is 3,585 (4,690 - 1,105 ERCs at end of test year).

- 5. To follow up on questions from staff's September 15, 2015 site visit, please complete the following table. Please make necessary corrections, if any, for the lift station power meters.

SANDALHAVEN				
LIFT STATIONS				
Lift Station No.	Address/Location	Power Meter Number	Pump Motor (hp)	Capacity (gpm)
LS-1		KJ14780		
LS-2		AC83591		
LS-3		KJ15654		
LS-4				
LS-5		ACD1553		
LS-6		ACD9841		
LS-7		ACD8684		
LS-8		AC74086		
LS-9		KJ15653		
LS-10		AC74135		
LS-11		KJ6694		
LS-12		KJ15642		
LS-13		6NL4409		

**RESPONSE:** See Attachment "4-5".

6. When did the Utility realize that the growth it had projected during its 2006 rate case with the Commission was not going to materialize?

**RESPONSE:** In early 2008, approximately one year after the revised MFRs for Docket No. 060285-SU were filed on December 28, 2006.

7. Since that time, what steps has the Utility taken to mitigate the cost impact(s) of the unrealized growth?

**RESPONSE:** Sandalhaven took the only actions it had available to mitigate cost impacts. First, it contacted EWD on January 25, 2008 to request an indefinite postponement of the option to purchase an additional 200,000 gpd of treatment and disposal capacity, which EWD agreed to do. Second, the Utility optimized its operation of the collection system to direct as much flow as it could to its own treatment plant rather than to EWD to avoid the higher EWD gallonage charge while maintaining compliance with the treatment and disposal constraints specified in the plant's operating permit. It should be noted that although Sandalhaven requested a postponement to purchase an additional 200,000 gpd, there was substantial basis for the purchase of the initial 300,000 gpd at the time of the purchase and, in hindsight, the facts still support that decision. In December, 2006, MFR Schedule A-12, page 3 was submitted in Docket No. 060285-SU, to support the purchases. It showed the flow commitments for which CIAC was prepaid at that time. That schedule has been brought up to date. Attachment "4-7" compares current prepaid commitments for demand with those presented in 2006, showing the portions of the prepaid commitments used and not used. This comparison substantiates the need for the capacity purchased and for Sandalhaven's position that the 300,000 gpd purchase from EWD is 100% used and useful. An important point to consider that is not reflected in the schedule is that the current flow shown is not indicative of the total capacity that was purchased and reserved for the current customer base due to its seasonal nature. The reserved capacity that is included in the tariff is 190 gpd per ERC and compares to the actual flow of 92 gpd per ERC for the current customers on an annual average basis due to the seasonal occupancy. But the full capacity must be available for those customers in the event the occupancy trend changes since the utility still has the obligation to provide that service.

8. Please refer to the Utility's response to questions 20-23 of Staff's Second Data Request dated August 25, 2015. Staff understands that the services provided by some of the vendors involved in constructing the interconnection force main would be unaffected by the size of the force main.. Given this, please estimate the incremental cost difference, if any, between having a 1,000,000 gallons per day (gpd) force main and a 500,000 gpd force main. Please explain your response.

**RESPONSE:** There seems to be some confusion as to capacity of the force main and the basis for its design. The utility was never faced with a choice between constructing a force main able to provide for either a 500,000 gpd average system demand or a 1,000,000 gpd day average system demand. The 2004 Master Plan projected a 900,000 gpd buildout demand for the entire system, including all undeveloped areas. Of this amount, it was estimated that 70%, or 630,000 gpd would flow through this force main at buildout conditions. That is what the force main is designed for. The 1,000,000 gpd is not related to force main capacity. Instead, it describes the master lift station's peak or instantaneous flow capacity for near term projected flows of approximately 275,000 gpd using a peaking factor of 4.0.



