

With the impact that an architectural and engineering (A/E) professional service provider can have on the physical assets of an institution, it is important to secure the most qualified consultant, and receive the best services for the optimal fees. In order to achieve a win-win scenario, representatives for the institution must negotiate with the external A/E professional service provider to arrive at an acceptable professional agreement and an equitable fee for both sides to produce a value-added product.

As stewards of the university's physical assets, we can gain significant gains in trying to reduce overall costs for capital projects. This needs to be accomplished while at the same time not compromising the integrity of the project. When the institution has need of Architectural and Engineering Services not available internally, these services are sought from outside professionals. The existing practices for acquiring these services are being questioned in these tumultuous times, where changes are fast outpacing expectations and customers are expecting more frugal financial practices, while at the same time, maintaining a stringent budget. The call for investigation with the intent to improve implies the need for change to the existing processes as well as exercising fair play.

Often reported are projects taking too long and cost estimates not matching the budget. To exacerbate the situations, the perceptions of those who manage the finances feel consultants are paid too much for the services rendered. On the supply side, consultants feel they do not make enough to cover the demanding client, excessive time involved in project definition, and continuous scope creep without compensation or remuneration. Unexpected circumstances, lack of understanding of expectations, along with failure to communicate what is wanted, needed, and required relative to available resources and project development, are some of the additional difficulties encountered.

Thus, there is an interest to investigate and propose an action plan for gaining assurance that optimal agreements for A/E services are negotiated, and the processes are consistent

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Negotiating Win-Win A/E Professional Services Agreements

by Christopher K. Ahoy and Donald Chrusciel

and value-added. The intent of this multi-phase study is to arrive at an equitable solution (fee determination) for both the university and the A/E professional service provider, and establish a guideline for those directly involved in negotiating these fees.

This study identifies the first step in this quest as establishing a common understanding amongst the participants. The first stage of our research was to investigate and discover any methodology used by other institutions, if one exists. From the findings, our research confirmed the importance of the common understanding among the participants as a means to derive an equitable solution. The results of this endeavor produced three products:

1. Basic services criteria for A/E Services to ascertain scope of work and expectations

The A/E professional service provider has an impact on the physical assets of an institution, so it is just as important to secure the most qualified consultant in order to receive the best services for the optimal fees.

2. Checklist for determining what services are being envisaged, included or omitted by the owner or owner's representative
3. Fee calculation guideline reference chart for Project Managers to negotiate an appropriate fee structure for the project envisaged so that scope, budget and expectations are aligned

Research Questions and Methodology

The negotiations for architectural/engineering services, if not a win-win situation, could result in paying too much for the services or obtaining less than the desired service and product results. The importance of win-win negotiations, and ultimately the outcome of the finished product, is expressed in James Biehle's (2000) quotation below:

If you spend a little more on designing and building schools now, the students will thank you twice: once when they enter their exciting, well-designed new school, and once again 20 years from now, when they're the taxpayers who won't have to pay out more to repair the building.¹

Lawrence (2002) characterizes the best approach for negotiating a win-win agreement is to search for common ground.² Achieving success, especially for future and long-term relationships, can only happen when all parties feel satisfied.

Given the valuable role that each Facilities Planning and Management (FP&M) staff member at Iowa State University plays in being a good steward of the universities' resources, the strategic investment of effort towards quality, cost, and time are paramount. The A/E professional service provider has an impact on the physical assets of an institution, so it is just as important to secure the most qualified consultant in order to receive the best services for the optimal fees. The focus of the first phase of this research project was to answer three questions in phase I followed by further investigation as to "Identify a Model for Evaluating Architectural and Engineering Services (A/E) costs."

1. What, if anything, can the institution do to better negotiate an optimal agreement to satisfy the interests of the parties involved?
2. What process improvements can the institution put in place that encourages value-added work and removes waste, in order to receive products and services of high quality, least cost, and fast delivery?
3. Will this be useful to other institutions facing the same issues?

