

Professional Services for School Capital Projects

Guidelines for School Districts

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Introduction

The construction of an educational facility is a major milestone for a school administrator and the local school board. A new school or significant renovation project, perhaps more than any other act of school officials, affects the delivery of the educational program for twenty or thirty years into the future. Policies may change; buildings remain. A well-planned, well-constructed educational facility can serve as a lasting legacy to the wisdom and care of the administration and community which planned it. Unfortunately, the converse is also true.

The purpose of these guidelines is to assist users in successfully completing school capital projects by focusing on starting those projects well—by understanding the decisions needed at the planning stage, and how the various entities which contribute to those decisions can collaborate .The guidelines highlight some of the more important administrative and legal aspects of capital projects as they relate to the various professional services that may be necessary for successful project execution. To some who may have great experience and familiarity with administration of capital projects, the guide's contents may seem obvious. Others may have had little experience in this field and will find the concepts new. In either event, if the guide assists school officials in thinking through the capital project process from the earliest stages to the completion of the project, the aim will have been accomplished.

In the selection of, and contracting for, pre-design, design, and project management services, it's worth noting that sections of Alaska statute and administrative code contain stipulations that are monitored by the department on projects with state aid and with which recipients of that state aid must comply. Primarily, these stipulations are aimed at preserving the open and competitive selection of entities providing these services. Two primary references apply: AS 14.11.020 (Assumption of responsibilities) and 4 AAC 31.065 (Selection of designers and construction managers).

Professional services are often needed at every phase in the life-cycle of capital projects: planning, design, construction, operation and maintenance, and capital renewal or replacement. The format of this publication generally follows this project life-cycle and provides information and guidance on professional services and their procurement related to each phase. With respect to project delivery, the guide is rooted in the traditional project delivery method known as Design-Bid-Build. This method, which is the baseline, default method described in department regulations, establishes contracts for professional design services independent of those for construction services. It also keeps the design and construction phases of a project separate and sequential. The department has defined, and can approve, other project delivery methods. For more information, see the department's publication *Project Delivery Method Handbook*.

Getting Started

The adage, "A thing well begun is a thing half done," is an apt philosophy for school capital projects. This section outlines three elements for consideration by school districts on how to get started on school capital projects and how professional services might come to bear in each of them.

Capital Planning

School capital projects emerge from the process of managing school facilities, and their supporting infrastructure, as capital assets. As a rule of thumb, the first five years after taking ownership of a new or renewed school facility are focused on operating the facility and assimilating it into the organization's daily mission-in our case, education. Warranty issues, planned maintenance, and minor repairs occur during this period along with the tasks associated with operating the facility. The need for professional services is usually very limited during this period. On occasion, building system specialists or construction trades are needed to trouble shoot operational issues or to provide training on system operation and maintenance. Following this initial operations phase, the need for repair of facility components with short lifespans start to arise. Often, user requests and mission-oriented needs begin to surface. These are signs the facility, or its infrastructure, has entered the capital asset management phase. Responding to the range of needs during this phase can require a diverse set of skills. Each school district should consider establishing a capital planning group or committee to review planning data and asset information for facilities in this phase. This information and data may include: space utilization, student population projections, and facility renewal needs (e.g., repairs, upgrades, improvements, and replacements). The primary responsibility of the committee would be the development of a multi-year capital improvement program. For additional background on developing, implementing, and sustaining a capital planning program, see the department's publication, Alaska School Facilities Preventive Maintenance and Facility Management Handbook. If staffing and capabilities exist, the district could produce this data internally. If not, the initial need for professional services is created. Professional services in the planning phase could include educational adequacy assessments, demographic analysis, and facility condition surveys. See **Pre-Design** for additional details regarding these services.

In order to be eligible for state-aid for a school capital project, a district must produce a six-year capital improvement plan (AS 14.11.011). Projects in the first year of that plan, for which state-aid is sought, must be described in detail on a capital improvement project (CIP) application (4 AAC 31.021). The department provides sufficient tools, training, and guidelines regarding the preparation of a CIP application such that an application could be adequately completed using district resources. In practice, very few districts complete their own CIP applications. Instead, most districts seek the professional services of educational facility planners, architects, and engineers, to assist them in this vital area of capital planning.

Project Management

The transition from capital asset management to project delivery—from planning to execution is most often triggered by funding. This funding could come from a variety of sources. Often, with many of these sources, the offer of funding comes with a set of stipulations and constraints. In addition, the process of developing and delivering a capital project, by necessity, involves a range of specialized expertise to achieve the goals of functionality, constructability, environmental and life safety, and operational efficiency—just to name a few. Projects can be complex. The professional service of project management has arisen to coordinate the efforts and entities needed to achieve the capital project's goals. The scope and complexity of the project will determine the need for project management services.

Called "construction management" in the applicable Alaska statutes and regulations, these project management services may be provided by qualified school district personnel or they may need to be solicited and retained by districts under professional services contracts. For school administrators or districts with limited capital project experience, hiring a construction manager is likely to be a vital component in both getting started on a school capital project and in successfully completing that project. The Construction Management Association of America publishes a document entitled *An Owners Guide to Construction and Program Management*, which is available on the CMAA website (cmaanet.org).

A construction manager (CM) can serve as responsible party for implementation of the project from hiring of consultants to coordination of all team members. A CM can be hired either as an employee of the district, or retained under a consultant contract; however, there are statutory limitations on the amount spent for CM by consultant under AS 14.11.020(c):

(c) The construction management costs of a project assumed under this section may not exceed four percent of the amount of appropriations for the facility if the amount of appropriations is \$500,000 or less. The construction management costs of a project assumed under this section may not exceed three percent of the amount of appropriations for the facility if the amount of appropriations is over \$500,000 but less than \$5,000,000. The construction management costs of a project assumed under this section may not exceed two percent of the amount of appropriations for the facility if the amount of appropriations is \$5,000,000 or more. For purposes of this subsection "construction management" means management of the project's schedule, quality, and budget during any phase of the planning, design, and construction of the facility by a private contractor engaged by the municipality or regional educational attendance area.

Highly qualified CMs are capable of assisting with project management process from cradle to grave. Following is a sampling of the types of services a district might seek from a CM professional:

- Project delivery analysis
- Site selection analysis
- Land and property issues
- Recommend project delivery method
- RFPs in support of project delivery methods
- Educational specifications
- Budget analysis and project controls

- Project status meetings
- Permitting coordination
- Design document reviews
- Owner general requirements for bids
- Provide owner representation during construction
- Perform inspections and quality control
- Maintain project records
- Assist in substantial completion
- Project closeout & documentation
- Manage warranties
- Assist with O&M setup

Since project management services through a CM, or related entity, are often a school district's first need after securing funding, and because even that step often requires knowledge and experience not found in every district, the department has developed a request for proposals (RFP) for CM services. This template can be viewed in Appendix D and is available for download as a separate file from the department's web site. The template contains boilerplate and editable elements that cover the: 1) solicitation, receipt, and scoring of proposals, 2) development of anticipated services, and 3) contract administration elements (e.g., insurance, terms of agreement, etc.).

The Project Team

The purpose of treating the topic of the project team under the **Getting Started** section of the guide is to highlight one final area of professional services to which a district might turn in order to effectively start a capital project. That service professional is an architect. There are many documents that discuss the process of completing a school capital project. Often, these documents refer to a project team. Some publications go further and identify the team members and their role in the process. Throughout this guide, sections of some of these documents are quoted or referenced as appropriate.

One such document, *You and Your Architect*, a publication of the American Institute of Architects (AIA), is pertinent to establishing a starting point for a school district embarking on a school facility project. It states, "the best way to begin a new project is for you - the owner - to reflect on what you bring to it." The document is available on the AIA website (aia.org).

Following is an excerpt from this document under a section entitled, "Getting Started":

Whether you have extensive experience with design and construction or are coming to both for the first time, it can be helpful to ask yourself a few questions before interviewing prospective architects. You do not need firm or complete answers at this point. Rather, these questions will help to ensure that your initial communications will be clear and productive and enable you to select the design professional best suited to your needs.

- How will your project be used?
- Do you have specific ideas on how to translate these activities into spaces and square footage?
- Do you have a site? Or will this also be a subject of discussion with the architect?
- Have you decided upon a schedule and budget?
- What are your overall aspirations for the project—aesthetic and emotional as well as practical?

- Who will be making the critical decisions you alone, your family, or a committee of some sort?
- Where will the resources come from to create and operate your project?
- Are you willing to pay a little extra up front on systems that will save energy or bring other operations savings and pay back over time?
- Do you have previous experience with design and construction? If so, in what ways were you successful, and was the experience in any way disappointing?

A good architect will listen closely to your answers, help you solidify your goals and desires, and translate them into an effective building. Look for a good listener, and you'll find a good architect.

More detailed information and guidance regarding establishing a project team is provided later in this guideline under a major section heading by this same name.

Pre-Design

Prior to engaging a design team, the district is well served in properly developing the project by identifying facility conditions, the goals of the project, and the needs of the district. There are services that can assist districts in this pre-design phase of the project. While these services can be included in the design contract, it may be better for the district to perform these prior to selecting a design team. Clear and well-defined goals and conditions will assist both the district and the design team to develop scope of the project and reduce unknowns. The preceding section described how a project management consultant can often help with pre-design services.

