

-PRELIMINARY!!-

**Northwest Florida Chapter of the Florida
Engineering Society**

**Review of Escambia County's
Engineer Selection Process
March 2009**

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SUMMARY

This outline report is the Northwest Florida Chapter of the Florida Engineering Society (NWFES) response to Escambia County's invitation for feedback concerning the engineer selection process. NWFES recognizes that the existing selection process appears to comply with relevant laws and is similar to the practices of other local agencies.

This report contains a good number of recommendations. However, they are simply suggestions for improvement to a process that was clearly planned and implemented with the goals of objectivity and fairness. The County's invitation for feedback from the engineering community is a way to look for improvements, and is appreciated. One of the functions of a professional

society is to contribute on these occasions, and the NWFES is glad to be a part of the process.

The following recommendations are described in more detail in the report section. Most of the recommendations address: more flexibility in making selections, and a continuous improvement process to maintain quality and objectivity.

1. Award engineering contracts on studies under \$25,000 for projects with an estimated construction cost under \$250,000 to firms on the County's pre-qualified list using a simplified process, at the discretion of the County. Award Continuing Service Contracts to a small number of firms as allowed by the CCNA.
2. Bundle projects to be awarded at one time to several consultants, using the same selection committee.
3. Reserve interviews for special projects and make most engineering firm evaluations and selections based on County and LOI information.
4. Establish objective measures of actual performance.
5. Periodically have a team of volunteer Professional Engineers review and comment on the selection process.
6. With a County definition of what is considered local, include a variable "Portion of this Project to be done Locally".
7. If or when the County reviews the favoring of socially desirable groups, do this by setting goals for the entire program and altering the weight of the criteria to meet those goals.
8. Review the scoring for each of the variables and rewrite to have "behavior anchored" scoring where applicable, thereby minimizing individual judgments.
9. Choose more selection committee members with expertise in the discipline being evaluated.

REPORT

Note that the report committee consulted with several PhD authorities in the selection business and an attorney in preparing the background information for this outline report. The legal background seemed to be the framework for many of the recommendations, so it is shown first.

Recommendations were finalized by the NWFES Board after considering the issues and comments generated in the engineering community, and documented here. The remaining background information is included at the end and addresses the field of Selection Science, stands from state and national professional societies, and practices of various agencies.

BACKGROUND INFORMATION: LEGAL

- In general all Florida public entities are required by law to follow the guidelines as described in FS 287.055 “Consultants’ Competitive Negotiation Act” (CCNA). The existing Escambia County selection process complies with this law.
- In general, when a project falls within the CCNA, compliance requires advertisement, qualification of firms, evaluation of qualified firms, and competitive selection involving at least three firms.
- There are areas of the CCNA that allow for some flexibility in the selection. For example:
 - The CCNA does not apply to design projects with an estimated construction cost under \$250,000 or studies with an estimated fee under \$25,000. The local government is free to develop its own process within these limits.
 - The CCNA allows for the selection of firms under a "continuing contract". However, the continuing contract must be competitively selected pursuant to CCNA procedures. Firms selected under a continuing contract can provide professional services on projects without further advertisement or competition.
 - There is no requirement in CCNA for oral presentations. They are allowed but not required.
 - CCNA suggests various possible criteria for selecting firms. Some of these variables seem directly related to identifying the most capable companies (ability of professional personnel; past performance; willingness to meet time and budget requirements; current and projected workloads). Some variables seem to be more oriented toward perceived fairness (whether a firm is a certified minority business enterprise; location; recent workloads; volume of work previously awarded by the agency to a firm).