Much attention has been paid to the difference in the cost of installing a 10" force main versus a 12" force main, as if that cost differential is significant or relevant. It is not. The Utility will concede that, all else being equal, the installed cost of a 10" main is slightly less than the installed cost of a 12" main. But what is relevant, and what was the major consideration in selecting a 12" force main, is the significantly higher operating cost of the lift station if the build out design flows were pumped through a 10" force main instead of a 12" force main.

In a letter from the design engineer dated June 26, 2007 and reinforced by the clarification letter of October 9, 2015 summarizing the force main and master lift station project, it was stated that the force main was "modeled to determine the most efficient pipeline size based on the need to produce velocity sufficient to carry solids through the pipe as well as meet the head condition (pressure) on the pump." See Attachment "4-8".

The power required to pump the flow generated at buildout and at peak demand conditions through a 12" force main can be met with two 88-Hp pumps. In comparison, two 300-Hp pumps would be required to meet peak flow conditions when pumping through a 10" force main. This would have a drastic ongoing cost impact, far offsetting any onetime saving in the installed cost of the force main. During the initial years of operation, when full projected demand was not yet evident, some savings were achievable by sizing the lift station pumps to serve current demand. The utility realized that savings by initially installing two 45-Hp pumps. Once the peak flow approaches the pumping capacity of the existing 45-Hp pumps the utility would otherwise face the choice of incurring very high operating costs after upgrading the pumping capacity of the master lift station by installing ever larger pumps or by constructing a parallel main, which would virtually double capital costs while also require the installation of larger pumps.

In its argument that the force main should be considered 100% used and useful, the utility differentiated this case from the previous docket in that FDEP is now requiring that the Sandalhaven WWTP be abandoned in 2015 and all flows diverted to EWD. This is significant, not because it changes the projected flows through the plant per the Master Plan, but because it accelerates the increased use of the force main; it now makes the force main the sole means of obtaining an alternative treatment and disposal method that is necessary in order to continue providing wastewater service to its customers.

9. Please refer Schedule F-7 of the Minimum Filing Requirements.

a. In the paragraph pertaining to the force main, the Utility states it "constructed a 12" force main, adequate to handle anticipated demand." Please explain the Utility's basis at that time for anticipating a demand of 1,000,000 gpd for the force main while negotiating a contract with Englewood Water District for a maximum capacity of 500,000 gpd.

**RESPONSE:** Please see response to No. 8 above. In addition, it should be understood that the EWD maximum capacity is on an annual average basis compared to the force main which must handle instantaneous peak flow conditions.

b. In the paragraph pertaining to the master lift station serving the force main, the Utility states it "constructed a receiving well for the master lift station adequate for total demand," and equipped it with "pumping capacity adequate for current demand and near term growth." Please provide the capacities, in gallons per day, of the receiving well constructed and the pumps installed in the master lift station.

**RESPONSE:** There are two 45-Hp pumps currently installed in the master lift station's wet well (receiving well), which provide 760 gpm of pumping capacity at peak flow conditions. The master lift station was designed for the operation of three 88-Hp pumps at buildout conditions, which would provide 1,850 gpm of pumping capacity. The receiving well is designed to house the three pumps in the ultimate configuration. When we refer to the receiving well, we are referring to the concrete structure or lift station wet well. According to the documents provided in response to questions 20-23 of the staff's second data request, the wet well cost comprises only \$139,920 of the total \$546,920 lift station contract. All other portions of this project cost are related to current and near term flow requirements.

Should you or Staff have any questions regarding this filing, please do not hesitate to give me a call.

