



TOWN COUNCIL WORK SESSION

Monday, July 6, 2015 @ 7:00pm
Front Royal Administration Building

1. Interviews for Engineering Services for Criser Road Bridge

Summary: The Department of Environmental Services (DES) completed reviews of the proposals submitted for the Criser Road Bridge Engineering Design Services. Each submittal was scored following certain criteria and the top two highest firms were recommended for Council to interview: AMT and Mattern and Craig. Council is requested to discuss the proposals with each attending firms' representatives and to ask any additional question regarding this project.

Staff Evaluation: DES sent out a RFP for Engineering Services of the Criser Road Bridge and had a total of four firms submit proposals. DES composed a panel to review the submittals and score on the following criteria: Responsiveness, Responsibility, Financial Responsibility, Experience, Capability and Skill, Qualifications, Methodology, Workload and the firm's location. Reference checks were completed on the highest scoring top two firms that were short-listed.

Budget/Funding: Funding to be determined by the Town Manager and Finance Director. Revenue Sharing with VDOT was approved by Town Council in October 2014 and through VDOT approval in June 2015.

- A. AMT Consulting Engineers (A. Morton Thomas & Associates, Inc.)
- B. Mattern & Craig Engineers/Surveyors

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MEMORANDUM

FROM: Jimmy Hannigan, Director of Environmental Services

DATE: June 10, 2015

RE: Criser Road Bridge RFP Engineering Firm Selection

The Department of Environmental Services (DES) composed a panel to complete reviews of the proposals submitted for the Criser Road Bridge Engineering Design Services. The panel consisted of the DES Director, Jimmy Hannigan; DES Manager, Terry Lewis; Streets Supervisor, Steve Scheulen; and Senior Administrative Assistant, Monica Dodson. The panel reviewed each submittal and scored the firms according to the following criteria: Responsiveness (15 pts), Responsibility (15 pts), Financial Responsibility (10 pts), Experience (15 pts), Capability and Skill (10 pts), Qualifications (10 pts), Methodology (5 pts), Workload (10 pts), and Location (5 pts). Each firm could score up to a total of 95 points. There were a total of four engineering firms that submitted proposals.

The following table depicts the engineering firm's name, points scored, and average score to rank from the highest (most desirable choice) to the lowest.

Firm Name Total Points Scored (listed)

AMT – average 88

95

90

84

84

Mattern & Craig – average 84

85

86

83

84

Volkert – average 75

66

67

82

84

Rinker Design – average 66

53

58

76

78

1. AMT Consulting Engineers (A. Morton Thomas and Associates, Inc)
2. Mattern & Craig Engineers/Surveyors
3. Volkert, Inc.
4. Rinker Design Associates, P.C.

Reference checks were completed for both firms short listed. References were asked the following questions:

- Were they satisfied with the quality and timeliness of the work?
- Was the engineering firm knowledgeable about the funding program and the requirements pursued?
- Was the engineering firm willing and able to work closely with staff and the community?
- Were the costs and charges reasonable in relation to the work actually performed?
- Did the engineering firm have other projects scheduled that caused time delays?
- Did the engineering firm assist with funding sources? Were applications successful?
- Did the engineering firm have the ability to address all permit requirements and work with all necessary Local, State, and Federal agencies?

Mattern & Craig received higher reviews than AMT from the references checks. As the two highest ranking firms are AMT and Mattern & Craig, the panel recommends it would be in the Town's best interest for the Town Council to interview these two candidates for the Criser Road Bridge Project.

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Council Discussion:

AMT Consulting Engineers

Representatives of AMT, Michael Wiercinski and Laura Mehiel presented the project overview which included two versions of bridge width. One included 12' lanes and 3' pedestrian/bike lanes. In response to Mr. Tewalt's question, noted the FEMA flood history and what the RFP requirements were in order to help keep rainstorm water underneath the bridge during flood events. Ms. Mehiel stated that they would balance raising the bridge with velocity and scour and cost of the Town's budget. She noted that they do this by reviewing 6" increments in order to take note of all aspects of the project. Mr. Tewalt stated that debris management was a large issue at the Criser Road bridge and he would like that taken into consideration with this decision.

Mr. Burke noted that Council should not fixate on the specifics of the bridge at this time, but rather the skills and expertise of the two firms presenting their qualifications for design was the intent of this meeting. Mr. Babaei, of AMT, noted three options which Council may consider: Precast 2-sided Culvert; Precast Box Culvert; and Cast-in-Place Slab Bridge on Pile Foundation. He also explained the advantages and disadvantages of each, with the precast options obviously quicker to install.

