

*TIFA*

*JANUARY 14, 2015*

# *AGENDA*

**TIFA LLC MEETING AGENDA**  
**January 14, 2015**  
**11:00 a.m.**  
**MEETING LOCATION**  
**CITY OF TITUSVILLE**  
**WATER RESOURCES**  
**2836 GARDEN STREET – TITUSVILLE, FLORIDA**

**Roll Call**

**Action Items**

- I. Approval of the Minutes of the TIFA LLC Meeting of December 18, 2014  
(Presenter: Jim Perry)
- II. Approval to Proceed with Drilling of New Well to Replace Well WR-5 and  
Abandon Existing Well WR-5 (Presenter: Sean Stauffer)

**Financial Items and Reports**

- III. Ratification of Expenses Paid from Operating Account and Request for  
Reimbursement (Presenter: Jim Perry)

**Staff Reports / Informational Items**

- IV. Area IV Phase 2 Update (Presenter: Sean Stauffer)

**Other Business**

**Public Comment**

**Next Scheduled Meeting**

**Open Items**

**Adjournment**

*FIRST ORDER OF BUSINESS*

Date: January 14, 2015

To: TIFA LLC Management Committee

From: Sarah Sweeting, GMS, LLC

Subject: Approval of Minutes – December 18, 2014 TIFA LLC Meeting

**Summary Explanation & Background:** The draft minutes of the December 18, 2014 TIFA LLC meeting were previously circulated for review. The minutes of the TIFA LLC meeting are presented for review and approval. Since the draft minutes were circulated, comments were received from Farnton Water Resources / Miami Corporation on January 9, 2015 and The City of Titusville on January 13, 2015. The minutes were revised to reflect those comments. No other comments have been received.

**Source of Funds:** This action requires no funds.

**Minutes of TIFA, LLC Meeting  
December 18, 2014  
11:30 a.m.  
City of Titusville Water Resources  
Mourning Dove Water Plant  
2836 Garden Street  
Titusville, FL 32796**

**Persons in Attendance:**

Dwight Severs, TIFA, Management Committee Member  
Glenn Storch, TIFA, Management Committee Alternate Member  
John Peterson, City of Titusville, Water Resources Manager  
Sean Stauffer, City of Titusville, Water Resources Director  
Richard Broome, City of Titusville City Attorney  
Barbra Goering, Farmton Water Resources (by phone)  
David Fuechtman, Farmton Water Resources (by phone)  
Susan Pattock, Farmton Water Resources (by phone)  
Helen Hutchens, Miami Corp. (by phone)  
Jim Perry, GMS, LLC

Jim Perry conducted the meeting.

**Actions Items:**

**I. Approval of the Minutes of the TIFA, LLC Meeting of November 18, 2014**

Jim Perry presented the minutes of the November 18, 2014 meeting. Member Severs motioned to approve the minutes of the November 18, 2014 meeting. Alternate Member Storch concurred and the minutes were approved.

**Financial Items and Reports:**

**II. Ratification of Expenses Paid from Operating Account and Request for Reimbursement**

Mr. Perry presented the expenses paid from the operating account totaling \$5,347.54. Member Severs motioned to ratify the expenses paid from operating account and request for reimbursement. Alternate Member Storch concurred and the expenses were ratified.

**Staff Reports / Informational Items:**

**III. Area IV Phase 2 Update**

Sean Stauffer discussed the Area IV Phase 2 update. Advanced Well Drilling reached substantial completion on November 11, 2014. Punch list items were completed December 17, 2014, therefore, AWD exceeded the contract time by six days. It was suggested by Alternate Member Storch that any discussion of liquidated damages be held until the punch list items have been reviewed and allow AWD to "make a case for more time."

Well WR-5 was flushed and a video camera installed. It was determined that the geologic formation just below the 12-inch casing is the source of sediment production causing excessive turbidity. CPH's sub-consultant, CCI, recommends two options; either abandon the well or install a liner pipe. Staff recommendations will be provided at a later date.

Pipeline and well outfitting; Felix & Associates has installed 6,500 feet of pipe out of 18,000 feet. Felix has cleared and grubbed the corridor from Phase 1 up to Well WR-1 and is currently moving south. An agreement has been reached with FP&L on modified language to FPL's easement. Legal descriptions related to the FPL easement have been received from CPH. Road construction has not commenced because a certificate of insurance has not been received from Felix & Associates for a material hauler. Felix requested that four days be added to the contract time due to heavy rainfall in the area. Mr. Stauffer recommended the addition of three days. Alternate Member Storch moved to approve staff's recommendation to grant an additional three days to Felix & Associates contract. Member Severs concurred and the recommendation was approved.