Very truly yours,



MARTIN S. FRIEDMAN  
For the Firm

MSF/  
Enclosures

cc: John Hoy (via email)  
Patrick Flynn (via email)  
Suzanne Brownless, Esquire (via email)  
Erik Sayler, Esquire (via email)

Rate	Dist	Acct	Rev Class	Bill Cycle	Devl	SP	MR	Name	Address	Remarks	Devl. Fee	Inst. Tax
								HACIENDA DEL MAR ASSOCIATION INC	11225 PLACIDA RD, ENGLEWOOD, FL, 34224		1	66000
256WVWGEN	256 Sandalhaven Westmaster General Service	2302510000	COML	M05	1	2302510020	1"		Clubhouse next to Pool		1	67000
256WVWGEN	256 Sandalhaven Wastewater General Service	7426510000	COML	M05	1	7426510136	1"	FIDDLERS GREEN ABBN CLUBHOUSE	6800 PLACIDA RD, ENGLEWOOD, FL, 34224		1	12000
256WVWGEN	256 Sandalhaven Westmaster General Service	1727802803	COML	M05	1	0630003522	1.5"	Dan Pedro State Island State Park	6450 PLACIDA RD, Englewood, FL, 34224	Dan Pedro State Park Reception Area	1	220000
256WVWGEN	256 Sandalhaven Westmaster General Service	4488510000	COML	M05	1	4488510874	1.5"	MARINA @ CAPE HAZE LLC	6290 HARBORSIDE CIR, PLACIDA, FL, 33948		1	225000
256WVWGEN	256 Sandalhaven Westmaster General Service	7084200000	COML	M05	1	7084200847	1.5"	CAPE HAZE REBRT COM ASC INC	8401 PLACIDA RD, CAPE HAZE, FL, 33948		1	271000
256WVWGEN	256 Sandalhaven Westmaster General Service	7880094337	COML	FL07	1	6788107071	1.5"	VILLA CARRI			1	294000
256WVWGEN	256 Sandalhaven Westmaster General Service	7005110000	COML	M05	1	0202510819	2"	HACIENDA DEL MAR ASSOCIATION INC	11220 HACIENDA DEL MAR BLVD BLDG A, ENGLEWOOD, FL, 34224		1	380000
256WVWGEN	256 Sandalhaven Westmaster General Service	3670817885	COML	M05	1	1829023450	2"	HACIENDA DEL MAR ASSOCIATION INC	11100 HACIENDA DEL MAR BLVD BLDG Q, ENGLEWOOD, FL, 34224		1	361000
256WVWGEN	256 Sandalhaven Westmaster General Service	4147116201	COML	M05	1	8031147121	2"	HACIENDA DEL MAR ASSOCIATION INC	11140 HACIENDA DEL MAR BLVD BLDG E, ENGLEWOOD, FL, 34224		1	367000
256WVWGEN	256 Sandalhaven Westmaster General Service	6026200000	COML	M05	1	6026200025	2"	HACIENDA DEL MAR ASSOCIATION INC	11180 HACIENDA DEL MAR BLVD BLDG C, ENGLEWOOD, FL, 34224		1	360000
256WVWGEN	256 Sandalhaven Westmaster General Service	6068100000	COML	M05	1	606810510	2"	PALM ISLAND MARINA INC	7080 PLACIDA RD, PLACIDA, FL, 33948		1	248000
256WVWGEN	256 Sandalhaven Westmaster General Service	7126200000	COML	M05	1	7126200036	2"	HACIENDA DEL MAR ASSOCIATION INC	11160 HACIENDA DEL MAR BLVD BLDG D, ENGLEWOOD, FL, 34224		1	268000
256WVWGEN	256 Sandalhaven Westmaster General Service	7880348886	COML	M05	1	6941060550	2"	HACIENDA DEL MAR ASSOCIATION INC	11120 HACIENDA DEL MAR BLVD BLDG F, ENGLEWOOD, FL, 34224		1	321000
256WVWGEN	256 Sandalhaven Westmaster General Service	8881510000	COML	M05	1	8881510884	2"	HACIENDA DEL MAR ASSOCIATION INC	11200 HACIENDA DEL MAR BLVD BLDG H, ENGLEWOOD, FL, 34224		1	368000
256WVWGEN	256 Sandalhaven Westmaster General Service	650032503	COML	M05	1	2871610053	3"	CAPE HAZE RESORT B 2/5 CHDO ASC	8403 PLACIDA RD, CAPE HAZE, FL, 33948		1	378000
256WVWGEN	256 Sandalhaven Westmaster General Service	2584200000	COML	M05	1	2584200885	3"	CAPE HAZE RESORT A 11/13 CHDO ABC INC	8411 PLACIDA RD, CAPE HAZE, FL, 33948		1	443000
256WVWGEN	256 Sandalhaven Westmaster General Service	3284200000	COML	M05	1	3284200070	3"	CAPE HAZE RESORT C 7/9 CHDO ABC INC (Club)	8407 PLACIDA RD, CAPE HAZE, FL, 33948		1	333000
256WVWGEN	256 Sandalhaven Westmaster General Service	4284200000	COML	M05	1	4284200885	3"	CAPE HAZE RESORT B 3/5 CHDO ABC	8405 PLACIDA RD, CAPE HAZE, FL, 33948		1	425000
256WVWGEN	256 Sandalhaven Westmaster General Service	4884200000	COML	M05	1	4884200887	3"	CAPE HAZE RESORT A 11/13 CHDO ABC INC	8413 PLACIDA RD, CAPE HAZE, FL, 33948		1	378000
256WVWGEN	256 Sandalhaven Westmaster General Service	5484200000	COML	M05	1	5484200888	3"	CAPE HAZE RESORT C 7/9 CHDO ABC INC (Club)	8409 PLACIDA RD, CAPE HAZE, FL, 33948		1	210000
