

MEMORANDUM

DATE: March 9, 2012

TO: Board of Trustees, Village of Essex Jct.

CC: David Crawford, Village of Essex Jct.
Jim Jutras, Village of Essex Jct.

FROM: Wayne Elliott, PE *WE*

RE: Wastewater Treatment Facility Refurbishment – C #1
Project Status
A+E Project 11016

Project Schedule

An overall project schedule is attached for your reference. The project remains on schedule as we are finalizing the contract documents and permitting under our final design services and are ready to continue to the bid and construction phase. The final design engineering is running about \$23,000 under the original budget amount.

Originally, this project was to receive the first of \$4.0 m of State funding in FY 14. Notification was received by the State in mid January 2012 that excess funds were available and that projects ready to proceed are eligible to receive surplus funds from FY 12. So that the Village could qualify for this FY 12 funding, the final design process was accelerated to ensure that the project is ready to proceed to bid.

The tentative bid advertisement date is April 29, 2012, with a start construction of August 1, 2012. The duration of construction will approximately 2 years, continuing through the spring of 2014.

Construction Loan Application

Copies of the State construction loan application are attached for consideration by the Board. The total bond amount was \$15,230,000, so the loan amount requested from the State is \$13,530,000, less the separate Vermont Municipal Bond Bank loan of \$1,700,000.

The Village will receive approximately \$3,235,200 from FY 12, plus an additional \$4.0 in FY 13, FY 14, etc. until the project is fully funded. Once the project receives the initial funding, it becomes a continuation and is a higher priority to receive the balance of funding. The State SRF loan terms are a 20 year term, 2% interest rate (admin fee). For the FY 12 funding, a 15%

loan subsidy is applied which means the Village pays back 85% of this loan amount. The loan subsidy may continue and could range from 0 to 15% for the following years.

Constructability Review

The Tri-Town committee made the decision that they wanted to have a constructability review of the project during the final design phase. Weston & Sampson was selected to perform this constructability review of the drawings, specifications, and sequence of work. This work was anticipated and budgeted in the overall project cost. The initial kick-off meeting was conducted on February 22, 2012, and a final meeting is scheduled for March 15, 2012 to review the findings with the consultant. No significant issues or concerns have been raised by the consultant at this point and some of the suggestions have already been addressed.

Engineering Construction Phase Services Contract

Since the project will be ready to proceed to the next phase, we are prepared to continue with the bid and construction phase engineering services. A Memo is attached which outlines the specific engineering services, summarizes the fees, etc.

Memorandum



Date: March 7, 2012

To: Essex Junction Board of Trustees
David Crawford
Jim Jutras

From: Brad Aldrich, P.E. 

RE: **WWTF Refurbishment – Construction Engineering**

Attached is a copy of our Amendment for Construction Engineering for the WWTF Refurbishment project. This is an Amendment to the Base Contract dated 3/3/11 (which included the Final Design services).

These Construction Engineering services are a **continuation of services and were budgeted as a project cost**. In fact, **our proposed fees result in a savings of \$7,300** from what was budgeted. This savings will go into the over project contingency.

This amendment covers all required services from the bid advertisement through construction and first year services. The fees are broken into four major tasks as described below:

BID PHASE SERVICES

This task includes all aspects of the bid process from advertising for bids in the newspaper, facilitating the distribution of bid documents to bidders, conducting a pre-bid meeting, responding to bidder's questions, conducting the bid opening, reviewing bids and preparing a recommendation to award the contract to the successful low bidder.

CONSTRUCTION BASIC SERVICES

This task includes all construction administration upon contract award, including shop drawing reviews, conducting progress meetings, providing general engineering oversight, reviewing pay estimates, preparing change orders and conducting both warranty and final inspections.

RESIDENT REPRESENTATIVE

This task includes the services of a full-time engineer's field representative to observe the work and coordinate field activities between the Owner and Contractor. This representative will be on-site at all times when work is being performed by the Contractor.

SPECIAL SERVICES

This task includes miscellaneous tasks such as field survey, preparation of an O&M Manual, record drawings, warranty services and quarterly performance reviews during the first year of full operation.

A summary of our fees for each of these tasks and how they compare to the project budget for Construction Administration Services are as follows:

FEE SUMMARY

▪ Bid Phase Services	\$ 16,500	NTE
▪ Construction Basic Services	\$ 588,500	FIXED
▪ Resident Representative	\$ 490,400	NTE
▪ Special Services	<u>\$ 97,300</u>	NTE
Total	\$1,192,700	

Project Budget: \$1,200,000

Over/(Under) Budget: \$(7,300)*

* savings transfers to contingency

VTDEC FEE CURVE ALLOWANCE

VTDEC has developed a fee curve allowance as a guide for their review of engineering fees for Preliminary Engineering, Final Design and Construction Administration. Their fee curve is a rather complicated formula, based on the estimated construction cost for the project improvements.

The fee curve is used by VTDEC to evaluate whether the fees being proposed are reasonable for the work being proposed. We often use the curve formula to estimate fees for final design and construction during preliminary engineering. It's also a good tool for communities to gage whether proposed engineering fees are fair and reasonable.

We have calculated the "VTDEC Fee Curve Allowance" as an additional comparison for our proposed fees.

VTDEC Fee Curve Allowance:	\$1,246,830
Fees Subject to Fee Curve:	\$1,131,400*
Over/(Under) Fee Allowance:	\$(115,430)

*Fees associated with the preparation of the O&M Manual and record drawings are included in Special Services fees above, but are excluded from the fee curve comparison.

This is **EXHIBIT K**, consisting of 2 pages, referred to in and part of the **Agreement between Owner and Engineer for Professional Services** dated May 3, 2011.

AMENDMENT TO OWNER-ENGINEER AGREEMENT

AMENDMENT No. 1

1. *Background Data:*

- a. Effective Date of Owner-Engineer Agreement: May 3, 2011
- b. Owner: Village of Essex Junction, VT
- c. Engineer: Aldrich + Elliott, PC
- d. Project: Wastewater Treatment Facility Refurbishment - Contract No. 1

2. *Description of Modifications:*

- a. Engineer shall perform or furnish the following Additional Services: *A1.04-Bid Phase, A1.05-Construction Phase, and A1.06-Post-Construction Phase* services for the above referenced project.
- b. For the Additional Services or the modifications to services set forth above, Owner shall pay Engineer the following additional compensation:

A1.04-Bid Phase Services:	\$ 16,500	NTE
A1.05-Construction Phase Services:		
Construction Basic Services:	\$ 588,500	Lump Sum
Resident Representative:	\$ 490,400	NTE
A1.06-Post Construction Phase Services:		
Special Services:	\$ <u>97,300</u>	NTE
TOTAL Amendment No. 1:	\$1,192,700	

The foregoing Agreement Summary is for reference only and does not alter the terms of the Agreement, including those set forth in Exhibit C.

Owner and Engineer hereby agree to modify the above-referenced Agreement as set forth in this Amendment. All provisions of the Agreement not modified by this or previous Amendments remain in effect. The Effective Date of this Amendment is **March 13, 2012**.

OWNER: **Village of Essex Junction**

ENGINEER: **Aldrich + Elliott, PC**

By: **David Crawford**

By: **Brad Aldrich, P.E.**

Title: **Village Manager**

Title: **President**

Date Signed: _____

Date Signed: _____