## **PIGEON - ROBERTS & ASSOCIATES, LLC**

September 30, 2014

Mr. Wade Moser Forest Utilities, Inc. 6000 Forest Boulevard Fort Myers, FL 33908

and

Roger Zlotoff Uniprop Jamaica Bay West Associates, LP 280 Daniels Street, Suite 300 Brimingham, MI 48009

Re: Jamaica Bay West, Ft. Myers FL
Wastewater Pumping System Performance Test Verification – Independent Engineer Acceptance

Gentleman,

Pigeon-Roberts & Assoc. has completed our review of the above referenced wastewater system construction and performance as well as received and reviewed various supplemental documents pertaining to the design, permitting and certification of construction Completion by the Engineer of Record.

More specifically the following project specific documentation is included by reference and is considered as being material to the opinions and conclusions reached by Pigeon-Roberts & Associates.

- GAI Consultants, Inc.; Forest Utilities JBW Wastewater Improvements Plans, Dated September 2013 and Not signed or sealed (drawing plot date Nov. 12, 2013)
- GAI Consultants, Inc.; Project Specifications, dated November 2013.
- GAI Consultants, Inc.; Engineering Report, JBW Settlement Implementation, Dated December 2013.
- GAI Consultants, Inc.; Figure 1: Master Utility Plan
- GAI Consultants, Inc.; Forest Utilities JBW Wastewater Improvements Plans, Dated September 2013 and Signed & Sealed on April 4, 2014 (drawing plot date October 30, 2013, April 4 & 30, 2014, May 1 & 6, 2014)
- GAI Consultants, Inc. response to RAI DEP permit Forest System Improvements, dated Dec. 9, 2013 including the attached Notification/Application for Constructing a Domestic Wastewater Collection/Transmission System.
- GAI Consultants, Inc. letter petition dated Nov. 20, 2013 requesting a variance from Rule 62.604.400(2)(a)
- FDEP Order Granting petition for Variance from Rule 62-604.400(2)(a)1 F.A.C. and revision of Permit 50149-018-DWC/CM and FLA014478.
- FDEP Wastewater Permit No. 50149-018-DWC/CM, Approved Dec. 19, 2013.
- Lee County Type D limited review Approval letter, dated May 23, 2014
- FDOT Utility Permit 2014-H-192-06, Approved April 14, 2014
- GAI Consultants, Inc.; Letter Dated Sept. 10, 2014 responding for review of Engineer's Memorandum
- GAI Consultants, Inc.; Letter Dated Sept. 24, 2014 Forest & JBW Motorized Valve Certification Tests. (Including photos and Video recording)

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925 S.E. 17<sup>th</sup> Street, Suite A Ocala ,FL 34471 Ph: 352-861-7799 Fax: 352-861-7709 The information listed above, as well as on-site performance testing and verification of construction, has allowed our firm to confirm, and obtain clarification for previously noted concerns, that the system construction can perform and is operational to the performance standards of 650 gallons per minute as contemplated for Flow Verification in the Settlement Agreement.

Furthermore, through the FDEP permit approval process, and FDEP granted Order, specific operating protocols and emergency response operating procedures have been addressed with regard to the operation of the new Forest Re-Pump station. The Order granted by FDEP concludes the State's acceptance to not requiring a fixed in-place emergency generator unit for this station. Based on this Order, the concerns about operator response time, potential overflows and compliance with Rule 62-604. although still valid concerns, have been addressed.

On September 28, 2014 a final observation and field verification of the Master Re-pump Station was conducted by Pigeon-Roberts & Assoc. and concluded the Station to be complete (see photos attachment).

Receipt of the Engineer of Record certification, dated September 24, 2014, concluded that the Motorized Valve at the Re-pump Station was tested and performed as designed and intended. Based on this certification, this firm can confirm the completion of the facility.

The project is considered compliant, based on the Lee County permit approval and Engineer of Records certification to FDEP stating that the facility, when properly maintained and operated in accordance with the Operation & Maintenance Manual, will function as intended and that the project has been constructed in accordance with the construction permit and engineering plans and specifications and that any deviations will not prevent the project from functioning in compliance with Chapter 62-604. F.A.C.

Considering the items noted above and reference documentation, we have concluded that the system construction and performance has met the Flow Requirement and operational verification as contemplated by the Settlement Agreement.

Respectfully,

PIGEON-ROBERTS & ASSOCIATES, LLC

Chuck A. Pigeon , P.E. Principal Engineer

Ec: File

## FOREST UTILITIES & JAMAICA BAY WEST - MASTER WASTEWATER REPUMP STATION DATE: SEPT. 27, 2014



PRESSURE SENSOR ON JBW INFLUENT LINE



INFLUENT LINE AND MOTORIZED CONTROL VALVE



FOREST UTILITY SYSTEM PRESSURE SENSOR



September 24, 2014 GAI No. A110638.01

Mr. Wade Moser General Manager Forest Utilities, Inc. 6000 Forest Boulevard Fort Meyers, Florida 33908

## **Forest Utilities & JBW Motorized Valve Certification Tests**

Dear Mr. Moser:

Tests were performed on September 22, 2014 to verify the installation and operation of the motorized valve. This valve is to open when the JBW system is operating both the J-1 and J-3 lift stations simultaneously and the system pressure is exceeded due to operations in the Forest system.

The test protocol for the motorized valve was as follows: Run one pump in each station simultaneously; verify flow through the JBW meter and close valves on US 41 to simulate high pressure conditions. The set point to establish an open valve signal was 36 pounds per square inch (psi) at the Master Pump Station. This process was repeated 5 times for confirmation that the valve would open at 36 psi.

Valve closure pressure was set at 29 psi monitored on the discharge side of the pumps. The operating pressure for the master pump station ranges from 40 psi for the small pumps to 65 psi for the large pump. The Master Pump Station pumps will run continuously until the JBW lift stations shut down. The signal to close the motorized valve will wait for the master pump station to stop running before returning the system back to normal operation sending flow directly to Forest.

Enclosed is a photo for your use. If you should have any questions please call me.

Sincerely,

**GAI Consultants, Inc.** 

Jules (Jay) J. Ameno, Jr., P.E.

**Environmental Department Manager** 

JJA/jja

cc: GAI File

Chuck Pigeon/PR&A