256WVWGEN	256 Sandalhaven Westmaster General Service	30260885	COML	M05	1	6038810235	6W	TALL PINES REALTY	6800 PLACIDA RD UNIT D1, ENGLEWOOD, FL, 34224		1	0
256WVWGEN	256 Sandalhaven Westmaster General Service	76810000	COML	M05	1	676810881	5W	MARINA @ CAPE HAZE LLC	8300 BAY PONTE DR East Dock, ENGLEWOOD, FL, 34224		1	0
256WVWGEN	256 Sandalhaven Westmaster General Service	1426171717	COML	M05	1	0888107185	5W	SOUTHWEST PROPERTIES	8501 PLACIDA RD UNIT A3, PLACIDA, FL, 33948		1	61000
256WVWGEN	256 Sandalhaven Westmaster General Service	1888100000	COML	M05	1	1588510776	5W	JOSEPH DICIANO DDS PA	8501 PLACIDA RD UNIT A1, PLACIDA, FL, 33948-2427		1	5000
256WVWGEN	256 Sandalhaven Westmaster General Service	1717814804	COML	M05	1	1739318171	5W	ACE HARDWARE OF CAPE HAZE INC	8501 PLACIDA RD UNIT 8, PLACIDA, FL, 33948-2427		1	56000
256WVWGEN	256 Sandalhaven Wastewater General Service	1879710000	RES	ALDP	1	1878710871	5W	BREWER, CAROL			1	1000
256WVWGEN	256 Sandalhaven Westmaster General Service	3634084388	COML	ALDP	1	7688510782	6W	SOUTHWEST PROPERTIES	6400 PLACIDA RD Grand House, ENGLEWOOD, FL, 34224		1	32000
256WVWGEN	256 Sandalhaven Westmaster General Service	3402510000	COML	M05	1	3402510841	6W	HACIENDA DEL MAR ASSOCIATION INC	6800 GASPARILLA PINES BLVD - POOL, ENGLEWOOD, FL, 34224, Pool		1	110000
256WVWGEN	256 Sandalhaven Westmaster General Service	3638510000	COML	M05	1	3638510280	6W	GOLDEN TEE ASSOCIATION	6810 GASPARILLA PINES BLVD POOL - POOL, ENGLEWOOD, FL, 34224, Pool		1	100000
256WVWGEN	256 Sandalhaven Westmaster General Service	4638810000	COML	M05	1	4638810271	6W	GOLDEN TEE THE SANCTUARY	6300 HARBORSIDE CIR POOL/CABANA, ENGLEWOOD, FL, 34224, Pool		1	352000
256WVWGEN	256 Sandalhaven Westmaster General Service	6668100000	COML	M05	1	666810888	5W	MARINA @ CAPE HAZE LLC	7022 PLACIDA RD N BLDG, PLACIDA, FL, 33948		1	0
256WVWGEN	256 Sandalhaven Wastewater General Service	6678510000	COML	M05	1	6678510888	5W	MARINE MAR PALM ISLAND	6000 PINEHAVEN WAY, ENGLEWOOD, FL, 34224		1	51000
256WVWGEN	256 Sandalhaven Westmaster General Service	6881058045	COML	M05	1	6710810034	5W	The Pines at Sandalhaven POA			1	34000
256WVWGEN	256 Sandalhaven Westmaster General Service	6888100000	COML	M05	1	5888510712	5W	WILDFLOWER COMMO ASSN	6780 GASPARILLA PINES BLVD, ENGLEWOOD, FL, 34224, Pool		1	67000
256WVWGEN	256 Sandalhaven Westmaster General Service	6878510000	COML	M05	1	6878510184	5W	FIDDLERS GREEN	6800 PLACIDA RD/FIDDLERS GREEN POOL, ENGLEWOOD, FL, 34224, Pool		1	7000
256WVWGEN	256 Sandalhaven Westmaster General Service	6146154812	COML	ALDP	1	1738318121	5W	Ace of Cape Haze Inc			1	2000
256WVWGEN	256 Sandalhaven Westmaster General Service	742226328	COML	RV04	1	0688510785	5W	FIDDLERS GREEN REALTY			1	513000
256WVWGEN	256 Sandalhaven Wastewater General Service	7768031195	COML	ALDP	1	4102182208	5W	Cape Haze Car Wash (TERRY SMITH)			1	87000
256WVWGEN	256 Sandalhaven Westmaster General Service	8138810000	COML	M05	1	8138810423	5W	LEMON BAY GOLF CLUB INC	8600 EAGLE PRESERVE DR - MAIN BLDG, ENGLEWOOD, FL, 34224		1	38000
256WVWGEN	256 Sandalhaven Westmaster General Service	8170058823	COML	M05	1	2438810231	6W	B.F. & C (MARE)	6800 PLACIDA RD UNIT C1, ENGLEWOOD, FL, 34224		1	310000
256WVWGEN	256 Sandalhaven Wastewater General Service	8781610000	COML	M05	1	8781610882	5W	LEMON BAY GOLF CLUB	8600 EAGLE PRESERVE DR, ENGLEWOOD, FL, 34224		1	162000
256WVWGEN	256 Sandalhaven Westmaster General Service	8461972516	COML	M05	1	8638810254	5W	PLACIDA GRILL (SCOTT GORDON)	8800 PLACIDA RD UNIT B1, ENGLEWOOD, FL, 34224		1	10000
256WVWGEN	256 Sandalhaven Wastewater General Service	8768100000	COML	M05	1	876810488	5W	MARINE MAX PALM ISLAND	7080 PLACIDA RD, PLACIDA, FL, 33948		1	10000