Ms. Mehiel stated that the City of Falls Church was just one community who has used a Bridge Selection Matrix in order to determine their choices and the best choice for their municipality. She explained that the decision parameters were clearly set, with the alternates noted, and the priority and quality of each option clearly defined. She also stated that the time constraints with disturbing the stream as required by State agencies.

Mattern & Craig

Chad Thomas, noted their bridge rehabilitation experience and staff credentials. He noted project issues which may arise, such as water resources (vertical alignment/span length), utilities, construction time, approach roadway/sidewalk/trail, property acquisition, construction inspection and bridge design. Mr. Thomas, noted that design criteria included that the bridge must be designed so that the 10-year storm will not overtop the road; and the design must be that the 100-year storm will overtop the road by no more than six (6) inches at the centerline. He noted that they can achieve this by setting the bridge opening, low/high cord elevation(s) and profile along Criser Road.

Mr. Thomas noted that they would obtain environmental permits on the Town's behalf and assist the Town with the Joint Permit Applications to the VA Marine Resource Commission, Department of Environmental Quality, and the US Army Corps of Engineers.

Mr. Cardwell, P.E., stated that economical bridge design is always a concern of theirs, and they also take note of construction time (during the summer to avoid delays with the school/buses), lengthen and raise the bridge, the foundation and bridge railing. He added that they were considering a pre-stressed (pre-cast) structure with quick construction and built within 1-2 days, and paved and railings placed in a short period of time.

2. Electric System Coordination and Ten-year System Study - Southeastern Consulting

Summary: A system study is required to plan for future growth and growth that has occurred since the last system study in 2007. The study will evaluate system coordination, guidelines for overcurrent protection, system expansion plans along with cost estimates for the proposed expansion facilities over the study period.

Staff Evaluation: Staff requested a cost proposal of services from our engineering firm on contract, which is Southeastern Engineering. Staff reviewed proposal and negotiated a price of \$45,000 to perform the coordination and system study.

Budget/Funding: The project was approved in the FY14-15 year and funds have been encumbered.

Staff Recommendations: Staff recommends the approval of the contract with Southeastern Engineering to perform the system study. The study will allow the Town to plan for future growth in the Happy Creek Area along with the development of the AVTEX site. This study will also be used as a critical component in the cost of service study to determine our utility rates in the future.

Council Discussion:

Southeastern Consulting Engineers representative, Mr. A.J. Molner stated that many of the poles have been in place for 50-60 years, while others surrounding said poles had been replaced over time. He explained that this was just one basic item the system study would help to address. He noted that maintaining safe and adequate electric service was important and the system study would assist with such a matter. He stated that maps would be updated for the Town's distribution, as well as gathering station loading and growth trend information from SCADA records power bills and REC data. Mr. Molner explained that that data would assist with reviewing trends and decide on growth. He stated that they would get updated protective device settings from REC and inspect the substation infrastructure to identify equipment that will reach end of its life cycle. He added that they would input information into the computer model of the entire system.

Mr. Molner stated that the system model is expanded for known spot load growth. He explained items which the study would clarify and record:

Technical Information

- ⦿ Voltage Drop
- ⦿ Available Fault Current
- ⦿ Overloaded Lines or Equipment

Operational Information

- ⦿ Substation Outage Contingency Plans
- ⦿ Identify Beneficial Switching Points
- ⦿ Proper Protection Device Operation
- ⦿ Capital Planning Information
- ⦿ Identify capacity availability for new development.
- ⦿ Scalable budget plan can be adjusted if projected load materializes faster or slower than expected.

- ⦿ Decade worth of expected projects identified to better plan for very expensive purchases (ex. Power Transformers)
- ⦿ Large expenditures planned versus made when equipment already damaged and replaced under emergency conditions.

Council Discussion:

Mr. Waltz stated that their last study was in 2007 and they needed to get ahead of any systems issues and projections before the Avtex build out and other Town projects began. Council decided to move forward.

3. Electric Vehicle (EV) DC Fast Charger – *Director of Energy Services*

Summary: Staff had been evaluating EV chargers for possible use in the Gazebo area when we became aware of a program offered through Virginia Clean Cities (VCC) to offer localities an EV charger at no cost. In partnership with ChargeUp, VCC is pursuing host sites in Virginia for the installation of EV chargers to address transportation needs for the exponential growth in electric vehicles. They have recently installed chargers in Staunton, New Kent County and Williamsburg totaling 21 systems deployed since the program started.