ISSUES WITH RECOMMENDATIONS

1. Should the County exercise its right to select smaller-fee projects without using the formal process? Under the current system, the proposal and presentation cost can be as high as \$8,000, exceeding the potential profit on a small job. And then, what would be a good limitation for awarding smaller-fee projects: the full capability allowed in CCNA?
 - a. Recommend: **Award engineering contracts on studies under \$25,000 for projects with an estimated construction cost under \$250,000 to firms on the County's pre-qualified list using a simplified process, at the discretion of the County.** These projects are outside of the CCNA and do not require competitive selection. This gives the County the flexibility to complement the existing hiring process, while also saving time and money.
 - b. Recommend: **Award Continuing Service Contracts to a small number of firms as allowed by the CCNA.** Set aside a percentage of the overall work program that could be awarded pursuant to the Continuing Services Contracts without the need for further advertisement or selection. Implement controls such as a term limit, and a limitation on the total contract value that can be used with each firm. These controls could be enough to still encourage plenty of open competition on other projects.
2. The same consultants seem to be awarded multiple jobs without enough regard for overloading a few consultants and not having an equitable distribution of work. Is this because there are so many different selection committee members that they may not be fully aware of who the work is being awarded to? How about awarding several projects at once, to "naturally" spread the work around?
 - a. Recommend: **Bundle projects to be awarded at one time to several consultants, using the same selection committee.** A separate short list could be generated for each project. Or one short list for several similar projects. (On the other hand, projects could be bundled and awarded to one consultant.)
3. Given the time and expense of interviews, should the County use interviews for all selections, or only for specialized projects?
 - a. Recommend: **Reserve interviews for special projects and make most engineering firm evaluations and selections based on County and LOI information.** This will reduce the burden on both the County and the consultants.

4. How about measuring a firm's performance after the project is awarded? Would this help make it easier to see if the selection variables are picking good firms? Would it be better to not even try to measure performance, rather than have an inaccurate measure that could hurt a company's reputation?
 - a. Recommend: **Establish objective measures of actual performance.** FDOT has several measures of performance that can be considered. One measure is change orders as a percentage of total construction cost.
5. What about having a small group of Professional Engineers periodically review the selection process, specifically the selection variables? Which variables are for finding the most capable firms and which ones address social requirements? Do the "capability" variables actually help to identify the most capable firms? Are those variables weighted to best predict the most capable firms? Is the Project Manager the right person to be choosing the selection criteria, or variables?
 - a. Recommend: **Periodically have a team of volunteer Professional Engineers review and comment on the selection process.**
 - b. This periodic review is a way to keep the community involved in the continuous improvement process for engineer selections. Note that the general perception is that the "capability" variable categories seem reasonable; however they must be kept up to date, especially when considering future information from measures of actual performance.
 - c. The team members should be Professional Engineers from both private and public areas. A convenient interval would be just before Continuing Service Contracts are advertised.
 - d. Note that this periodic review process will hopefully evolve. The team of PE's would focus on capability variables and scoring. The County would set social goals and adjust the scoring for social variables to help achieve those goals.
6. Should the County place more weight on hiring local firms? What is the definition of local? Would the hiring of local firms mean that more work will be available for our local economy? How about firms that attract outside work for our local workers; should they get bonus points? How about companies with local offices who send work to the home office? Would the selection criteria, "knowledge of local conditions", be enough to weight projects to local companies? Should

the variable “Current Workload” take into consideration the number of local employees?

- a. Recommend: **With a County definition of what is considered local, include a variable “Portion of this Project to be done Locally”.**
 - b. The engineering community has discouraged our being the ones to suggest a definition of local, since it implies a social requirement that should only be defined by the County.
 - c. However, knowledge of local conditions is considered a “capability” variable that could impact quality through knowledge of local: circumstances, agency personnel, site accessibility, and paths of communication.
 - d. “Portion of This Project to be Done Locally” could require a listing of employees projected to work on this project including whether each one is local.
 - e. Note that “Current Workload” could be revised on the form to more clearly show current open contracts with the County including contract amount and amount paid to date; and take into consideration the number of fulltime local employees.
7. How about socially desirable selection practices that favor a DBE, WBE, small business, new business, or use of subs who have these credentials?
- a. Recommend: **When the County reviews the favoring of socially desirable groups, do this by setting goals for the entire program and altering the weight of the criteria to meet those goals.** Avoid making blanket requirements that would apply to all jobs.
 - b. Similar to the case of the definition of local, the County should be the one to set goals for any socially desirable requirements.
 - c. Apparently there is a small pool of choices within any one of these groups in our area. Therefore, it might be a good idea to favor all of these groups, instead of just one at a time. Program goal results could be followed and adjusted over time.
8. Is the scoring method set up to be as consistent as possible, so that it does not matter who does the scoring?
- a. Recommend: **Review the scoring for each of the variables and rewrite to have “behavior anchored” scoring where applicable, thereby minimizing individual judgements.** In other words, define behaviors that justify each point on the scoring scale.