Rate	Dist	Acct	Rev Class	Bill Cycle	Devl	SP	MR	Name	Address	Remarks	Devl. Fee	Inst. Tax
256WVWMLL	256 Sandalhaven Westmaster Multi-Residential	4048818703	RES	M05	1	1320020007	1.5"	BTARE SEAMORE LLC	7035 PLACIDA RD, ENGLEWOOD, FL, 34224		4	41000
256WVWMLL	256 Sandalhaven Westmaster Multi-Residential	8724480714	RES	ALDP	1	1320020007	1.5"	FORET REAL ESTATE GROUP LLC			101	2380000
256WVWMLL	256 Sandalhaven Wastewater Multi-Residential	8800810000	RES	M05	1	8800810028	3"	CHRISTIAN CITY OF FL	6430 GASPARILLA PINES BLVD, ENGLEWOOD, FL, 34224		28	1428000
256WVWMLL	256 Sandalhaven Wastewater Multi-Residential	2317810000	RES	M05	1	2317810084	6"	HARBORTOWN VILLAGE	7070 PLACIDA RD, PLACIDA, FL, 33948	Shops on map & Charlotte City roads at 7070 28	148	4840000
256WVWMLL	256 Sandalhaven Westmaster Multi-Residential	7178710000	RES	M05	1	7178710510	6"	THE HAMMOCKS OF CAPE HAZE LLC	6885 PLACIDA RD, ENGLEWOOD, FL, 34224		1	10000

