

MINUTES
Plainwell City Council
Special meeting
September 1, 2011
3:00PM

Meeting was called to order at 3:03pm by Mayor Brooks

Present: Mayor Brooks, Councilman Burnham and Councilwoman Steele. Absent: Councilman Overhuel and Councilman Keeler.

Also Present: City Manager Wilson and Engineer Bob Wilcox.

B. Wilcox started the meeting by stating that this is the special meeting set by Council to consider a resolution to authorize the S2 Grant agreement and City Manager Erik Wilson as the City representative.

The applications were made available at 8am this morning and it is necessary to approve this resolution to submit the application in a timely manner so we will be in the front of the application line. B. Wilcox reviewed a memo from Fleis & Vandenbrink outlining the scope of the SRF Wastewater improvements project (See attached).

A motion by Steele, supported by Burnham to adopt resolution 11-24 authorizing the S2 Grant agreement. On a voice vote, all in favor. Motion carried.

B. Wilcox stated that minor edit changes were made to the engineering memo as per DEQ requirements. The scope or fees were not changed.

A motion by Steele, seconded by Brooks to adjourn the meeting at 3:16pm

Memo



FLEIS & VANDENBRINK
ENGINEERING, INC.

Offices in Michigan and Indiana
2960 Lucerne Drive S.E., Grand Rapids, MI 49546
Office (616) 977-1000 Fax (616) 977-1005

To: Plainwell City Council
From: Bob Wilcox, Rich Grant
Date: August 19, 2011
Re: SRF Wastewater System Improvements Project – Recommended Scope Validation, Design Development, and Design Phase Engineering Services

The purpose of this memo is to outline the recommended scope of the scope validation/design development and design phase services as necessary to include in an agreement between the City and Fleis & VandenBrink Engineering, Inc. (F&V) to qualify for an S2 grant for 90% of these costs. MDEQ has described the upcoming S2 competition as a “footrace” for the \$40 million of available funding. Rapid action, in advance of the September 1, 2011, S2 documents publication date, will be key to success.

An approvable S2 application will include appropriate documentation of S2 eligible activities that have occurred *after* the S2 December 14, 2010 milestone date and a signed Engineering Agreement for upcoming design development and design assignments. This memo presents the recommended scope of engineering services for consideration by the City in advance of the September 1, 2011, S2 grant competition.

We have prepared the following scope of work and budgets for engineering services necessary to complete the design for the Wastewater System Improvements outlined in the public meetings, public hearing, and State Revolving Fund (SRF) Project Plan adopted by the City on July 11, 2011.

The scope of the Wastewater System Improvements Project currently includes the following:

- Cured-in-place pipe (CIPP) rehabilitation of the main influent trunk sewer on Fairlane Street and the existing sewer crossing the Kalamazoo River.
- Construct a new river crossing adjacent to the existing crossing (near Cushman Lift Station).
- Install a new influent screen near the existing grit channel.
- Install a biofilter odor control system to collect and treat odorous gases from the influent sewer and primary processes.
- Install a new moving bed biofilm reactor (MBBR) secondary treatment process including construction of new concrete tanks, installation of process equipment, process piping and valves, and new controls.
- Repair and rehabilitate the existing primary clarifier concrete.
- Replace the existing generator at the WRP.
- Implement modifications at the existing Primary Building to allow for acceptance of high strength waste for treatment and handling at the existing biosolids process to generate additional biogas.
- Improvements to the existing chemical feed system to add a new ferric chloride feed location and new polymer feed system.
- Replace existing laboratory cabinets at the WRP Building.

SRF Project and S2 Grant – Assignments Completed, S2 Eligible

Assignments completed after December 14, 2010, are S2 grant eligible with proper documentation (invoices). These assignments include:

- 1) SRF Project Plan 2011 Supplement, public meeting, and public hearing activities.
- 2) Scope Validation/Design Development and Preliminary Design for new project components.
- 3) Completion of design for Wastewater System Improvements.

F&V will assemble these invoices and include them in the September S2 application.

SRF Project and S2 Grant – Next Steps

In order for the upcoming engineering work to be eligible for 90 percent S2 grant, the City must have a complete SRF Project Plan (done), a signed Engineering Agreement, and an S2 application at the very front of the anticipated long line of applicants.

The S2 Grant application will become available on September 1, 2011. Grant funds will be allocated by the State of Michigan on a first come, first served basis.