Staff Evaluation: Staff requested additional information from VCC and the following are details of the program:

1. The EV charging equipment is provided to the host site at no cost (value of \$40,000)
2. The locality is responsible for all installation costs
3. The locality is responsible for the third party payment vendor (license fee of \$2,500 & subscription fee of \$600 for four (4) years)

Staff Recommendations: There is a growing demand for fast and convenient charging infrastructure near retail and cultural destinations for electric vehicles. The VCC charger deployment program will allow the Town of Front Royal to offer this service to our citizens and visitors while visiting the Downtown area with minimal cost to the Town. Staff recommends pursuing this opportunity.

Council Discussion:

Mr. Waltz noted that individuals would need to go to Strasburg (and stay at the hotel) or Winchester to get their vehicle charged at the closest station. He stated that the location would allow two vehicles to charge at the vehicles, with installation of \$1,000 in costs. He noted that the project was a great opportunity for the Town.

Councilman Tewalt stated that he would like the Town Attorney to review the matter in full. He asked if the Town had to maintain the project for five years; Mr. Waltz noted that was correct. Mr. Tewalt asked about the usage fees; Mr. Waltz noted that the Town received the fees, except the 5% transaction fees (credit card use). Councilman Tewalt asked about the one year warranty. Mayor Darr noted that replacing it did not seem too costly as it was basically a transformer. Mr. Waltz noted that he was unsure of the answer to the replacement or repair costs should it breakdown after the first year. He stated that so far he was aware that those installed were holding up fairly well.

Council asked for more information, including whether it was vehicle-type specific, how other localities and installations are working, what type of return others are receiving, and return to Council.

4. AMP Solar Phase II Project – *Director of Energy Services*

Summary: American Municipal Power (AMP) has opened the subscription to the new Solar Phase II project to its members. The project will have an AMP ownership arrangement and will be a “take-or pay” power sales contract. It is proposed that all solar array installations will reside behind the members’ meter. Construction of the first site will start in a couple of months with additional installations as subscribed through the subscription process thereafter. AMP has compiled a list of an additional 19 sites to be built as subscription warrant construction.

Staff Evaluation: Staff has completed the evaluation of the feasibility study and other supporting documentation for the solar project. AMP has selected 20 sites to install solar arrays including the Town of Front Royal. Our community will host a 2.44 MW solar array on 15 acres located at the end of Manassas Extended on the Donaldson farm property. This facility will be a behind the meter generation project, which will allow additional transmission savings on the PJM network.

Staff Recommendations: Staff recommends participation in the project to further strengthen and diversify our power supply portfolio. The project will provide a cost-effective, safe, environmentally friendly, asset based alternative to the wholesale market.

PROJECT OVERVIEW

- 20 sites selected for potential solar development
- All sites to be rolled into one project
 - Maximize savings in energy and capacity rate
 - Diversifies risks and provides redundancy
- Partnered with Power Secure Solar (PSS)
 - EPC contractor
 - Use local markets for contract labor
- AMP will own and operate

BENEFITS

- Peaking capacity and transmission savings
- Diversifies power supply
- Long term cost stability
- Reduces reliance on wholesale market

RISKS

- Value of SREC
- Construction
- 25% Step up provision

RECOMMENDATIONS

- Leidos Plan (April 2014)

- 2,500 kW
- Leidos Plan (October 2014)
- 4,460 kW
- Staff recommendation (July 2015)
- 3,000 kW

NEXT STEP

- Approve Power Sales Contract
 - Public Hearing on July 13 & 27
- Negotiate lease agreement on land
 - Vegetation control also negotiated
 - Complete by September
- Engineering and design
 - Scheduled to start in September
- COD is August 2016

Council Discussion:

To answer Council questions, Mr. Waltz noted that AMP encourages the Town to build behind the meter. Mr. Burke asked about having 5-10 days of no or little generation; Mr. Waltz stated that the Town would have the generation to handle matters. He noted that AMP held Front Royal as one of the less desirable sites and they were on a time constraint. Mr. Waltz stated that he has advertised for the public hearings and the next step would be the lease agreement on the land. He noted that negotiations should go well. He explained that he has reviewed the floodway issues with AMP. He added that it would be a 30 year solar contract. Mr. Waltz noted that they had 4.6 MW in hydro and 6 MW in coal.

5. Renovations for Offices and Warehouse for Energy Services Facility– Dir. of Energy Services

Summary: Staff has been working over the past three years to consolidate and improve the Energy Services facilities. To control and reduce cost, Town staff has been completing the site work internally along with project management. A major component in the process is the renovation of the existing building into offices and warehouse. The work includes the interior renovation of an existing pre-engineered metal building of approximately 8000 square feet located at 1100 Manassas Extended into 60% offices and 40% warehouse space. The project includes wood framing, gypsum board walls and ceilings, interior doors, hollow metal frames, new windows, plumbing, mechanical and electrical work.