Rate	Dist	Acct	Rev Class	Bill Cycle	Devl	SP	MR	Name	Address	Devl. Fee
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250WWR1B 756 Sandalwood Westwind Restaurant  
250WWR1B 256 Sandalwood Westwind Restaurant

05208408 REB  
05081000 REB

MOS  
MOS

1  
1

0021007211 1.0' ZYDECO GRILLE, LLC  
0050010400 6.0' LEVEROCKS AT PALM ISLAND

6901 PLACIDA RD UNIT 14, PLACIDA, FL 33096  
7002 PLACIDA RD, PLACIDA, FL 33096

1 231000  
1 095000

**Sandalhaven ERC's Yr End**  
*per CC&B Rpt 30*

<b>Year</b>	<b>ERC's</b>
2010	1,155
2011	1,196
2012	1,314
2013	1,301
2014	1,302



Utilities, Inc. of Sandalhaven

Docket No. 150102-SU

October 13, 2015

Lift Station Roster

Lift Station No.	Address/Location	FP&I Meter Number	Pump (hp)	Phase	Voltage	Pumping Capacity (gpm)
L/S SH-01	6811 PLACIDA RD @ FIDDLERS GREEN, PH. 2	KJ14780	5.0	3	240	35
L/S SH-02	6800 PLACIDA RD @ FIDDLERS GREEN, PH. 1	AC83591	5.0	1	240	*
L/S SH-03	7070 PLACIDA RD @ LEVEROCK'S	KJ15654	3.0	3	240	181
L/S SH-04	6833 GASPARILLA PINES BLVD @ GOLDFINCH DR	KJ12429	3.0	3	240	41
L/S SH-05	6796 GASPARILLA @ WILDFLOWER VILLAGE	ACD1553	7.5	3	240	63
L/S SH-06	6600 GASPARILLA @ GOLDEN TEE	ACD9841	5.0	1	240	75
L/S SH-07	9047A BANTRY BAY @ SHAMROCK SHORES	ACD8684	1.5	1	240	*
L/S SH-08	9860 EAGLE PRESERVE DR @ EAGLES PRESERVE, PH. 1	AC74086	4.0	1	240	*
L/S SH-09	10064 EAGLE PRESERVE DR @ EAGLES PRESERVE, PH. 2	KJ15653	3.0	3	240	*
L/S SH-10	8600 ESTHER ST @ CAPE HAZE MARINA	AC74135	7.6	3	240	103
L/S SH-11	8501 PLACIDA RD @ CAPE HAZE PLAZA	KJ16694	4.0	1	240	209
L/S SH-12	8581 AMBERJACK CIRCLE @ HAMMOCKS	KJ15642	10.0	3	240	190
L/S SH-13	8401 PLACID ROAD - MASTER L/S	KNL6465	45.0	3	480	760

Notes:

1. As of 11/2/15, L/S SH-04 pumps will be 35 Hp, 240V, 3-phase
2. \* indicates pumping capacity is not documented.

CIAC by Type and Classification

Company: WSPCO Inc. of Southwestern  
 Docket No. 199403-01  
 Release Year End: December 31, 2004  
 Projected Year End: December 31, 2007  
 Interim ( ) or Final (X)  
 Retired ( ) or Projected (X)

Florida Public Service Commission

Subchapter A-12  
 Page 1 of 3  
 Preparer: Robinson, F.