To explore topics and obtain answers to the questions, the investigative team used qualitative research methods, in combination with continuous quality improvement (CQI), and LeanSigma tools, along with the six sigma methodology for solving existing problems with DMAIC (define, measure, analyze, improve, and control) methodology.

A formal semi-structured interview process allowed the researchers to set up specific meeting times with representatives from each of the eight identified A/E firms. Individuals from the firms were asked the same questions in a similar setting. This methodology provided assurance that the overall presentation package was comparable.



Using a semi-structured interview method, the A/E firm representatives were asked to do an in-depth review of a prearranged chart of services required by FP&M, and to identify the specific services that the consultants felt fell under basic services, and those, which were seen as an extra services cost. The formulated basic services chart was based on the AIA (2001) prescribed services. After the interviews, eight additional questions were asked of each consultant representative. This was also to help probe into how one might be able to improve upon the working relationship between client and consultant, and perhaps to anticipate and point to those areas where to reduce the costs for A/E services now impacted by process issues.

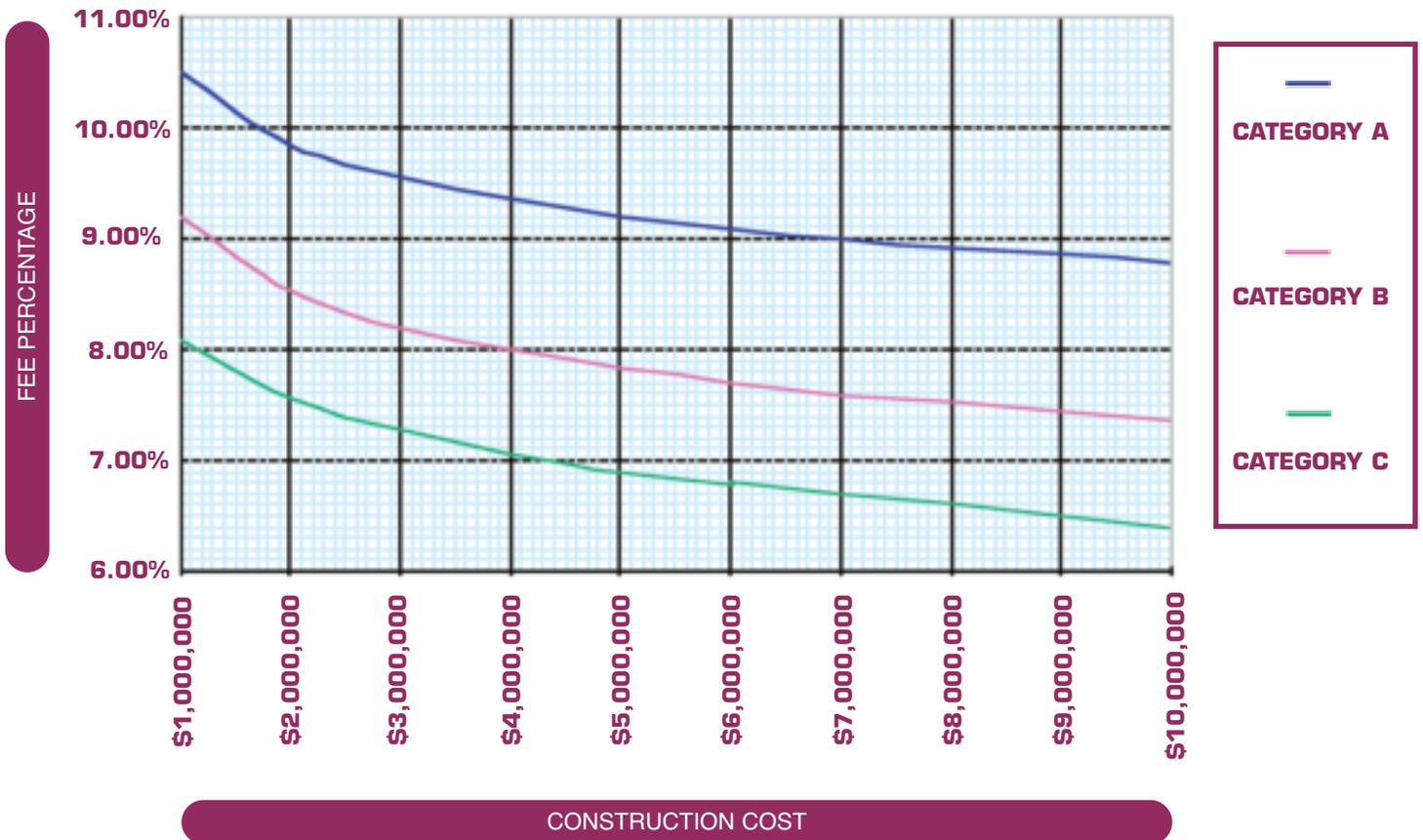
The responses from the A/E basic services review were combined for further evaluation(s). The responses for the other eight questions from the respondents were tabulated and put into a matrix for supporting evaluation purposes. It is that information gleaned from this research exercise that allowed the research team to delve deeper into investigation of the first of the three questions on how to improve this process by looking at:

1. What do we have currently in practice?
2. What is out there and being used for best practice?
3. What is needed to improve the existing paradigm?

Approach and Findings

Prior to collecting and analyzing any data, we recognized that the best course of action was not only to collect data as it was happening, but investigate what other organizations may be using in the way of fee charts, how they are using them, and upon what basis they were developed. It was also interesting investigating the potential of any new and/or better methods already in use elsewhere by other organizations.

Ahoy Chart A/E Services Fee (\$1M - \$10M) 1980



For clarification purposes, two categories of service activities were identified, basic and additional. Basic services are those activities the A/E firm is expected to provide under the normal “basic” contract. “Additional” services are identified as those activities above and beyond the normal “basic” services contract.

With this understanding as a starting point, two questions surfaced that influenced the project. First, does ISU consider basic services equivalent to what the A/E firms view as basic services? Secondly, if another organization has done research in this area, is their definition(s) equivalent to those of ISU? The answers to these questions do not influence the outcome of the project, but only the process of discovery. We realized that once the answer to the first question was determined, both parties could start at a common point to conduct contract negotiations. Given clear expectations for basic services and a common starting point, both time and effort from the client and vendor can focus on whatever falls outside the basic/normal A/E professional services contract.

What is Out There?

The initial searches to uncover what other organizations in higher education do in regards to establishing negotiating guidelines for A/E services uncovered the same problem as above. The question arises as to whether the charts, calcula-

tors, etc., used by others, deal only with basic services, and if so, what are those basic services? The list of available entities providing some type of chart, matrix, feedback, etc., is numerous, but by no means exhaustive.

It included six state governments, which also covered their institutions of higher education, and an additional seven doctoral research extensive institutions. To complement this inquiry, an additional survey with another 12, predominately land-grant mission, research institutions were included. The institutions ranged in size from 15,000 students (FTE) to 30,000 students (FTE), and were drawn from a variety of locations within the continental U.S.

The common theme and purpose for the A/E fee calculation methods used by these organizations was to set up guidelines to provide the initial starting point for “basic service” fee negotiations. Because these methods are viewed as guidelines and the initial starting point for negotiation, it was not possible to determine whether the fee calculation method (chart, schedule, calculator, etc.) was actually used. This was substantiated further with the explanation that the dynamics of each specific capital project required individualized tweaking of the starting fee in order to arrive at a final number.

Another influencing factor was the demographics of the organization due to its geographic location and vendor mar-

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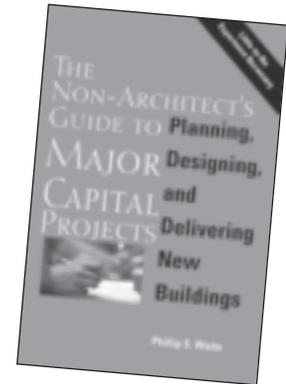
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kets. Thus, projects could not be compared, and basic A/E activities per project were not a common set. There was also concern that the intent of any published chart might serve as a means to stifle the creativity component of the most qualified A/E professional service provider selected for the project.