These initial consultant services can assist new facilities with site surveys and geological surveys or existing facility renovations with condition surveys. For both new educational space or reconfiguration of existing educational space, an educational specification is not only required by statute but is extremely important to a successful project.

Educational Specifications

A program for design, or Educational Specifications, as it is referred to in Department of Education & Early Development (DEED) regulations, should spell out the district's complete educational requirements. The department has published a guide for developing educational specifications, which is available on the internet at:

education.alaska.gov/facilities/publications/EdSpec.pdf

By regulation, 4 AAC 31.010, DEED requires that "the chief school administrator, under the direction of the local school board, be responsible for preparation of educational specifications for all new public elementary and secondary schools, as well as additions and rehabilitations of existing facilities" for which state aid is sought. The specifications must include, at a minimum, the following elements:

- 1. The current year and five-year projected elementary and secondary enrollment to be served.
- 2. A statement of educational philosophy and goals.
- 3. The activities that will be conducted.
- 4. The curriculum that will be housed.
- 5. The anticipated community uses.
- 6. The specific and general architectural characteristics required.
- 7. The educational spaces needed, their approximate size in square feet, their recommended equipment requirements, and their spatial relationships to other facility elements.
- 8. The size, use, and condition of existing school spaces in the facility (additions and rehabilitations only).
- 9. The recommended site and utility requirements.
- 10. The proposed budget and method of financing.
- 11. The technology goals of the curriculum and their facility requirements.

The completed educational specifications become the district's blueprint for the design of the school facility.

In many cases, much of the pre-design work for a facility may be accomplished by the district before the selection of the design team. Prior to, or in conjunction with seeking funds, most districts will establish the need for additional or reconfigured space based on enrollment projections, changes in the educational program, review of existing space, and an analysis of alternative facilities or space usage. At a minimum, districts should have a fairly detailed idea of the educational space requirements of the new or remodeled facilities which, in turn, provide estimates of square footage size and potential costs. While it is sometimes advisable to involve an architect in preliminary feasibility studies, particularly in the analysis of existing facilities and the determination of square footage, the essential pre-design work revolves around educational rather than architectural considerations.

Should a district desire other outside assistance at this point of the project, the services of an educational facilities planner or architect familiar with school planning might be beneficial. These professionals can conduct an assessment of need for new or reconfigured space, perform educational feasibility studies, and provide preliminary interpretation of curricular needs into educational specifications.

The development of educational specifications is the key to a successful school construction or remodeling project. It is during this phase of project planning that everyone concerned with the new space -- teachers, administrators, students, board members, and the community at large -- has the opportunity to present ideas, thoughts and dreams concerning the facility. Well-developed educational specifications ensure that the completed facility will support the planned educational program of the district. The Educational Specifications can also provide the basis for a creative, original design which may make a significant contribution to the learning process. Districts that spend time in conceptualizing the program to be offered in the new space, establishing the relationships between the various educational activities which will be carried out therein, and giving attention to the smallest detail which can maximize the educational value of the envisioned spaces will reap considerable benefits in the design and construction phases of the project, as well as when the building is finally in use. An educational facility planning professional who is trained in conceptualizing and describing educational spaces can be of great help to the district and community in this activity.

Condition Surveys

For projects involving renovation of existing facilities, a condition survey helps to define conditions of the facility and its components. This can help to develop project scope and give a clearer definition of design needs during the selection of a design team. The department has a publication, *Guide for School Condition Surveys*, to assist districts in developing a condition survey. As stated in the guide's introduction, "It is anticipated that the condition survey will be accomplished by a team of professionals and/or tradespersons with the necessary expertise to assess the various areas. However, with the exception of the regulatory data section, most of the checklists could be utilized by experienced maintenance personnel which districts may have on

staff'. Condition surveys are required for major renovations and highly recommended for all other renovations and component replacement projects.

Additional Pre-Design Services

Other pre-design services that can assist districts when developing projects and add clarity when engaging in design services include:

- Surveying: For existing sites this could be re-establishing property lines and site improvements. For new sites this establishes property lines, elevations, and any right of ways or special conditions.
- Site Investigation / Geotechnical Survey: This service helps to establish design criteria for foundations, septic systems, wells, water infiltration, and subsurface water elevations that might influence design or construction. This information can help to decide site selection or suitable locations within a site prior to design. Site investigation is a distinct budget category in DEED-funded projects, so separately tracking the expense is helpful.
- Archeological Survey: As in the above, the archeological survey could assist in site selection and is required for new school sites.
- Project Delivery Method Analysis: It is sometimes important to consider various project delivery methods such as Design-Build or Construction Manager/General Contractor arrangements during pre-design. As an example, entering into a design contract for complete design and construction administration services could preclude the use of Design-Build at a later point in the project.

Once the project scope and conditions have been established, the selection process for engaging a design team can begin.

The Project Team

An initial project team should consist of individuals and groups with a stake in the outcome of the project, as well as those with the expertise to provide those stakeholders with the information necessary to make sound decisions. There are alternate compositions and names for project teams. However, all stakeholders should have a place on the team. Team members may include representatives from the district administration, the educational specifications committee, the proposed principal and faculty, the students, the parents, community members, and necessary educational and facilities professionals. In addition, a project coordinator is essential for good management and continuity. At the appropriate point, the design team should be added to the project team.

The school district project coordinator should be the lead or chairperson of the project team and the principal contact for the project team with authority for approvals of both design and construction matters. Generally, this position's responsibilities can be handled by an in-house representative with assistance from the design team during construction. However, many districts have found that a professional project manager (See the Construction Management discussion in the Introduction) can relieve the district of burdensome coordination activities, thus allowing district personnel to focus on educational delivery.

The project team has overall responsibility for coordination of all aspects of the project from initial needs determination to post-occupancy evaluation. Many of the duties may be assigned to individual project team members or subcommittees. In smaller districts, the team may delegate responsibilities to the project coordinator or the district superintendent, or the school board may assign responsibilities to that individual.

In addition to being the official administrative contact with the design team, the coordinator should be a liaison between other groups and committees providing information such as educational specifications, site information, and educational programming. Beyond the design phase, the project coordinator should serve as the owners representative for the construction contract.

Reference should be made to a document listed in Department Of Education & Early Development (DEED) regulations as a guideline entitled *Guide for Planning Educational Facilities*, CEFPI, 1991, specifically the section "The Planning Professionals." The design team is generally headed by a principal or associate of an architectural firm and consists of members of his firm and consultants. Quoting from the document mentioned above:

A district should be carefully review proposed services of such a project manager and the architect; traditional services of each can widely overlap. The architect's services are explained in the next chapter. The design team members, besides those who are directly involved in architectural design and coordination as associates of the architect, are normally consultants to the architect who serves as team leader. If a district feels they can best be served by certain named consultants, these should be identified in request for proposal documents as a district choice but not as a requirement. Architects may feel more comfortable with certain consultants based on their past experiences. As prime consultant the architect is responsible for the work of his consultants although they in turn are responsible to him. The architect's consultants, or they may be in-house staff, usually consist of structural, mechanical and electrical engineers. In addition, for some projects, consultants may include civil soils, survey, and utility engineers as well as those with specialties including cost estimating, acoustics, kitchen/food service, technology, school planning, and construction management or contract administration.

An architect A/E consultant is an important member of the project or planning team, from initial conceptualization of the project through substantial completion of the building itself. It is the architect who has the primary responsibility for translating educational program concepts and needs into educational facilities that are effective learning spaces. An architect must understand the desires of the client as well as the technical aspects of the project; therefore, in selecting an architect, intangible considerations, such as mutual respect, trust and compatibility of working styles, can be as important as technical competence. Dr. Basil Castaldi, a well-known authority on educational facilities planning, states it well:

In and of itself, however, the employment of an architect does not automatically assure a board of higher authority that he will design a school to satisfy their institutional needs. The architect should be creative, competent, flexible, understanding, perceptive of educational needs, open-minded, aesthetically oriented but cost-conscious, imaginative, practical, and cooperative in spirit. ³

Success in selecting an architect, whether an individual or a firm, who can bring the attributes listed above to a school construction project depends in large part on how thoroughly a district conducts pre-selection activities.

There are times when a district will be looking for the services of on engineering consultant, such as when considering structural, mechanical, electrical, foundation, or site work that may not require the participation of an Architect. In such cases, the district may consider the directions in the following sections of this guideline to apply equally to the selection of and engineering consultant. Therefore, terminology from this point forward will refer to the Architectural/Engineering or A/E consultant.

The Scope of Services

Districts that wish to obtain the most effective design services will spend time *before* the selection of the A/E consultant in determining the range of services it will need. Certain services are required from the design professional during each phase of the project. In addition, A/E consultants can provide a broad range of supplemental services. These basic and additional services are well described in various publications including a document previously mentioned entitled *You and Your Architect* published by the American Institute of Architects (AIA). Districts are encouraged to review descriptions of services available prior to A/E consultant selection to obtain at least a general idea of those services which may be requested.

The services that may be required of a design firm can be characterized as "basic," i.e., those which are performed normally by a design professional in order to move the project through construction, and "additional" or "supplementary", i.e., services which may be required or desired to enhance or respond to critical issues related to the project.