Form 1186  
 Preparer: Robinson, F.

Committed Demand on Capacity

Docket No. 199403-01  
 Release Year End: December 31, 2004

Florida Public Service Commission

Preparer: Robinson, F.  
 Form 1186

Schedule of Commitments and Capacity

COMMITMENTS	Add'l Flow (gpd)	Cumulative Flow (gpd)	ERCs @ 190 gpd/ERC
Current Annual Average Flow (12 Month RAA) to WWTP		90,000	
<b>Additional Prepaid Commitments:</b>			
52 lots Eagles Preserve	9,880		52
80 lots Shamrock Shores	11,400		60
45 lots Cape Haze Marina, in bankruptcy	8,550		45
105 condos Hacienda Del Mar, under constr.	16,070		85
48 rooms Ship's Lammam Hotel, no activity	9,600		51
234 condos Hamrocks at Cape Haze, under constr.	48,050		253
Commercial Cape Haze Plaza Addition, under constr.	5,280		28
254 apts Cape Haze Resort-under constr.	56,340		297
	165,150		869
422 condos 8401 Placida Road-under design	84,400		444
<b>Total Prepaid Commitments through 2006</b>	<b>249,550</b>	<b>319,850</b>	<b>1,313</b>
<b>Prepaid Commitments added after 2006</b>			
Placida Maze			
Epret Real estate			
<b>Total Prepaid Commitments</b>			
<b>Total Capacity Committed including flows diverted from WWTP</b>			

Calculation of Committed DWD Capacity for Docket No. 199403-01

CIAC Paid?	ERCs @ 190 gpd/ERC	Flow (gpd)	ERCs not built	Prepaid Capacity Not Used	Date Paid
		72,501			
No	68	12,920	68	12,920	Guaranteed Rev. Payments
Yes	57	10,830	57	10,830	Prepaid UI ownership
Yes	59	11,290	45	8,550	8/12/95
Yes	112	21,280	-	-	2/24/03
Yes	51	9,600	51	9,600	1/15/03
Yes	234	44,460	85	16,150	10/1/04
Yes	29	5,280	-	-	3/31/05
Yes	254	50,160	120	22,800	2/24/06
	873	185,800	426	80,940	
Yes	418	79,420	418	79,420	9/11/06
	1,291	245,220	842	159,980	
Yes	26	4,922	26	4,940	10/19/08
Yes	3	619	3	570	1/17/09
Yes	29	5,541	29	5,510	
	1,320	250,761	871	165,490	
		323,262			

June 26, 2007

Reprinted  
AUG 07 2012



Mr. Patrick Flynn  
Regional Director  
Utilities, Inc. of Sandalhaven  
200 Weathersfield Avenue  
Altamonte Springs, FL 32714

101 North Woodland Blvd.  
Suite 600  
DeLand, Florida 32720  
Phone: 386.736.4142  
Fax: 386.736.8412  
[www.cphengineers.com](http://www.cphengineers.com)

RE: Sandalhaven Master Lift Station and Force Main Project Summary

Dear Mr. Flynn:

Pursuant to your request, this letter is intended to summarize the lift station and force main project recently completed in the Utilities, Inc. of Sandalhaven's (Sandalhaven) service area. The lift station and force main were constructed to divert a portion of the Sandalhaven service area's flows to the Englewood Water District's (EWD) Wastewater Treatment Facility. Sandalhaven's current wastewater treatment facility is rated at 0.150 million gallons per day (MGD), and flows during peak season exceed 0.135 MGD. Instead of expanding the wastewater treatment facility to meet future growth requirements, Sandalhaven opted to install approximately three miles of 12-inch force main and construct a master lift station to divert flow to EWD.