Staff Evaluation: Staff along with our architectural firm, Baughan & Baukhages prepared and issued an RFP for the renovations of the existing building. The Town of Front Royal received eight (8) proposals from firms qualified to complete the work. Staff reviewed all proposals in accordance with the drawings, documents and specifications prepared by Baughan & Baukhages as part of the bid package.

Budget/Funding: Funding for the project was encumbered in the FY 13-14 and FY 14-15 year.

Staff Recommendations: Staff recommends approval of contract with Lantz Construction of Winchester to complete the renovations of the Energy Services existing building located at 1100 Manassas Extended to accommodate offices and warehouse space for the cost of \$ 348,000.

NEW ENERGY SERVICES FACILITY

- Funding for project began in FY 13-14
 - Funds available \$ 752,765
 - ✦ FY13-14 \$100,000
 - ✦ FY14-15 \$350,000
 - ✦ FY15-16 \$302,765
- Estimated Construction Cost
 - Total project cost \$800,000
 - ✦ Site Work \$160,000
 - ✦ Office and Warehouse renovations \$300,000
 - ✦ New Garage building \$235,000
 - ✦ Fencing \$40,000
 - ✦ Professional Services \$40,000
 - ✦ Misc. & Contingencies \$25,000

DETAILS

- Baughan & Baukhages designed the facilities
- RFP was issued for renovations in June
 - 6 responses from qualified firms
- Lowest bidder – Lantz of Winchester
- Contract price higher than estimated
 - Design and construction of load bearing walls for future second floor space

RECOMMENDATION

- Approval of contract with Lantz Construction of Winchester
 - Main Scope \$ 345,000.00
 - Option 1 \$ 3,000.00 (installation of data cables)
 - Contract Amount \$ 348,000.00

Council Discussion:

Councilman Tewalt asked about the second floor framing and accessibility. Mr. Waltz noted that it would be available by stairs and it would not be insulated, until such time as Town Staff occupied that portion of the building. Mayor Darr stated that they allocated office and renovations of \$300,000, and this proposal was \$348,000 – and this Staff presentation was basically an update, not a request for funding – as funding of over \$752,000 was available for the entire project. Mr. Waltz confirmed that Mayor Darr's summary was accurate. Council chose to move forward with placing it on the regular agenda.

6. Main Street Canopy Lighting Project – Department of Energy Services

Summary: The Town of Front Royal last year installed several strands of canopy lights along Main Street as a pilot project with the help of Downtown businesses. To evaluate and complete the canopy lighting along Main Street, staff issued a proposal

document for the design of exterior light connections on commercial buildings to determine overall cost of the project.

Staff Evaluation: Staff received only one (1) response to the RFP, which was from Engineering Techniques who completed the previous design work. Staff then met with Dan Hotek of Engineering Techniques and negotiated a cost proposal for the engineering of the project. The estimated cost for the design work is approximately \$4,500.00 but not to exceed \$6,000.00.

Budget/Funding: The following is a cost estimate for the completion of the project:

1. Engineering - \$6,000.00 (not to exceed)
2. Permits - \$100.00
3. Material (lights and etc.) – \$1,700.00
- Total Estimated Project Cost - \$ 7,800.00

Staff Recommendations: Staff recommends the approval of the contract with Engineering Techniques not to exceed \$6,000.00 to provide engineering services for the design of canopy lighting along Main Street.

Council Discussion:

In response to Council's questions, it was noted that there were possibly twelve more attachments. Mr. Waltz noted that they were LED bulbs. Mr. Tewalt asked for colored light perhaps, or better bulbs that were more aesthetically pleasing. Mayor Darr stated that he was in favor of how the lights were currently.

7. Comcast Channel 15 Elimination – *Vice Mayor Tharpe*

Item removed by Councilman Tharpe.

8. Council Discussion/Goals

Mr. Napier explained to Mr. Tewalt that Comcast is paying the new rates and the two parties continue to discuss matters, though it was a slow process.

Present: Mayor Darr, Vice Mayor Tharpe, Councilman Connolly, Councilman Egger, Councilman Funk, Councilman Tewalt, Finance Director Breeden, Town Attorney Napier, Clerk of Council Berry, Chief of Police Shiflett, Energy Service Director Waltz, members of the media and members of the public.

Absent: Councilman Hrbek