- b. Although this type of scoring is more structured, the individual scorer could still have the flexibility to adjust the score up or down, given knowledge of extenuating circumstances. This would result in a "behavior anchored" score plus a scorer's adjustment to get the final for that item.
9. Should some of the selection committee members have PE's? How about having some members of the committee outside of the County employees? How about using existing County personnel who have more knowledge about the kind of work being advertised? Should the selection committee have less variability in it's membership from one job to the next, to improve the consistency in selecting firms? If the pool of the selection committee becomes limited, shouldn't there be a term limit to avoid potential problems? If the selection committee has a discussion before making the selection, doesn't that bias the selection in favor of the more dominant members of the committee?
 - a. Recommend: **Choose more selection committee members with expertise in the discipline being evaluated.**

OTHER COMMENTS FROM THE ENGINEERING COMMUNITY

On March 12 the NWFES had a general meeting that included members and non-members. Here are resulting comments concerning the possible recommendations:

Award small engineering contracts any way the County wants. Award some Continuing Service Contracts.

- There were many complaints regarding the time and money spent on presentations for firms short-listed on projects.
- There was concern that if Continuing Service Contracts were awarded, they could grow to a point that they might minimize a benefit of the existing system: open competition.
- A person commented that the existing practice for small projects is fair, and that the County already has the capability to award small projects in a different way, if they choose to.
- One person basically disagreed: Everyone should be required to compete, no handouts, even if they are only competing against other small firms...I don't have a problem with continuing service contracts but keep in mind this will minimize the number of small engineering contracts...

Bundle projects to be awarded at one time to several consultants, using the same selection committee.

- One comment was: Good idea and will save the county time and money by minimizing staff time.

Reserve interviews for special projects, and make most engineering firm selections based on County and LOI information.

- There was discussion about how expensive the interview process is: a minimum of \$2000 for each consultant doing a presentation, and for the County the time and payroll costs add up. For straightforward projects, the interview process does not seem necessary.
- One person disagreed: I do not see anything wrong with interviews or presentations with questions and answers to select engineering firms... doesn't it make sense to have firms distinguish or demonstrate their ability to communicate as part of the selection process?... important especially in selecting firms that have not done work for the county or when a new project manager is introduced...

Establish objective measures of actual performance.

- The comment was made about using previous projects and design experience. Change orders are an instrument used to measure performance and it was suggested that the county could model their process so that it is similar to FDOT's process.
- Another comment: ...(OK) but I would make sure there is a method to discuss the performance evaluation with the evaluator.

Include a variable, "Portion of this project to be done locally". Define local as the Pensacola metropolitan area.

- As an overall consensus, FES probably should stay out of saying who is considered local and who is not. For example, a person commented: I do not believe FES should be in the business of defining geographical areas in which the engineering community can or can't do work in; Politicians can do this but FES shouldn't.
- One suggestion was that the county perform periodic office visits to local engineering firms to determine if the firm really has a local presence.

Periodically have a team of volunteer Professional Engineers review and comment on the selection process, with emphasis on the variables.

- The general perception was the variables themselves are probably good, but the scoring of those variables needs review. It was explained that the recommendation for periodic review is to insure ongoing assessment of the process by the engineering community. One comment: Continuous improvement is always a good thing.

Consider expanding the membership of the selection committee pool to include volunteer Professional Engineers who are not County employees.

- It was agreed that there is a problem with the technical knowledge of some members of the selection committee for some specific projects. However, this proposed solution to the problem was not well received by the members. One comment: Bad idea!
- An idea that did seem to be acceptable was that the county selection group should be more project dependant. For example, a drainage project should have selection members with drainage design/construction experience and from the building inspections department.
- One response was that the County simply does not have the personnel to have a large enough pool of technically experienced committee members, and still have enough variation in who serves. (The County is apparently avoiding having the same selection committee serve for any length of time, in order to avoid potential problems.)

(There were other comments that were not directed specifically to the possible recommendations listed:)

- Scoring was brought up and a number of the members present at the meeting want the county to reevaluate their scoring method.
- There were a couple of comments suggesting that the County should become active in establishing a more structured Disadvantaged Business Enterprise program. One person commented: Growing local DBE firms in this economy may not be a popular idea but given the demographics of Escambia County it would be the right thing to do.
- The consensus from those present at the meeting was that the selection should be based on the nature of the job versus the construction cost (as it already is, and as directed by law).