Following is a summary of the next steps for the SRF project:

1. Scope Validation/Design Development for additional project components.
2. Preliminary Design.
3. Complete Detailed Design Engineering; prepare Bidding Documents and obtain permits.
4. Prepare SRF User Charge System.
5. Prepare SRF Application Parts I and II.
6. Bidding of the Construction Contracts.
7. Prepare SRF Application Part III.
8. Construction of Improvements; Construction Phase Engineering.
9. Systems Startup, Operations & Maintenance Manuals.

We understand that the City will be pursuing S2 grant funding for eligible planning and design phase services. Construction Phase Services are not S2 eligible, and are thus not included in this memo.

Applicants requesting S2 grant funding must have an executed Engineering Agreement detailing the proposed scope of work and budget. Therefore, we are recommending that the City proceed with authorization of remaining Design Development, Preliminary Design, and Detailed Design Phase services (Items 1-5 above) as soon as possible.

Proposed Engineering Scope of Work

Scope Validation/Design Development

The WRP improvements presented in the 2011 SRF Project Plan Supplement (selected Alternative 5) were identified based on a number of assumptions that should be confirmed prior to detailed design.

The planning work for the Scope Validation/Design Development includes the following:

- Confirm the design basis, sizing, and design approach for the acceptance of high organic strength waste to increase biogas production of the anaerobic digesters and generate additional energy.
- Evaluate the composition and strength of waste streams from local food processors.
- Evaluate loading rates and biogas production rates of various high strength waste streams.
- Prepare budgetary capital costs for improvements to allow for acceptance of high strength waste.

- Evaluate the payback period for various waste loading rates

Preliminary Design

The preliminary design phase is important for advancing concepts developed during the planning and scope validation phases. Specifically, preliminary design for this Project will focus on advancing the high strength waste acceptance design.

The scope of work for the preliminary design includes the following:

- Confirm design parameters (flows, concentrations, loadings, gas production).
- Further refine the design basis for the high strength waste acceptance work and budget costs.
- Evaluate alternatives and costs for concrete repairs in the primary clarifiers.
- Develop preliminary layouts for new project components.
- Design kickoff meeting with City staff and MDEQ.

Detailed Design Engineering Services

Detailed Design Engineering includes finalizing the design and details, submittal of permit applications, and assembly of the bidding documents (plans and specifications).

The scope of work for the design phase includes the following:

- Prepare an updated Design Basis Report with supporting design calculations for review.
- Coordinate and host design meetings with the City and MDEQ.
- Prepare final plans and specifications including the new features, excluding the intermediate clarifier systems.
- Prepare Part 41 Construction Permit application.

Revenue System Development

The scope of work for Revenue System Development includes the following:

- Preparation of the SRF User Charge System; assistance in assembling the legal documents.
- Engineering assistance related to the preparation of SRF Application Parts I and II.

Proposed Engineering Budgets

The following summarizes the proposed budgets corresponding to the scope of work described above. The total budgets are as presented in the table below, as well as the anticipated 10 percent City match to the S2 grant amount.

Description	Total Budget	Portion that is City 10% Match
2011 SRF Project Plan Supplement	\$5,900	\$590
Scope Validation/Design Development	\$13,900	\$1,390
Preliminary Engineering	\$18,900	\$1,890
Final Design Phase Engineering	\$97,700	\$9,770
Revenue System Development	\$8,500	\$850
TOTAL BUDGET:	\$144,900	\$14,490

Anticipated Schedule

Upon receipt of S2 Grant funding, Preliminary and Final Design Phase engineering can proceed as presented below, regardless of the timing of the design.

The following is a draft schedule based on a SRF FY2013 Q2 schedule:

Milestone	Date
2011 SRF Supplement	Complete
Preliminary Design	January-February 2012
Final Design	March-May 2012
Part 41 Permit	August-September 2012
SRF Part I Application	November 2012
Final Contract Documents	November-December 2012
SRF Part II Application	December 2012
Advertise for Bidding	January 2013
Open Bids for Construction	February 2013
SRF Part III Application	February 2013
Begin Construction	April/May 2013

Attached is a draft Professional Service Agreement for your consideration. An agreement will need to be executed prior to submittal of the S2 grant application.

We look forward to working with the City to submit the S2 application very soon.