Basic Design Services

Basic design services are described as follows:

- 1. Schematic design services consist of the preparation of drawings and other documents that serve to illustrate the general scope, scale, and relationship of project components. The documents from this phase of work need to be reviewed and approved by the department before the district authorizes the consultant to proceed to the design development phase [4 AAC 31.030(b)(3)]. Work in this phase incorporates information gathered from the district in the form of Educational Specifications, public meetings, and stakeholder meetings. Typical services include: civil, structural, mechanical and electrical concepts; architectural, interior in landscape design concepts; estimate of probable construction costs based on the schematic design documents; and consultation and review.
- 2. Design development services consist of the preparation, from the approved schematic design documents, drawings and other documents that serve to fix and describe the size and character of the entire project as to structural, mechanical, and electrical systems, materials and such other essentials as are appropriate. The documents from this phase of work need to be reviewed and approved by the department before the district authorizes the consultant to proceed to the construction document phase [4 AAC 31.030(b)(4)]. Typical services include: civil, structural, mechanical and electrical design development; architectural, interior and landscape design development; estimate of probable construction costs; and regulatory agency review.
- 3. **Construction document services** consist of the preparation, from the approved design development documents, drawings and specifications that provide in detail, the requirements for construction of the entire project. The documents from this phase of work need to be reviewed and approved by the department before the district authorizes the consultant to proceed to the bidding phase [4 AAC 31.030(b)(5)]. Typical services include: complete civil, structural, mechanical and electrical construction documents; architectural

working documents; more detailed estimate of probable costs; and document review/coordination.

- 4. **Bid services** consist of the preparation, from the approved construction documents, bid documents for obtaining bids and awarding contracts for construction for approval by the district. Typical services include: preparation of bidding documents; bid procedure; bid evaluation; assistance, with owner's attorney, on construction contract agreements; and analysis of alternatives/substitutions.
- 5. **Construction services** consist of providing assistance to the district in its administration of the construction contract commencing with award and terminating following final acceptance of project and contracting agency's approval of the architect's final invoice for all services throughout the construction phase. Typical services include: limited construction observation; shop drawing review; review of contractor pay requests; change order review/approval; testing and inspection coordination; and project close out assistance.⁴

Supplemental Services

In addition to the above five basic services areas, there are four additional phases of a construction project during which the additional services of a design or other facility professional may be required:

- 1. **Pre-design**, where an architect may be involved with facility programming; space schematics; project budgeting; surveys of existing facilities; economic feasibility studies; and project scheduling.
- 2. **Site analysis**, in which architectural services are typically required for site analysis and selection; site development and utilization studies; environmental studies; zoning processing assistance; utility studies; and project budgeting.
- 3. **Post-construction**, at which time the architect provides maintenance and operational programming for the electrical and mechanical aspects of the facility; start-up assistance; record drawings; warranty review; and post-construction evaluation. ⁵
- 4. **Commissioning**, in which a qualified professional is retained to ensure the building is operating as designed at the point of turn over to the owner. These services can start in pre-design and continue into post-construction as indicated above.

Both Alaska's Department of Transportation and Public Facilities (DOT&PF) and AIA identify additional or supplemental services which may be requested of design firms. Such services will vary from project to project, and may include, but are not limited to the following:

- 1. perform preliminary energy audits;
- 2. attend meetings or conduct hearings to facilitate design review and obtain required approvals;
- 3. provide detailed estimates of construction costs;
- 4. prepare record prints (As-Built drawings) of significant changes made during the construction process;

- 5. serve as a member of an Art Advisory Committee to determine the type and site of public art works;
- 6. determine if a proposed site has historic, prehistoric or archeological value under applicable federal or state statutes;
- 7. select furnishings, fixtures and equipment;
- 8. design special furnishings;
- 9. perform life-cycle costs and cost-benefit analysis;
- 10. conduct special studies or design special computer applications;
- 11. prepare specialized or elaborate graphics or models for presentations;
- 12. provide daily or periodic on-site observations of construction activities.

Statement of Services

The "Standard Statement of Services for General Architectural and Engineering Design" of DOT&PF's *Professional Services Agreement* provides a more detailed description of both basic and additional services, as does the standard form of contract of the AIA.

The AIA publishes a *Compensation Management System* which provides a checklist of both basic and supplemental services. The checklist provides a convenient method for districts in determining the scope of architectural services desired. A copy of the AIA checklist from the above-referenced document is attached in the appendix. Contract documents may be obtained from:

American Institute of Architects 1735 New York Avenue N.W., Washington, D.C. 20006

or from

Alaska Chapter of American Institute of Architects 807 B Street, Anchorage, AK 99501 www.aia.org

As mentioned earlier, districts should have a fairly firm idea of the scope of services to be requested of the A/E consultant before a consultant is selected, particularly where additional services are required.

The Selection Process

The means used to select an A/E consultant should depend somewhat on the size and scope of the contemplated project. For small projects with design fees estimated at less than \$50,000 -- where costs of obtaining and screening proposals from several firms may exceed the benefits of having multiple proposals -- the district may choose an architect who has performed successfully for the district in the past, or set up a shorter version of the process described below.

For larger projects, however, it is generally to the district's advantage to use a process which will allow for comparison between several individuals or firms. The discussion which follows focuses on setting up and implementing a comparative selection process which has proven effective in selecting design services for larger school construction projects.

Department of Education & Early Development (DEED) regulations regarding selection are as follows:

4 AAC 31.065 SELECTION OF DESIGNERS AND CONSTRUCTION MANAGERS. (a) If a school district determines that it is necessary to engage the services of a private consultant to design or provide construction management for an educational facility with money provided under AS 14.11.011 - 14.11.020, or for a project approved for reimbursement of costs under AS 14.11.100, and the estimated cost of the contract is more than \$50,000, the selection of the consultant shall be accomplished by soliciting written proposals by advertising in a newspaper of general circulation at least 21 days before the proposals are due. The contract shall be awarded to the most qualified offeror, after evaluating the proposals submitted.

(b) Nothing in this section precludes a school district from retaining the services of a consultant on an as-needed basis under a multi-year contract, if the term of the contract is not more than five years.

(c) The school district shall provide a procedure for administrative review of complaints by aggrieved offerors which allows them to appeal, within 10 days after the notice of intent to award, requesting a hearing with notice to interested parties, for a redetermination and final award in accordance with law. (Eff. 12/2/83, Register 88; am 8/31/90, Register 115)

Authority: AS 14.11.017 AS 14.11.020 AS 14.11.132

As mentioned previously, selection of design professionals must be undertaken as a qualifications-based process rather than one that is fee-based. The A/E consultant will lead the design effort of the design or planning team and the team will need the most qualified individual or firm, rather than the least expensive.

The final selection of the A/E consultant or firm is the responsibility of the local school board. However, in most cases, the board will wish to delegate the responsibility for initial screening and review of potential candidates to school district administration, or to a committee such as the project or planning team. It is recommended that the initial screening be conducted by a minimum of three persons. The initial screening process should result in forwarding to the board a "short list" of between three and five candidates for final consideration. Education facilities planners can work with the district through the A/E consultant selection phase of the project, including negotiation of architect services fees and contracts. Some planning firms also offer project management services. During the pre-design period of the project, the district should explore all options for project management services and make its decisions about the use of consultants, prior to bringing on the A/E consultant. If project management is contracted to an outside organization, communication protocols and channels must be clearly identified to avoid confusion or misunderstandings during the life of the project.

The competitive bid process generally does not apply to the procurement of professional services such as that of an A/E consultant or firm. Districts are free to solicit and choose design services in many different fashions, although city/borough districts may be subject to local ordinances. All districts, though, must exercise prudence in the management of public funds.

Prior to seeking proposals from interested firms, the following procedures will need to be completed:

- 1. <u>Solicitation of potential applicants</u>, which includes the decision to solicit from a few known firms or to advertise widely; to solicit only from local firms or from a larger geographic area; etc.¹
- 2. <u>Preparation of project information</u> which will be used by prospective applicants to prepare their presentations. Including the program for design or educational specifications.
- 3. <u>Determination of information to be requested from responding firms</u>, at least in general form. In most cases, the screening criteria will dictate the areas to which firms will respond.
- 4. <u>Determination of screening criteria</u>, which will spell out in some detail the items to be used in the review of proposals; the weights which will be assigned to the various items; treatment of "joint ventures" or multiple-firm proposals; etc.

After initial screening of the responding firms, follow these steps:

1. <u>Further review of candidates</u> on the "short list" of firms or individuals who have been rated highest in the initial review. All of the firms on the "short list" should be technically capable of performing the required services. Because of the importance of intangibles, such as rapport, personality, ability to listen, etc., it is strongly recommended that individuals and firms on the "short list" be interviewed by the full school board or the board-designated selection committee. Interview schedules, a list of topics to be covered in the interviews, and a method of evaluating interviewees should be determined prior to inviting selected firms to participate and provided to the short list.

¹ 4 AAC 31.065(a) "If ... the estimated cost of the contract is more than \$50,000, selection of the consultant shall be accomplished by soliciting written proposals by advertising in a newspaper of general circulation at least 21 days before proposals are due."

2. <u>Research on responding individuals or firms</u>, which will require follow-up of references given by respondents; actual visits to completed facilities designed by the responding firms may be considered for the top firms identified in the initial screening.