From Feb 26 meeting of area consulting firm representatives:

- The County's Continuing Services list contains far too many firms to be effective. It primarily seems to be used as a "pre-qualification" tool
- There should be an equitable distribution of work among qualified firms
- The selection criteria on which consultants are evaluated could be improved- ideas include
 - Providing criteria for innovative ideas or cost-saving measures (such as existing design or survey data)
 - Further definition of the term "local"

- Further define equitable distribution of work – should include not just the \$ amount but also the number of staff in office
- Stress the importance of location of all staff members on project team – not just the project manager
- The selection committee members from the County should include staff with sufficient experience and expertise on the type of project evaluated
- There have been numerous technical problems with the County’s new electronic submittal process.
- The software that is suggested to be purchased to aid in the County’s electronic submittal process is cost prohibitive to many small firms
- Too many small projects are being advertised individually - This creates a lot of cost for the consultant community for a potentially low fee, small project
- Escambia County staff spending too much time on the selection committee’s due to sheer number of presentations and evaluations
- Escambia County is not utilizing procedures outlined in the CCNA. Projects of less than \$250k do not have to be advertised and projects with a construction value of less than \$1million can be given to firms selected on a continuing services contract.
- The County could consider advertising projects in groups, short-listing several firms for presentations, and then selecting on several projects at one time. This could shorten the selection process significantly and lessen the burden on County staff and consultants.

BACKGROUND INFORMATION: SELECTION SCIENCE

Note that there is a field of study that has methods for making selections and making sure they are scientifically valid. The field deals mostly with employee selection and the authorities are generally Industrial Psychologists.

- There need to be objective measures of performance, once a firm is selected.
- The County has a quantitative point-based consultant scoring system for making selection decisions. This leads to the following questions:
 - Do the individual variables being scored actually help to identify the most capable firms? And, are those variables “weighted” to best predict the most capable firms? Answers to these questions should be periodically reviewed and updated by a team of experts.
 - Is the scoring method set up to be as consistent as possible, so that it does not matter who does the scoring?

- Is there a periodic review to compare the selection formulas to the actual performance of the firms?
- For clarity, it is probably important to separate the selection process into two parts:
 - one part to identify the most capable engineering firms,
 - a second part to identify the best firm for a specific project by taking into consideration desirable social considerations such as whether: local personnel are doing the work, the work is being fairly spread around, the firm is able to also attract significant work from outside the area, etc.
- With a team of experts periodically reviewing selection criteria, and objective measures of performance, the County can improve the “Content Validity” of the engineer selection process.

BACKGROUND INFORMATION: PROFESSIONAL SOCIETY STANDS

- The American Society of Civil Engineers (ASCE) promotes a Qualification Based Selection (QBS) process, in which a firm is chosen based solely on qualifications before a fee is negotiated. (Florida’s CCNA laws comply with QBS.)
- The State Florida Engineering Society (FES) completely supports CCNA law.

BACKGROUND INFORMATION: AGENCY PRACTICES

- Escambia County advertises every engineering project. Interested firms submit a Letter of Interest and several standard forms. The Project Manager chooses the selection criteria. A committee of up to five County employees consisting of two employees from the Department issuing the project and three at large employees, narrow the list of submitters to a minimum of three up to as many as five firms using a grading system of several variables. This short list is determined only by scoring. The membership of the committee changes for each project, and draws from a pool of County employees instructed on how to contribute. The top ranked firms following the submissions make presentations. The committee discusses and then votes to decide the winning firm.
- The City of Pensacola in general selects several firms to provide continuing professional services for a set period of time (three years typically). The firms selected are assigned projects within the CCNA guidelines. Firms are grouped by their size, i.e. two large firms and two small firms. Work is distributed based on complexity and construction cost as appropriate. Typically the City rotates firms through this

continuing contract which allows for the “equitable distribution of contracts” as defined by CCNA.

- ECUA does basically the same thing however; their equitable distribution is handled within by the Project Managers. They distribute work to the firms on their “list” fairly evenly. Their continuing contracts are valid for five years.
- The Escambia County School Board also selects firms for continuing contracts, on a two year cycle. They tend to keep firms on their list for as long as the firm continues to provide a high level of service, however, resubmission is required as the term expires.

NWFES BOARD MEMBERS AND COMMITTEE MEMBERS

This quorum of NWFES Board members reviewed and endorsed this report. They are:

- David Reaves, President
- Amy DiRusso, Treasurer
- Pat Overton, Secretary

The following committee members did research, gathered opinions from the engineering community, and composed a draft report for the Board:

- Mike Dooley, Chair
- John Wimberly
- Dale Long
- Brent Rawson