**Other Business:**

Glenn Storch advised that the St. Johns River Water Management District granted the Farmton CUP. Water quality testing in the 5A area is being conducted.

**Public Comment:**

None.

**Next Scheduled Meeting:**

The next scheduled meeting is January 14, 2015 at 11:30 a.m. at this location.

**Open Items:**

None.

**Adjournment:**

Member Severs moved to adjourn the meeting at 12:00 p.m. Member Storch concurred and the meeting was adjourned.

*SECOND ORDER OF BUSINESS*



Date: January 7, 2015

To: TIFA LLC Management Committee

From: Sean L. Stauffer, Water Resources Director

Subject: Approval of Drilling New Well to Replace Well WR-5 and Abandonment of Existing Well WR-5

**Summary Explanation & Background:**

Major milestones in the drilling of Well WR-5 are shown in the following table:

Activity	Date
Vibrate 18-inch casing	June 5, 2014
Begin drilling 8-inch pilot hole	August 18, 2014
Finish pilot hole/ream to 118 feet	August 19, 2014
Install 12-inch casing, pump initial grout	August 20, 2014
Tag cement inside surface casing	August 21, 2014
Finish grouting casing	August 22, 2014
Step-drawdown testing	September 19, 2014
Geophysical logging	October 24, 2014
Acid added to well	October 28, 2014
Begin neutralization	October 31, 2014
Complete neutralization	November 3, 2014
Begin development (post acidization)	November 5, 2014
Stop development	December 5, 2014
Flush well, conduct static/pumped video	December 15, 2014

When it became apparent that continued development of Well WR-5 was not likely to produce raw water meeting the specification of turbidity of less than one NTU, it was decided to conduct a static and pumping borehole video in an effort to determine the cause of the elevated turbidity. As noted in the table above, this video was conducted on December 15, 2014.

The consulting hydrogeologist, CCI (sub-contractor to CPH Engineers) reviewed the December 15, 2014 video and compared it with the pre-acidizing video. CCI reached the initial conclusion that sediment is entering the well at and just below the base of the 12-inch casing. CCI further concluded that a collapsed formation in this location may be playing a role in the sediment that is observed entering the well borehole.

CCI presented two alternatives: Abandon the location and identify a new location for a replacement of Well WR-5 or; install an 8-inch sleeve at an appropriate depth in the open hole. The cost to install a new well was estimated to be \$78,500; the cost to install an 8-inch liner was estimated to be \$40,000.

In an effort to clarify the matter as to the source of the problem and the proposed solution, Miami Corporation engaged Devo Engineering to review the pre- and post-acidization videos, the static/pumping video and other information and provide an opinion as to the source of the excessive turbidity and recommend a solution.

Devo Engineering was provided with information such as the pre- and post-acidizing videos, geophysical logs, step-test data, and lithologic logs. Based on their review of this information, Devo Engineering concluded in their initial review that the turbidity source is from around and above the base of the casing, within an area where grout is missing. The cause of the missing grout cannot be definitively determined but is likely the result of multiple factors.

Following further review of the videos, Devo Engineering could not state with certainty what caused the problem (missing grout); however, it was stated that it may be related to a combination of factors such as borehole and casing plumbness, formation hardness within the centralizer depth interval, well acidizing and excessive pumping. Devo Engineering also opined that it appears the steps taken during construction of Well WR-5 were correct and appropriate.

It is noteworthy that a third hydrologist was consulted to review the Well WR-5 information. Bob Oros with the Colinas Group reviewed the videos, field notes, lithologic logs and well construction specifications and provided his independent opinion regarding the turbidity issue at the WR-5 well. Mr. Oros confirmed that the cement grout forming the casing seal is partially missing and this has caused the casing seal to fail. Mr. Oros also calculated the volume of grout utilized in the construction of Well WR-5 and found the grout quantities to be reasonable. Mr. Oros stated that the methods and procedures reported in the construction of Well WR-5 are acceptable and are considered to be good standard practice within the water well industry. He further stated that there was nothing in the information provided by CPH that would indicate substandard or improper procedures or materials associated with construction of this well.