Once the selection procedures have been established, the district will begin to solicit proposals. A knowledgeable consultant can be retained to perform this task, complete the initial screening with the committee, and submit a "short list" to the district. Whoever performs this task should have information on the following areas prepared to send out to all parties interested in presenting a proposal.

- 1. <u>Project summary</u>, or a brief description of the proposed facility, including intended use, location, square footage, and total funds available for both design and construction.
- 2. <u>Community description</u>, which contains information about the location, ethnic and economic background, climate and other pertinent characteristics of the community.
- 3. <u>Description of the educational philosophy and program</u> of the district, including any particular instructional methods, grade groupings or other characteristics which have design implications.
- 4. <u>Site description</u>, including any particular characteristics which will affect design options.
- 5. <u>Funding sources</u> and estimated budget amounts, including information about phasing or other constraints.
- 6. <u>Timeline</u> which indicates the anticipated dates of architect selection, design completion and substantial completion of construction.
- 7. <u>Scope of services initially proposed</u>, which includes any additional services beyond the basic services to be requested.
- 8. <u>Selection procedures</u>, which indicate the events and timeline for the selection process.
- 9. <u>Selection criteria</u>, which detail those areas of experience and capacity which will be weighed in the selection process.
- 10. <u>Description of proposal format</u>, which should speak to any unusual formatting requirements of the school district. In general, firms and individuals should be allowed to format responses in any manner which yields the requested information.
- 11. <u>Deadline for submission</u>, indicating to whom and where the proposals should be sent. The district should also indicate the number of copies required.

Screening the Applicants

1. <u>Review of written proposals</u> - Once proposals have been received, all proposals should receive an initial review utilizing the rating criteria and weighting system established earlier. A Suggested *Performance Rating Review*, developed by the South East Regional Resource Center, is included in Appendix A. Other checklists or methods which result in a uniform analysis of all submitted proposals can be developed by the district. On the basis of this initial screening, a "short list" of the three to five most qualified firms should be prepared.

- 2. <u>Interviews of "short list" firms or individuals</u> Experience has shown that a formal interview before the full board or the architect selection committee is the most useful method of evaluating the intangible characteristics which contribute greatly to a good district to A/E consultant working relationship. Interviews should be carefully planned to assist the board or selection committee make judgments on the human relations as well as the technical skills of the persons interviewed. A standard format and a general list of questions determined beforehand will help the interviewers to make the best opportunity of the time allowed and will assure that each firm or individual is asked to respond to the same types of inquiries.
- 3. <u>Reference checks</u> In addition to participating in an interview, firms and individuals on the "short list" should undergo a background check of references. Much can be learned-- and much grief avoided--if the district or its agent takes a little time to call other districts or organizations which have been clients of the firms under consideration. Results of this background check should be given to the board or selection committee along with the firms' written proposals.

In some cases, actual visits to other completed facilities which have been designed by the firm(s) under consideration can be helpful. Generally, the facilities of only the top two contenders would be viewed, given the time and travel funds involved. However, if such visits are conducted, information about the effectiveness of the facility should be obtained from the users (teachers, students, maintenance personnel, etc.,) as well as from the administration or the board.

Selection of Preferred Firm or Individual

Upon completion of the screening activities, the district should list the firms in the order of preference and begin to negotiate a fee with the first choice. If negotiations are not successful, the district can then proceed to negotiate with the next listed firm. If the district cannot decide between two or more firms, the district may request an additional interview or additional written information. However, the district and school board should avoid asking the firms to provide design sketches, models, or other services as part of the selection process.

Utilizing Multi-Year Term Contracts

One method of selecting an A/E consultant is through a multi-year term contract². This allows the school district to advertise and go through the selection process once and contract with a consultant, or more than one consultant, for up to five years. This can be used for a consultant team for major projects, a specialty consultant, like a mechanical engineer, for specific types of projects. Term contracts can also be used for construction management services. This process can be advantages where a district forecasts many projects in the future and wishes to have consultants ready to proceed with a project without having many separate selection proceedings.

² 4 AAC 31.065(b) "Nothing in this section precludes a school district from retaining the services of a consultant on an as-needed basis under a multi-year contract, if the term of the contract is not more than five years."

School districts should keep records of their multi-term selection process in order to show that the selection meets state regulations for advertising, appeal and other requirements.

An example of how this process works for one school district:

- 1. A school district anticipates a large number of projects over the next three years and wishes to have consultants available in order to reduce time due to multiple selection procedures. The projects anticipated range from large school projects, mechanical projects and some lighting projects.
- 2. The school district advertises for proposals and qualifications for Architectural teams, as well as, mechanical and electrical engineers. The advertisement sets a term contract for three years and annual limits of a million dollars for Architectural and a half a million dollars for mechanical and electrical consultant contracts.
- 3. After a 21 day advertisement period, proposals and qualifications are received and evaluated. The top three ranked A/E consultants in each category are chosen to be offered term contracts, subject to a 10 day appeal period.
- 4. Upon initiation of the first project, the consultant on the top of the appropriate list and the school district review scope and negotiate a fee. A project task order is initiated and the project proceeds.
- 5. Subsequent projects cycles through the list in order until the end of the term contract or the annual limit is met.

This is but one example of how the multi-year term contract process works.

Although cost considerations are not a part of the design team selection process in the same manner as in a competitive bid situation, the school board may wish to consider fee schedules in coming to a final determination. However, in most cases, only the general fee structure is available for comparison; architects or firms are unlikely to respond favorably to requests for a quote for services until they can fully review the owner's scope of work. Determination of design costs is usually arrived at through negotiations with the successful proposer. Items to be considered in such negotiations are covered in the following section.

Negotiation of Services and Compensation

Once an A/E consultant has been selected, negotiations should take place between the district and consultant to identify the scope of services to be provided and the fee that will be paid. It is important for districts to realize that, because selection of design services is usually not governed by laws directed at competitive bid projects, districts have considerable flexibility in negotiating the terms and conditions of a design services contract. In order to make the most of this flexibility, districts are advised to have a well-developed idea of the scope of services to be requested well ahead of sitting down to negotiate a contract.

"Basic services" are described by the Department of Transportation & Public Facilities (DOT&PF), and are similar to those described by the American Institute of Architects (AIA) (refer to this guideline's **The Scope of Services** section). The basic services are predetermined, so this should provide a starting point for negotiations.

A. Determining Final of Scope of Services

The services requested of an A/E firm can be characterized either as "basic," (i.e. - services performed normally by a design professional in order to move the project through construction); and "additional" or "supplemental," (i.e. - services required or desired beyond basic services).

The scope of services, proposed compensation, and the contract document should be reviewed and agreed upon. The following sections on compensation and the form of contract should give the owner background for negotiating.

As previously stated, the district should have a fairly firm idea of the scope of services to be requested of the architect before selection, particularly where additional services are required. The scope of services may be modified during the negotiation process, but it should not be left to the architect or architectural firm to determine what will or will not be provided.

Compensation

The total cost of design services will be dependent on the scope of services required. Once the scope is set, the A/E consultant will indicate the amounts to be charged for basic services broken down by phase (schematic design, for example) and each selected additional service. Charges will include professional fees and expenses, both of which are negotiable. Compensation may be by a single method of payment for all the work required plus other agreed-upon expenses, or it may involve different methods for different elements of work. Districts should be aware of the more common methods of payment utilized for school facility design services: lump sums, specific hourly rates, and professional billing rates, each of which is described below. An additional method, cost per unit of work, is also used by architects. Because it is used only when dealing with apartment building units, hotel rooms, or other identical units, however, it is seldom encountered in educational facility construction.

- 1. <u>Lump sum</u> is the method whereby the architect is paid a fixed dollar amount for specific services. The amount includes profit, direct salary costs and indirect costs.
- 2. <u>Specific hourly rates</u>, whereby the architect is paid fixed hourly rates for each class of employee directly engaged in providing services of indefinite duration. The rates include profit, direct salary costs, and indirect costs.
- 3. <u>Professional billing rates</u>, an alternative to specific hourly rates, whereby the architect is paid fixed hourly rates for specifically named employees engaged in providing services of indefinite extent, plus a percentage, also referred to as a multiple, for indirect and non-reimbursable direct costs, and for profit.

The following definitions apply to the terms used above:

- 1. <u>Direct salary costs</u> consist of the actual hourly wage rate for time directly chargeable to the project, plus an allowance for payroll overhead.
- 2. <u>Payroll overhead</u> consists of all employee-related costs and personnel benefits, including life and medical insurance, sick leave, vacation and holiday pay, social security, workmen's compensation, pension retirement contributions, and other similar employee-related costs. Overtime for non-salaried hourly wage rate employees may be included, if approved in writing by the district.
- 3. <u>Indirect costs</u> include allowable expenses not directly identified with a single project. Indirect costs include salary and non-salary costs such as general administrative salaries, recruitment of employees, office rents, maintenance and utilities, office supplies, etc. Indirect costs are payable as a multiple or percentage of direct salary costs.

