EXHIBIT "D - LP"

SEACOAST UTILITY AUTHORITY 4200 HOOD ROAD PALM BEACH GARDENS, FL 33410

(PHONE: 561-627-2900)

"SHOP" SPECIFICATIONS FOR LOW PRESSURE SEWER SYSTEMS

Project Name:			
Concurrence of Utility (Contractor:		
,	Signature	Date	
Firm			
Concurrence of the Eng	ineer:		
O	Signature	Date	
Firm			

By signature above, the utility contractor and engineer for referenced project agrees to adhere to both the following product specifications and Authority's Construction Standards and Specifications (latest edition). It is understood that Authority will reject construction not in accordance with this document.

<u>Basis</u>: The following products and specifications have been found to be acceptable and/or desirable in their respective groups. Shop drawings need not be submitted for Authority's approval if the contractor uses products on this list. Any product that is not on this list must be approved in advance by Authority. Such approval requires the submission of sufficient copies (Authority will retain two copies) of a shop drawing for each product that has been approved by the EOR. Shop drawings will also be required for all non-standard items including, but not limited to all precast concrete structures, lift station shut-off valve and valve box, hose bibb, backflow or vacuum breaker, pre-assembled lift stations, control panels, and electrical panels. All material for use in a potable water system shall be NSF61 certified.

CIRCLE ITEMS OF CHOICE

- a. Pipe: Sch 80 gray bell joint PVC, 350 psi (Charlotte Pipe or equal).
- b. Fittings up to 2 inch: Sch 40 PVC (Spears Manufacturing Company or approved equal).
- c. Fittings 3 inch: MJ Ductile Iron Class 350 with Protecto 401 lining.
- d. Gravity piping to wet well: Sch 40 PVC, Sch 80 PVC, SDR 26, or equal piping with Sch 40, SDR 26, SDR 35, or equal fittings.
- e. Valves 1 ¼ inch, 1 ½ inch, and 2 inch Ford Meter Box or AY McDonald full port ball valves, PVC Pack Joint x PVC Pack Joint Ford B77-555, B77-666, and B77-777, and 7600-44, AY McDonald,

- f. Valves 3 inch: Milliken Millcentric Eccentric Plug Valves, MJ body with stainless steel bolting, nickel sear, Nitrile (Buna) Elastomer trim, with 2 inch square operating, bi-directional shut off.
- g. Valve boxes for 3 inch: Ametek 5 ¼ inch plastic valve box with cast iron cover and ring with "sewer" designation.
- h. Valve Boxes for up to 2 inch valves: Russco VB2607S with "sewer" designation with 6 inch SDR 35 PVC riser.
- i. Clean out Boxes: Carson Plastic #MSBCF1118-12XL with EBBA Iron Lid #MKSCBC1118.
- j. Pipe Tracing Wire: Continuous (no breaks) #12 AWG solid copper conductor Type THWN with a 30 mil thick green HDPE insulation rated for 30 volts, Proline Safety #7401205 or equal, fastened with 11 inch cable ties and Dryconn Direct Bury lugs #90120.
- k. PVC Primer Cement: Hercules Purple, medium bodied.
- 1. Thread Sealing Compound: PTFE paste)LA-CO Slic-tite or Hercules Real-tuff).
- m. 2 inch and smaller plugs: Sch 40 red brass, solid type with square head (Lee).
- n. Underground Marking Tape for Authority owned piping: Non-detectable type polyethylene 6 inch width, 11 mil thick, working: "Caution: Buried Sewer Line Below" in black lettering with green background, 3M EMS Warning Tape 7900 series.
- o. Underground Marking Tape for privately owned piping: Metallic detectable tape, Terra Tape #540 or equal, marked Caution: "Sewer Line Below".
- p. E One Sewer Systems stainless steel lateral assembly NA0330P05.
- q. Reduced Pressure Backflow Preventer Located at water meter. Sizes ¾" 2" with standard ball valves. Supply with chloramine resistant silicone rubber seal rings or disks and lead free brass.
 - a. Ames Model LF 919
 - b. Apollo Model RPLF 4A
 - c. Watts Model LF 919
 - d. Zurn Model 975XL2