As detailed in the Master Plan developed in 2004, the service area's flow at buildout is projected to be approximately 900,000 gallons per day (gpd). The new force main and master lift station were designed to deliver all of the flow from the southern portion of the service area. This ultimately equates to approximately 665,000 gpd (or 462 gallons per minute), about 70% of the total service area flow. To handle this expected flow, the lift station design must allow for a peaking factor of 4.0, yielding a flow rate of 2.660 MGD or 1,850 gpm. The lift station is set up as a triplex (three pump) station to ultimately pump the peak rate to the EWD wastewater facility. The pipeline was modeled to determine the most efficient pipeline size based on the need to produce velocity sufficient to carry solids through the pipe as well as meet the total head condition (pressure) on the pump. The 12-inch pipeline was selected because it reduces the head condition down to approximately 125 feet at 950 gpm, and 105 feet at 750 gpm. This equates to a power requirement of 88 Horsepower for each pump. Had a smaller pipe size been selected to maximize velocity through the pipeline in order to minimize solids deposition, the pump horsepower would have been significantly higher – an estimated 300 Horsepower. This would have drastically increased the operating cost of the station. This would also have required installation of a larger wet well and a larger emergency generator for backup power. Therefore, the smaller 10-inch pipeline was not considered feasible based on the increased pumping and power requirements compared to the relatively small gain in capital cost.

While the pump station was designed and sized for ultimate capacity, the project was constructed to meet the Utility's more immediate needs. Two 45 Horsepower pumps

were installed initially to provide an interim pumping capacity of 760 gpm or 1.0 MGD peak flow. This equates to an average daily flow rate of 0.275 MGD. The current flow area is estimated to be approximately 0.050 MGD. While this initial flow rate will require periodic maintenance of the pipeline due to possible solids deposition caused by low velocities, the low head condition made this interim size feasible and more cost effective.

If you have any further questions or need any additional clarifications, please let me know. Thank you.

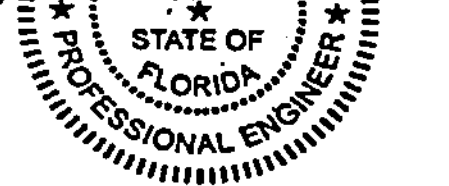
Sincerely,

CPH ENGINEERING INC.

STEPHEN NEIL ROMANO 57579

STEPHEN NEIL ROMANO 57579

Stephen N. Romano, P.E.  
Vice President





# Kimley»»Horn

October 8, 2015

Patrick Flynn  
Vice President  
Utilities Inc. of Sandalhaven  
200 Weathersfield Ave  
Altamonte Springs, FL 32714

Re: Sandalhaven Master Lift Station and force main clarification

Patrick:

As requested, this letter is to provide a clarification of the June 26, 2007 Sandalhaven Master Lift Station and Force Main Project Summary letter. In the second paragraph of the letter the following was asserted:

*"The 12-inch pipeline was selected because it reduces the head condition down to approximately 125 feet at 950 gpm, and 105 feet at 750 gpm. This equates to a power requirement of 88 Horsepower for each pump. Had a smaller pipe size been selected to maximize velocity through the pipeline in order to minimize solids deposition, the pump horsepower would have been significantly higher – an estimated 300 Horsepower."*

The pump design points are associated with the specific pump curve for each pump. To achieve the peak design point of 1850 gpm, the design point with a 12-inch pipeline called for a triplex pump station with each pump's design point being at 950 gpm at 125 feet TDH. This yields three 88-Hp pumps, with two operating and one as a standby. This is a total of 176-Hp with two pumps operating. The reduction of the pipeline to a 10-inch increases the pump design point to 950 gpm at approximately 275 feet TDH. This yields a horsepower per pump of approximately 150-Hp for a total 300-Hp with two pumps operating.

The comparison made in the June 26, 2007 letter was based on two pumps operating with a rated horsepower of 176 as compared to 300, a 70% increase in required motor size.

I hope this clarification provides you with the information you needed. If you need any additional information please contact me any time.

Very truly yours,  
KIMLEY-HORN AND ASSOCIATES, INC.

  
By: Stephen N. Romano, PE  
Sr. Project Manager