Determining Reimbursable Expenses

In addition to fees, which cover salaries, profit and indirect costs, most projects require the A/E consultant to provide services which involve additional expenses. Such direct non-salary costs should be identified specifically as reimbursable expenses which will be paid upon receipt of documentation that the expense was incurred. <u>Transportation</u> and <u>per diem</u> are the most common reimbursable expenses. Others include:

- 1. <u>Cost of subcontracts</u> when these have been identified specifically within the professional services agreement;
- 2. <u>Fees for regulatory approvals</u> paid to authorities having jurisdiction over services provided by the agreement. Such fees include local, state, or federal permitting costs;
- 3. Expenses for <u>telecommunication charges</u>, including telephone, teleconference, fax, etc., incurred in the provision of services under the agreement;
- 4. Expenses for postage and handling of materials required by the agreement;

- 5. Expenses for <u>reproduction of reports</u>, <u>drawings and specifications</u> in excess of that which would normally be required (usually two copies);
- 6. <u>Computer time</u> for special applications required by the district;
- 7. Expenses for producing <u>specialized or elaborate</u> models, promotional materials and presentations required by the district.
- 8. Other expenses identified in the contract.

As can be seen by the above listing, the amount of reimbursable expenses allowed is generally under the control of the district in that such expenses are triggered by the amount of travel and other activities required by the district. Because such expenses can mount up quickly, districts are encouraged to set a maximum amount for which expenses will be reimbursed in the agreement itself, unless further authorized by the district.

Determining Amount of Compensation

Determination of final costs of design services will be the result of negotiation on the various fees requested by the design firm, plus the amount of reimbursable expenses to be allowed by the district. Districts can use several methods in estimating the limits of compensation. A simple, common method is to use a percentage of construction costs. Compensation for basic services range from 10% of estimated construction costs on small projects to 6% for large projects. This method should be used with care and is best suited to projects where the scope of services is typical and is mutually understood by the parties-often due to having a history of substantially similar projects. Because of the wide range of construction costs throughout the regions of Alaska, the compensation for basic services with this method should be calculated upon an estimated cost for identical work in Anchorage. To this fee can be added extra overhead items such as transportation, weather conditions, staff living and travel expenses, telephone and courier deliveries, etc. as additional or supplemental services. Additional services and reimbursable expenses will vary, depending on the extent of services required. Even if not used as the basis for a design fee, the percentage of construction costs can be a helpful back-check or comparison to fees developed using other methods. Districts are cautioned that construction costs, not total project costs, should be used as the basis for calculation if a percentage is used.

Some confusion may exist regarding the application of Section 14.11.020 of Alaska Statutes dealing with <u>Construction, Rehabilitation, and Improvement of Schools and Education Related Facilities</u>. This section limits the costs of construction management to 4% for construction projects of \$500,000 or less, to 3% for projects over \$500,000 but less than \$5,000,000, and to 2% if the project is \$5,000,000 or more. However, this section refers to the "management of the project's schedule, quality, and budget during any phase of the planning, design, and construction of the facility by a private contractor engaged by the municipality or regional educational attendance area." It does not place a percentage cap on the amount that can be expended for design services. Nor does it differentiate between those services performed by an architect under basic service and those to be

performed by the owner in this administrative and accounting rate (or by a third party contract manager).

Under AIA document B141, the *Standard Form of Agreement between Owner and Architect*, it is acceptable for an architect to provide the services identified in statute as construction management. If construction management and design services are awarded to a single entity, it will be necessary to account for the two categories separately. If a district chooses to retain an independent construction manager, there must be a clear distinction between the responsibilities of the A/E consultant and the construction manager, as well as compensation for those services.

If a percent-of-construction-costs method is not used, districts must determine another way of establishing the reasonableness of compensation for design services. Other acceptable methods include comparison with other projects completed by the district, design cost ranges for comparable projects being developed by other districts, or professional judgment. However, with the exception of the most simple school capital projects, the detailed-services method is likely to be the most appropriate for the majority of projects. Under this method, the owner, usually through a request for proposals (RFP), identifies the scope of the project along with its anticipated services. The design professional then proposes a set of detailed services by project phase; these are often called 'tasks'. Each service/task, is supported with a proposed staffing, the hours for those staff, and the hourly rate. The detailed services method results in a very clear definition of contract scope. In evaluating this type of fee proposal, districts can review: 1) the categories of services needed (e.g., Will the design team need to make public presentations of design iterations?), 2) the level of expertise needed (e.g., Can an engineer in training (EIT) really handle all the electrical design or is a senior engineer needed?), and 3) the hours needed to complete the task (e.g., 100 hours for a door schedule at 95% design; doesn't modern design software automate that process?). Review and negotiation of design services at this level of detail is often very helpful for all parties in the resulting contract.

Design costs for basic services should be approximately the same for a similar project anywhere in the state, because the Alaskan cities in which A/E offices are located do not differ markedly in cost of living. Types of services, however, may vary considerably; a \$5 million facility constructed in Anchorage could easily cost \$10 million if built in Bethel or Barrow. Often this is due to infrastructure elements such as extensive water, wastewater, and electrical power; these systems all require additional professional services for their design. Travel expenses to remote locations also need to be considered, along with the time lost when unplanned site visits become necessary. Fixed costs for site visits need to remain flexible enough to accommodate travel delays and resultant unplanned expenses.

Agreements between the owner and A/E consultant on the basis and amount of compensation, maximum amounts to be paid for reimbursable expenses, and the compensation schedule should be set out clearly in the agreement between the A/E consultant or firm and the district.

DOT&PF's "Professional Services Agreement" in Appendix C: Basis of Compensation contains one format which can be useful to districts in setting out the compensation rates and schedule. A more simplified format which has been used successfully by several districts is included as Appendix B of these Guidelines. Districts are able to choose the format that is most useful to them in laying out the terms and limits of compensation.

Contract for Design Services

Preparing a contract for design services is a complicated process, but the process can be made easier by utilizing standard contract documents available from one of many different organizations or associations. The comments which follow are not in any order of priority nor do they exhaustively discuss or analyze the various trouble spots which may arise in development of a contract for design services. This document covers a few specific areas and concepts that often appear to be misunderstood.

The contracting process often raises issues and questions upon which specific legal advice is necessary. These guidelines are not a substitute for such advice but provide information that can enable the district to have an informed discussion with its legal counsel regarding the design services contract.

Standard Documents

There are numerous form contract packages in existence which have been developed by various user groups associated with the construction industry. For example, the American Institute of Architects (AIA) publishes forms which are often used by its members and others. The Alaska Department of Transportation and Public Facilities (DOT&PF) has also developed such forms, several of which have been referenced. The Engineers Joint Contract Document Committee (EJCDC) also publishes standard contract documents. Other forms are published by contractor and engineering associations. Some municipalities have their own contract forms. Each form has its own constituency and group of adherents, and ideal circumstance of application.

Architects generally use the AIA contract forms. These have been developed and modified to changing conditions over many years. The AIA contract documents from architect services through construction to project closeout are fully integrated with construction contract forms. All forms must be approached knowledgeably and employed properly. They can save a great deal of time and expense over trying to start from scratch. The contract document is extremely important, and the contracting agency should use great care in selecting the standard form. All contracts are not created equal.

All contract form packages may be changed and supplemented. However, any change must be coordinated with construction documents. Some of the following comments provide areas for further consideration. Standard contract documents allow for revision, and each time the documents are used, the district should review provisions of the contract to verify that they apply, or if they should be modified. If provisions of the design contract are modified, careful consideration should be given to the impact that the change has on the corresponding construction contract. As with any contract, anytime provisions are modified or added, legal counsel should be consulted to determine the effect of the proposed changes.

Document Integration

Whether one of the form contracts is used as a basic document or not, the entire contract document for professional services must ultimately work together as a package. Districts must make sure that any changes incorporated into the form are made consistently throughout. If, for example, it is determined to delete the arbitration clause, all references to such arbitration must be deleted throughout the various contract documents.

These *Guidelines* focus only on the design services contract, ultimately there will be a construction contract, insurance documents etc.. The duties, rights and responsibilities of the A/E consultant—as set out in the design services contract—will have a direct effect on the construction contract. It is very important that both the design contract and construction contract remain consistent.

For this reason it is not recommended that a district use one form of design services contract and a different form of construction contract. If two "mismatched" contracts (e.g., AIA with DOT&PF contract forms) were used, the provisions of each will have to be carefully reviewed and compared to be certain that all inconsistencies and discrepancies are caught and corrected. Generally speaking, if a standard design services contract is used, it should be used in the way it was intended—as a package with the construction contract as well.

The Contractual Parties

AS 14.14.060 purports to lay out the relationship between a borough and a borough school district in the design and construction of schools. Although it is not entirely clear, a possible interpretation of that section is that the district is authorized to contract for the professional services needed for school facility design subject to municipal approval. The construction of the project, however, is handled and contracted by the municipality unless there are other specific agreements.

It is important that the contract documents clearly identify the entity responsible for the contract. If the municipality has authorized the school district to act as the contracting agency, a copy of the resolution should be included as an attachment to the contract.

It is also advisable that the same entity act as contracting agency for the complete project; i.e., both the design and construction of the project. If the municipality does not desire to release its obligation to the district as contracting agency for the construction of the project, then it may be preferable that the municipality should act as the contracting agency for the design services as well. Because the design of a project and the subsequent execution of that design are inextricably connected at many points and in many ways, the entity which bears the responsibility and also the liability for the design portion of the project should be a participant during construction to provide continuity and expertise the project.