It is on this basis that the research team felt the need to continue their quest as there was now a need to identify basic services.

What is Needed? Developing an A/E Professional Services Guide

Based on the findings from the initial research (interviews) with the representatives from the multiple A/E firms, it became clear there was not a common understanding between the two parties. Iowa State University Facilities Planning and Management's knowledge management group compiled a cumulative list of A/E services based on the AIA "Range of Architectural Services." This listing was the basis for the review document used during the interview process with the A/E professional.

From that point, the entire FP&M project management group was asked to discuss in an open session the accumulated findings for the purpose of clarification, enhancement, accuracy, etc. Using a simplified color-coding, three categories of services were identified: basic services, additional services, and those in-between. Those services falling into the "in-between" grouping seemed to be the major point of contention when conducting negotiations for an A/E services contract.

Given the primary interest is to identify possible ways not only to improve the negotiations process, but also to reduce the overall costs, we realized that the first and very important step was to make sure there was a common understanding between the two parties involved in the negotiations. We decided that a tool would be useful in the form of an A/E services "Guide" to help project managers in fee negotiations. This evolved into a multi-page checklist by which the ISU FP&M University Architect can review the intended services with the A/E professional at the start of any A/E professional services negotiation to establish a common understanding between the two parties.

Following determination of services, a compensation fee chart for consultants based upon diversity of services would assist in helping frame an approximate guideline for how the fee was based upon the complexity of each project in category A, B, or C level of difficulty. This document, already available to ISU project managers, has been designated as the "Ahoy Chart" and is an appendix to services performed.

The resulting final document A/E Professional Services Guide comprises:

- Appendix A for fee calculation (Ahoy Chart, reprinted in this article)
- Attachment B for Basic A/E Services
- Attachment C for Checklist

The findings from the research with the A/E firms allow ISU FP&M to look more critically at how the operation conducts business. More specifically, what can the organization as the representative of ISU do differently to encourage better business practices, while at the same time, maximize the gain on our partnerships?

Summary and Conclusions

With the initial interest to discover opportunities for effective negotiations between Iowa State University FP&M and its A/E professional service providers, the research team employed the six Sigma methodology for solving existing problem, the **DMAIC** (define, measure, analyze, improve and control) methodology supported with qualitative research. From the onset, we discovered that in order to establish an optimal partnership with an A/E professional services provider, a common understanding of the expected services is imperative.

With this concept as a guiding principle, a basic service "Guide" check sheet and fee-calculating chart helps the ISU FP&M University Architect initiate negotiations with the service provider and establish a common starting point. This common ground not only sets the foundation upon which to establish an agreement, but also encourages the A/E professional service provider to collaborate further exploration to enhance negotiations for future partnerships. This is the first step towards establishing equitable agreements.

Culminating from the research effort was an understanding that the overall solution is much more complex, evasive, and difficult to define in just one research effort. To address this complexity, we decided to break up the entire quest into multiple phases, identifying key discoveries along the way. Work is ongoing as it matures and develops with changing times. The ideal A/E Professional Services Guide will continue to develop with improvements in both the definition of basic services, extra services, and other services, as well as a checklist for determining the scope of services required, and finally a methodology for estimating how fees can be calculated.

We hope the findings presented here will help in serving as a stepping-stone to future iterations of improved guidelines and as a stimulation of interest with intent to rally others to assist in this ongoing research effort, realizing the outcome can have significant impact on an institution's capital project program. 🏛️

References

1. Biehle, J. (2000, August). Invest now or pay later, *American School & University*, 72, Retrieved May 10, 2003 from American School & University Web site: http://asumag.com/mag/university_invest_pay_later/index.html
2. Lawrence, C. (2002). Integrating writing and negotiation skills, *Business Communication Quarterly*, 65(2), pp. 54-66.