With regard to the next steps, it is Devo Engineering's opinion that abandoning this well and moving to a new location would offer a more certain solution to the problem. It should be noted that if the decision is made to rehabilitate Well WR-5, Devo Engineering recommends stabilizing the well area with pressure grouting to minimize the danger of sinkhole formation. The cost to pressure grout is estimated to be a minimum of \$10,000; this brings the estimated cost of rehabilitating Well WR-5 to at least \$50,000.

Based on the above, it is the recommendation of the City and Farmton Water Resources that TIFA proceed with the necessary steps to find a suitable location for a new well to replace WR-5, secure approval of such location from the water management district and approve a change order to Advanced Well Drilling to drill a replacement well and abandon existing Well WR-5. The change in the contract price is estimated to be \$82,000 (this price is subject to change; finalized Change Order #3 to Advanced Well Drilling will be provided at the January 14, 2015 TIFA meeting). The proposed change in contract time to complete the work is 120 days.

**Source of Funds:**

Sufficient funds are available in the City's capital project account to cover the City's share of the estimated cost of drilling a replacement well and abandoning existing Well WR-5.

**Exhibits Attached:**

Change Order #3 to Advanced Well Drilling.

*THIRD ORDER OF BUSINESS*

**TIFA LLC**  
**INVOICE APPROVAL BY MANAGERS**

**WHEREAS**, the undersigned are the duly appointed and acting Managers of TIFA LLC, which operates pursuant to that certain Limited Liability Company Operating Agreement of TIFA LLC dated May 24, 2010 ("Operating Agreement"); and,

**WHEREAS**, at a duly called and noticed public meeting of the Managers as indicated below, the undersigned approved the contract and/or authorized the expenditure as indicated below, and further authorized the managers to execute the Invoice Approval by Managers form reflecting such authorized expenditures in order to process payments.

**Previous Authorizations**

TIFA Meeting Date	Approved	Total Contract or Expenditure Authorized
01/14/15	Imprest Account Reimbursement from Depository Account	See Attached

**NOW, THEREFORE**, the Managers of TIFA LLC, based upon the previous TIFA authorizations, approve the following payments:

Invoice Description	Total Amount	Pursuant to Previous TIFA Authorization Date	Invoice Payment
Transfer to imprest account at Northern Trust ending *8866	\$3,159.40	01/14/15	To be Paid by TIFA upon this approval

Except as otherwise set forth herein, defined terms shall have the meaning set forth in the Operating Agreement. This Action may be executed in several counterparts, and all counterparts so executed shall constitute one Approval binding on all parties.

**IN WITNESS WHEREOF**, the undersigned represent and warrant that each is the duly authorized and appointed agent of TIFA LLC.

\_\_\_\_\_  
 Mike Brown, Manager

\_\_\_\_\_  
 Dwight Severs, Manager

Date: \_\_\_\_\_, 2015

Date: \_\_\_\_\_, 2015

TIFA LLC  
Check Detail

December 16, 2014 through January 12, 2015

Type	Num	Date	Name	Item	Account	Paid Amount	Original Amount
Bill Pmt -Check	1092	01/06/2015	Florida Power & Li...		103.00 - Cash- Nort...		-1,173.83
Bill	09060...	01/02/2015			511.00 - Utilities	-212.28	212.28
Bill	24869...	01/02/2015			511.00 - Utilities	-196.83	196.83
Bill	40983...	01/02/2015			511.00 - Utilities	-190.93	190.93
Bill	62400...	01/02/2015			511.00 - Utilities	-197.89	197.89
Bill	73681...	01/02/2015			511.00 - Utilities	-194.29	194.29
Bill	83665...	01/02/2015			511.00 - Utilities	-182.61	182.61
TOTAL						-1,173.83	1,173.83
Bill Pmt -Check	1093	01/09/2015	The City of Titusville		103.00 - Cash- Nort...		-1,985.57
Bill	R-173	12/01/2014			501.00 - O&M Oper...	-162.76	162.76
Bill	R-174	12/03/2014			501.00 - O&M Oper...	-255.96	255.96
Bill	R-175	12/09/2014			501.00 - O&M Oper...	-287.03	287.03
Bill	R-176	12/10/2014			501.00 - O&M Oper...	-287.03	287.03
Bill	R-177	12/17/2014			501.00 - O&M Oper...	-349.17	349.17
Bill	P-011	12/17/2014			501.00 - O&M Oper...	-287.03	287.03
Bill	R-178	12/23/2014			501.00 - O&M Oper...	-193.83	193.83
Bill	R-179	12/31/2014			501.00 - O&M Oper...	-162.76	162.76
TOTAL						-1,985.57	1,985.57