When boroughs serve as the contract manager and contracting entity, a key role remains for the school district. Under this structure, the district becomes the 'using agency' for which the project is being executed. In this role, the district must work to clearly communicate its needs and goals for the project and the end-uses for which it must function. In many cases the head of the project team serves in that capacity or as representative of the superintendent of the school district.

Indemnity and Liability

An "indemnity clause", also known as the "hold harmless clause" may be important from the contracting agency's viewpoint. Such a clause obligates the architect to indemnify and hold the owner harmless from certain kinds of claims. For example, if a floor collapses and the contractor were to claim it was inadequately designed; the contracting agency generally wants to assure itself that the architect will be responsible for defending the claim.

The Alaska Statutes, Title 45, impose a limit on the kinds of claims that can be indemnified in a construction contract. An indemnity clause in any construction contract is void if it purports to indemnify the owner against liability for damages arising from the <u>sole</u> negligence or willful misconduct of the owner. The standard AIA form does not include an indemnity clause; it does however propose liability insurance and arbitration (AS 45.45.900).

A knowledgeable owner or school district may wish to find a place to put blame in case of delay or change order for faulty construction and personal damage. A construction project should be a three-way partnership of owner, architect and contractor. Architects can no more accept an indemnity clause than can the owner, architect or contractor.

Arbitration and liability insurance do provide for review of liability and security for recompense. Some contracts with architects have been written with a liquidated damage clause to provide that in the event the architect fails to perform in accordance with the contract time schedule, the architect agrees to pay. The standard AIA form does not include liquidated damages. It does call for arbitration of disputes and liability insurance.

Professional liability insurance is required in Alaska and is carried by most A/E consultants. Policies are written with deductibles. Most claims in Alaska have been settled within the deductible. The cost for this insurance is high and if the owner's request is high, the cost may equal the A/E expected profit. A reasonable and suggested approach is for the cost to be included in the final fee agreement. The duration of the policy is important. Policies are written on a "claims made" basis, which means that a policy must be in force at the time of claim. If a policy is canceled at completion of a project, the policy will not be in effect if a claim is made later. Districts may wish to consider a requirement that the policy be maintained for a number of years after completion of the project.

The architect, as a state-registered professional, accepts liability for injuries to his client or others which are due to his negligence. Most contracts do ask for architects or engineers to indemnify and hold harmless their client for all occurrences. However, construction is fraught with many risks that are outside of the A/E consultant's control.

The AIA document does call for arbitration of claims, disputes or other matter in question between the parties to the agreement. This is in accordance with the construction industry arbitration rules of the American Arbitration Association.

Post-Occupancy Services

When school construction is complete and the school is occupied, there are other services that may be provided by an A/E consultant. Those services include development of a preventive maintenance plan; development of an operations manual; and completion of a Post-Occupancy Survey.

Development of a preventive maintenance plan is a required deliverable under the department's Project Agreement, and involves developing periodic maintenance schedules for all of the components upgraded or installed as a part of a capital improvement project. The preventative maintenance plan also includes development of a custodial operation plan, energy management plan, maintenance training plan and renewal and replacement schedules.

Development of an operations manual is not required by the department, but is an important document that will provide future users of the facility with a reference document for operation of the building systems.

In some instances, especially in cases where a project will utilize new, innovative, or un-tested design strategies or non-standard space utilization strategies, it is beneficial to return to the facility at least a year after student occupancy and review the facility using a process known as a "Post-Occupancy Survey." A Post-Occupancy Survey provides the district and users of the facility an opportunity to report on how well the facility is performing. The department has developed a detailed questionnaire that can be used to perform a Post-Occupancy Survey.

Project Budget and Schedule

The district should include provisions in the A/E contract to insure that the A/E consultant is prepared to develop three cost estimates at three separate times during project development.

The department's Project Agreement includes required submittal of three progressive cost estimates during the development of the project documents.

The first cost estimate typically prepared by the A/E consultant is the Schematic Design cost estimate, and is performed at the schematic design phase of the project, or approximately 35% through the design process. This estimate will be based on the schematic design drawings and will provide the district with a cost that includes more detail than the cost estimate a district may have prepared for the submittal of a CIP application. The schematic design cost estimate will assist the district in identifying if a project budget is adequate to complete the work identified in the scope of the project. At this state of the project, changes to the scope and design are relatively easy for the designer to make, so the district should pay very close attention to this document and make the effort to thoroughly review the cost estimate and scope of the project before authorizing the A/E consultant to proceed to the design development stage.

The Design Development cost estimate is completed at the design development phase of the project, or approximately 65% through the design process. This estimate will provide a further refinement of the cost estimate prepared during the schematic design phase and should give the district an idea of whether the project budget is adequate to complete the entire project scope. If the design development cost estimate exceeds the project budget, the district will need to work with the A/E consultant to refine the project scope to decrease project costs so that they are within the allocated budget amount.

The Construction Document cost estimate is completed at the end of the design phase, and serves as a final check of the anticipated project cost against the project budget. If the construction cost estimate exceeds the project construction budget, the district will need to review the project and identify components of the project that can be reduced by either utilizing additive alternates or eliminating altogether in order to bring the base construction project cost within the construction budget for the project.

The department has developed a tool identified as the *Program Demand Cost Model;* this tool provides districts with the ability to perform basic cost estimating tasks that can be useful for preparation of planning level cost estimates that can be used for the Capital Improvement Program Application. The Cost Model should not be used for preparation of schematic level cost estimates.

In addition to tracking the project budget through cost estimates, the district should also consider including provisions in the contract with the A/E consultant that provide for tracking of the project schedule. The project schedule should be updated periodically throughout the project in order for the district to verify that the project completion date does not slip, or if it does, that the appropriate school district and school board representatives are informed of any changes in the schedule.

APPENDICES

Appendix A - Table of Typical Design Services Provided by Architects and Engineers

As the owner, you will find it helpful to review this chart with your A/E consultant to acquaint yourself with the various phases of design and construction and the services available for each.

Project Administration & Management Services

Project Administration Disciplines Coordination/ Document Checking Agency Consulting/ Review/ Approval **Owner-Supplied** Data Coordination Schedule Development/ Monitoring of the Work Preliminary Estimate of Cost of the Work

Presentation

Pre-design Services Programming Space Schematics/ Flow Diagrams **Existing Facilities Surveys** Marking Studies Economic Feasibility Studies Project Financing

Site Development Site Analysis and Selection Site Development Planning Detailed Site Utilization Studies **On-Site Utility Studies Off-Site Utility Studies** Environmental Studies and Reports Zoning Processing Assistance Geotechnical Engineering Site Surveying

Design Services Architectural Design/ Documentation Structural Design/ Documentation Mechanical Design/ Documentation Electrical Design/ Documentation Civil Design/ Documentation Landscape Design/ Documentation Interior Design/ Documentation Special Design/ Documentation Materials Research/ Specifications

Bidding or Negotiation Services	Contract Admin. Services	Post-contract Services	
Bidding Material	Submittal Services	Maintenance and Operational	
Addenda	Observation Services	Programming	
Bidding/Negotiation	Project Representation	Startup Assistance	
Analysis of Alternates/ Substitutions	Testing & Inspection Administration	Record Drawing	
Special Bidding	Commissioning	Warranty Review	
Bid Evaluation	Supplemental Documentation	Post-contract Evaluation	
Contract Award	Quotation Requests/ Change Orders		
	Contract Cost Accounting	Basic Services Contained in AIA's	
	Furniture & Equipment Installation Administration	Standard owner architect agreement (B141)	
	Interpretations and Decisions		

Additional Services contained in expanded list of services (B163)

Refer to AIA Document B163, Standard Form of Agreement between Owner and Architect for Designated Services for an expansive listing of available services.

Project Closeout

Suggested A/E Rating System

Following is a possible rating review for architectural firm interviews should be prepared to consider other pertinent areas for discussion.

<u>Overall Experience</u> - (10 points) The entire architectural experience based upon varied projects involvement.

<u>Specifically Related Experiences</u> - (10 points) That architectural experience which directly involves construction and design of educational facilities similar to the project.

<u>Capacity</u> - (10 points) The ability of the architectural firm to handle the magnitude and complexity of the project.

<u>Qualified Staff</u> - (10 points) The professional experience of the architectural team to be involved in the project.

<u>Ability To Respond (Timeline)</u> - (10 points) The ability to meet deadlines as proposed. The ability to respond to clients' needs.

<u>Design Philosophy</u> - (10 points) The aesthetic and functional accomplishments of design and construction work performed (appearance, function, quality and technological approach).

 \underline{Cost} - (10 points) The reality of the construction and project budget as indicated in material provided.

<u>Extra Points</u> - (10 points) Additional strengths of architectural firms. Examples include: design problems, limited number of change orders, staying within the architectural contract, communication and work attitude, responsiveness to problem areas, and varied recommendations received from previous clients.

The Scoring Scale

Each area to be rated is to be assigned a numerical value from 0 to 10 by the rater. The following may be referred to as a general guide; Districts may wish to revise points available for each group.

- 10 Exceptionally Strong Area
- 8 Very Strong Area
- 5 Average Strengths
- 3 Weak Area
- 0 Area not Addressed

Following are some of the items for discussion with the architect.

Overall Experience - (10 points possible)

- 1. What is the Architect's entire architectural experience based on various projects involvement? Are these experiences relevant to the project?
- 2. Has the Architect demonstrated familiarity with:
 - a. Making facilities accessible to physically handicapped?
 - b. Fire safety criteria?
 - c. Energy conservation appropriate to Alaska?
 - d. Design environment for education?
- 3. What does the Architect state regarding the following?
 - a. Response to owner (cooperation, management plan, timelines, etc.)?
 - b. Budget control (design budget, bids, change orders)?
 - c. Design success (function, user satisfaction)?
 - d. Aesthetic acceptance (owner and community acceptance)?
 - e. Maintenance and operation?
 - f. Involvement during construction (including construction observation)?
- 4. What efforts has the Architect made in the past to insure that contract documents include inventory lists detailing spare parts, location of suppliers for spare parts, submittal data, required testing, etc.? And how would the architect handle this important service?

What experience does the Architect have in managing a project, and is he willing to take on this role from educational specification to move into finished facility?

Specifically Related Experiences - (10 points possible)

- 1. What school design experience has the Architect had? How closely is it related to this project? Have these closely related jobs been successes?
- 2. What can the Architect state regarding the following about past related experiences:
 - a. Response to owner (cooperation, timelines, management plan, etc.)?
 - b. Budget control (design budget, bids, change orders)?
 - c. Design success (function, user satisfaction)?
 - d. Aesthetic acceptance (owner and community acceptance)?
 - e. Maintenance and operation?
 - f. Involvement during construction (including construction observation)?
- 3. Does the Architect have experience working on facilities similar to those contemplated by the District, with specific reference to experiences in last ten years?
- 4. What efforts would the Architect make to insure that contract documents include adequate documentation of materials and systems for operation maintenance and supply?
- 5. Is the Architect familiar with DEED regulations?

Capacity - (10 points possible)

- 1. What is the Architect's overall ability to handle the magnitude and complexity of the project? How the architectural team will be organized and administered?
- 2. Does the Architect have the office facilities and production capabilities to handle this project?
- 3. What is the Architect's suggested scope of services?
- 4. What energy conservation measures would the Architect utilize in this design? Detailed operational cost estimates may be required (regarding wind-driven rain, solar advantage, light utilization, heating and air-conditioning systems).
- 5. Would the Architect and sub-consultants be willing to write a complete maintenance and operations narrative for the District?
- 6. Will the Architect and sub-consultants assist in a one-year post-occupancy inspection in order to evaluate maintenance and operations?
- 7. What other information do you feel is important about your firm that will justify your selection over other firms?

Qualified Staff - (10 points possible)

- 1. Who are the members of the architectural team to be involved in the project? What is the professional experience of each of the team members? Does the Architect and/or architectural team have backgrounds appropriate for handling the project?
- 2. What are the names and addresses of the Architect's proposed consultants? Are they "in-house"? How is coordination handled for completion of electrical, mechanical, and structural components? What experience have you had with the proposed design team?

Ability To Respond (Timeline) - (10 points possible)

- 1. Does the Architect show a willingness to be sensitive to community needs, and will he welcome involvement of community representatives? Is the Architect willing to work with District personnel in the ongoing process?
- 2. What schedule and guidelines would the Architect suggest in order to plan and coordinate the design of the facility with community participation and approval?
- 3. Can the Architect suggest a time schedule indicating when the design, bidding and award, and construction phases could be completed?
 - a. What techniques has the Architect employed on past projects to ensure the set time schedule is met?
 - b. Does the Architect have the staff and capability to have the construction documents completed along the District's timelines? Who will be working on the project? List by discipline and by name.
 - c. What is a realistic period of time to have completed plans for actual construction? (Give some timelines.)
- 4. What design and construction problems have you encountered on similar projects, and how can they be avoided?
- 5. Could the Architect assist the District with the selection of all equipment and furnishings?
- 6. Would the Architect and sub-consultants be willing to write a complete maintenance and operations narrative for the District? Would the Architect and sub-consultants be available to perform start-up of a new facility and give complete maintenance instructions?
- 7. Can the Architect coordinate design to provide a place for the Work of Art? How could this effort be coordinated with the community?

Design Philosophy- (10 points possible)

- 1. Does the Architect have the ability to produce an excellent design for the project? (This should be based upon the aesthetic and functional accomplishments of the design and construction work performed— appearance, function, quality, and technical approach.)
- 2. What is the Architect's design philosophy for this project (including life-cycle costs factors and aesthetic values)?
- 3. Is the Architect familiar with the various design standards (i.e., fire, handicapped) and DEED requirements?
- 4. Can the Architect coordinate design to make provisions for art works? How could this effort be coordinated with the community?

Cost - (10 points possible)

- 1. What are the costs per square foot estimated to be for this area for various types and locations of school construction?
- 2. What is the Architect's basic scope of services? What is the estimated slope of reimbursable services?
- 3. Does the Architect see any constraints with the budget indicated for the project?

Extra Points - (10 points)

1. Additional strengths of the Architect's firm. Examples include: design problems solved, services available during construction, change order experience, staying within the parameters of the architectural contract, communication and work attitudes, responsiveness to problem areas, and various recommendations received from previous clients.

		PERI	PERFORMANCE RATING CHART	E RATING	G CHART				
Architectural Firm	Overall Experience 10 pts	Related Experi- ences 10 pts	Capacity 10 pts	Qualified Staff 10 pts	Ability To Respond 10 pts	Design Philos- ophy 10 pts	Cost 10 pts	Extra Points 10 pts	Total Point Rating
	Note:	Note: Possible points for each area should be adjusted by district.	ints for each	l area should	l be adjuste	d by distric	ct.		

Appendix C - Sample Schedule of Compensation

This sample schedule provides one method whereby the fees and expenses for each basic and additional service may be displayed in the agreement for design services. The form is a sample only and would need to be modified to reflect only those services which are to be provided by the architect or architectural firm.

BASIC SERVICES

Description of Services	Agreement Reference	Days for Completion	Method of Pay	Compensation	Fees & Expenses
Schematic Design					
Design Development					
Construction Documents					
Bid Services					
Construction Services					
In addition to the above, service	es may be requi	ired of the archite	ect during the	following phases	of the project:
Pre-design Services					
Site Selection					
Post-Construction					

Additional Services (Examples)

Feasibility Study					<u> </u>
Energy Audit		<u> </u>		<u> </u>	
Meetings & Presentations	<u> </u>		<u> </u>	<u> </u>	

Services

Appendix D - Sample RFP for Construction Manager

[SCHOOL DISTRICT NAME]

REQUEST FOR PROPOSALS FOR CONSTRUCTION MANAGEMENT DEL ATEN SEDVICES

[District Logo]

	[per 4 AAC 31.065]
Project Name: Project #: RFP #: Location:	Procurement Agency and Address: [District] [Division] [Address] City, Alaska 99XXX
Procurement Officer:	Date of Issuance:
District Contact:	[Month/Date/Year]
Phone:	
Email:	
REQUIRED SERVICES: are described in the attach	ned Statement of Services
The Project cost estimate is: \Box under \$50,000 \Box \Box over \$200,000	□ \$50,000 - \$100,000 □ \$100,000 - \$200,000.00
material. Comments concerning defects and objecti received by the purchasing authority before proposa addenda. It will also help prevent the opening of a	ation for defects and questionable or objectionable onable material must be made in writing and must be l due date. This will allow issuance of any necessary defective solicitation and exposure of the Offeror's potests based on any omission, error, or the content of iting before the proposal due date.
PERIOD OF PERFORMANCE: Begin: [Month]	Year] End: [Month Year]

SUBMITTAL DEADLINE AND LOCATION **PREVAILING TIME:**

DATE:

OR Email:

Fax :

Hand deliver proposal directly to following location, and person, if named; or email, or fax to a number above:

PHYSICAL ADDRESS: **INDIVIDUAL:**

Late proposals will not be considered. Offerors are responsible to assure timely delivery and receipt and are encouraged to respond at least four business hours prior to the above deadline. Any addendum issued less than 24 hours prior to a Deadline will extend that Deadline by a minimum of an additional 24 hours. The Contracting Agency shall not be responsible for any communication equipment failures or congestion and will not extend the deadline for any proposals not received in their entirety prior to the deadline. Except for hand delivered proposals, confirmation of receipt by telephone or other means four hours or less prior to deadline will *not* be provided.

1. PROPOSAL FORMAT

The Construction Management firm's proposal shall be provided in the following format in order to provide the information to demonstrate the firms experience, knowledge personnel and resources to successfully perform the services requested. The required submittals are:

- A. Proposal Form (see attached)
- B. Cover Letter: Provide a cover letter (not to exceed two pages) introducing your firm, the proposal, and your understanding of the project.
- C. Project Team: Provide an overview of the proposed team detailing the professional staff expected to be providing services on this project. Include the experience and professional credentials (i.e. CCM, PMP) for each team member. Provide a history of the team's relationship.
- D. Project Management Firm Experience / Project Profiles: Provide a maximum of 5 project profiles. Preferred projects presented should demonstrate experience with the following attributes: project delivery methods, school construction, and state funding through AS 14.11.11 or AS 14.11.100. For each project include the client name, project name, project location, summary of services performed, and construction budget. Provide Owner references for at least three (3) of the projects, including name, title, and phone number.
- E. Project Organization: Provide an organization chart. Identify roles and responsibilities, reporting relationships and use of sub-consultants. Identify whether project management services will be self-performed or utilize sub-consultants.
- F. Project Approach: Present your understanding of the Project, its schedule, and the scope of the services required. Include how your firm provides project management services for any or all of the Project's phases (i.e., design, construction, project close-out, etc.).

2. BASIS OF SELECTION

This solicitation does not guarantee that a contract will be awarded. All proposals may be summarily rejected. The intent is to select a Contractor based on the criteria specified as follows:

Criteria

- A. Project Team & Staffing: qualifications, education, experience, and references.
- B. Experience: experience of the offeror in performing similar services for building projects of similar scope and similar location.
- C. Methodology: understanding of the project, the services required, and the soundness of the project approach.
- D. Responsiveness: proposal completeness and quality, responsiveness to the detailed services and anticipated schedule.

Scoring

Proposals will be evaluated using the categories and scoring indicated below. The final score will be calculated by computing an average of the total Evaluation Committee's scores.

- a. Background (XX Points)
- b. Project Team & Staffing (XX Points)
- c. Related Experience (XX Points)
- d. Overall Project Approach (XX Points)
- e. Approach to Schedule and Budget (XX Points)
- f. References (XX Points)

3. PRICE AND METHOD OF PAYMENT

A Price Estimate is NOT required with your proposal. The selected Offeror shall submit a Price Estimate within *three* business days following a request from the Contracting Agency. A Price Estimate shall include all tasks to perform the contract and be prepared to show hourly rates, anticipated hours, and anticipated staff, by task. Note that a Price Estimate is not a bid. It is a negotiable offer. A Fixed Price contract is desirable; however, a Cost Reimbursement contract may result if a Fixed Price cannot be negotiated.

4. PROJECT INFORMATION AND SCHEDULE

[Enter project description and background]

Schedule

CM Firm contract award	[Date]
Advertise for A/E RFP	[Date]
A/E RFPs Due	[Date]
A/E Contracted	[Date]
Schematic Design Due	[Date]
Design Development*	[Date]
Contract documents	[Date]
Advertise for Bids	[Date]
Award for construction	[Date]
Construction Completion	[Date]

5. RESPONDENT'S CHECKLIST

Proposals will not be considered if the following information, documents and/or attachments are not completely filled out and submitted with the proposal.

- □ Cover sheet, page 1, Proposal Form, must be manually signed.
- □ Copy of Alaska Registration or Required Certifications
- □ Project References
- □ Other

1. ATTACHMENTS

- □ Statement of Services
- □ Proposal Form
- □ [Sample Contract]
- □ [General Conditions]
- [Insurance Requirements]

DEED Project No: Date Prepared: XX/XX/XXXX

STATEMENT OF SERVICES

[PROJECT NAME]

INDEX

ARTICLE NUMBER TITLE

B1 ADMINISTRATIVE REQUIREMENTS

B2 DETAILED SERVICES

<u>ARTICLE B1</u> <u>ADMINISTRATIVE REQUIREMENTS</u>

B1.1 General. The Contractor shall provide services as identified and authorized by sequentially numbered Notices-to-Proceed (NTP). The Contractor shall not perform services or incur billable expense except as authorized by an NTP.

B1.2 Definitions.

B1.2.1 "Project Manager", "Construction Manager", "CM", or similar phrases mean the contractor who is a party to this agreement.

B1.2.2 "User Agency" means the District, division, etc., that generated the requirement for which services under this agreement are obtained.

B1.3 Project Staff. All services must be performed by or under the direct supervision of the following individuals (replacement of, or addition to, the Project Staff named below shall be accomplished only by prior written approval from the Contracting Agency):

NameProject ResponsibilitiesENTER NAMES OF CONTRACTOR'S &SUBCONTRACTOR'S KEY STAFF

B1.4 Professional Registration. Unless otherwise required by Alaska Statute, professional registration is not required to perform these services.

B1.5 Billing Reports. The Contractor shall provide a two-page (typical) report with each monthly billing for months in which services are performed. The report shall specifically describe the services and other items *for which the billing is submitted*, and shall estimate the percent the services are complete. Any delayed costs from previous billing periods that are included in the current billing must be clearly explained in the report.

B1.6 Correspondence. All correspondence prepared by the Contractor shall bear the Contracting Agency's assigned Project name and numbers (State & Federal).

B1.7 Documents and Reports shall be printed with solid black letters that are double spaced on white, 8.5 inch x 11 inch bond paper. Other size paper may be used for illustrations if they are folded to 8.5 inch x 11-inch size. Original documents and reports shall be printed on one side of the paper only and shall be ready for copying. The use of black and white photographs, color photographs, or multicolored graphics is approved for this project.

Original, camera ready, copies of final documents and reports shall be submitted to the Contracting Agency for a check before printing.

B.1.7.1 Copies. When the Contract calls for multiple copies of documents or reports, the copies shall be printed on both sides of the paper. However, the cover and pages with approved illustrations, multicolored graphics, or photographs shall be printed on one side of the page only. All copies - except for originals - shall be bound.

B1.7.2 Page Numbers. All documents shall be page numbered to allow every major Section, Chapter, Appendix, etc., to begin on a "right hand," odd numbered page.

B1.7.3 Covers. The cover of all documents and reports shall include the following information:

- a. Name of document or report.
- b. Date.
- c. Indicate whether draft or final.
- d. Project Name.
- e. State and Federal Project Number(s).
- f. Prepared for:
- g. Prepared by:
- h Map and/or picture of project area.

B1.8 Revisions. The Contractor shall modify work products in response to direction from the Contracting Agency. Corrections, adjustments, or modifications necessitated by the review/approval process, but which do not substantially affect the scope, complexity, or character of the services, shall be considered a normal part of the Contractor's services.

B1.8.1 Errors and Omissions. Except as described in this Statement of Services, work products shall be essentially complete when submitted to the Contracting Agency. Work products having significant errors or omissions will not be accepted until such problems are corrected.

B1.8.2 Reviews. Following each review, the Contracting Agency will provide written comments and may hold a meeting to discuss the issues. The Contractor's personnel who are in-responsible-charge for the work products under review shall attend the meeting and they may be asked to interpret and provide explanations of the content.

B1.8.3 Comment Resolution. The Contractor shall provide a written response with subsequent submittals that address all written and oral comments from the Contracting Agency. All changes from previous submittals shall be clearly explained.

B1.9 Reproduction and Distribution. When the contract requires only the original or only one copy of a work product to be delivered, the Contracting Agency will reproduce and distribute any other copies required. Items delivered for reproduction shall be organized and camera ready for copying and not stapled or otherwise bound.

ARTICLE B2 DETAILED SERVICES

B2.1 General Services: This contract is to assist the [Name] School District in meeting its project management and project administration obligations under the Project Agreement with the Department of Education & Early Development for the [Name] project, GR-XX-XXX.

B2.1.1 The CM shall conduct regularly scheduled project status meetings with project stakeholders and provide minutes of those meetings to the parties determined by the District.

B2.1.2 The CM shall monitor the project's budget and provide project controls and reports as required to inform parties as to the requirements that may be needed to keep the project on budget.

B2.1.3 The CM will assist in developing the project schedule and will provide project controls and reports as required to inform parties as to the requirements that may be needed to keep the project on schedule.

B2.1.4 The CM will coordinate as needed with project stakeholders including [list primary known or anticipated stakeholders] to ensure that stakeholders are aware of project needs and proposed solutions and to receive commitments, as needed, from project stakeholders in support of the project.

B2.1.5 The CM will prepare, on behalf of the District, an RFP for professional services for design and construction administration; will solicit and receive proposals for professional services and will assist the district in evaluating, selecting and entering into contracts with design and engineering professionals and will manage these contracts on behalf of the District.

B2.1.5 The CM shall evaluate, with the District, the need for any other types of contracts and agreements for services and shall solicit, recommend award, and manage all contracts in support of this project.

B2.1.6 The CM shall ensure compliance with DEED requirements for project reporting, project procurements, project submittals, and project payments.

B2.1.7 The CM shall oversee, in conjunction with the districts design contractor, permitting and other regulatory agency requirements.

B2.1.8 The CM shall oversee project close-out requirements with DEED and any other agency having close-out requirements.

B2.1.9 CM shall understand any land and property related aspects of this project including land ownership, leases, right-of-way, right-of-entry, disposal, acquisition, etc. by project stakeholders and shall assist the district in the preparation of documents and instruments as may be needed to clarify land and property issues required by the project scope.

B2.1.10CM services may require travel, overnight lodging, and other reimbursable expenses.

Notes

- Castaldi, Basil, *Educational Facilities, Planning, Modernization and Management*, 2nd Edition, Allyn and Bacon, Inc., Boston, Massachusetts, 1982. p. 158.
- 2. State of Alaska, Department of Transportation and Public Facilities, Appendix B: *Standard Statement of Services for General Architectural and Engineering Design*, Form SSS/GAED, Juneau, Alaska, 1980. pp. 2-4.
- 3. American Institute of Architects, *Compensation Management System*, Form F819, AIA, Washington, D.C., 1975 and contracts B163 and B141.
 - 4. Council of Educational Facility Planners, Inc, *Planning Guide*, 1991 C.E.F.P.I, Scottsdale, Arizona.