BOND REIMBURSEMENT & GRANT REVIEW COMMITTEE

May 2, 2017
Teleconference
MEETING MINUTES

Committee Members Present	Staff	Additional Participants
Heidi Teshner, Chair	Tim Mearig	Paul Baril, nvision, A4LE
Rep. Sam Kito III	Wayne Marquis	Julie Cisco, Kenai Peninsula Borough School District
Mark Langberg	Lori Weed	Craig Fredeen, Cold Climate Engineering
Dale Smythe		Kevin Lyon, Kenai Pen. Borough
Robert "Bob" Tucker		Kathy Christy, A4LE
William "Bill" Murdock		
Doug Crevensten		
Don Hiley		

CALL TO ORDER and ROLL CALL at 2:32pm

Heidi Teshner, chair, called the meeting to order at 2:32 p.m. Roll call of members: Bob Tucker is absent; Sen. MacKinnon and Rep. Kito are excused. Quorum of 6 members.

REVIEW and APPROVAL of AGENDA

Agenda reviewed and approved by unanimous consent.

REVIEW and APPROVAL of MINUTES

Minutes for March 30, 2017 reviewed and approved as submitted by unanimous consent.

DEPARTMENT BRIEFING

Tim introduced construction standard topic by noting the committee's statute touching on standards indicates the committee will "develop criteria ... to achieve cost-effective school construction." He emphasized that the state does have standards relating to cost-effective school construction; the department and the committee have been diligent in implementing them over time. It began with the formation of the committee in 1994 and with the change in staffing at the department from grant administrators to technical expertise.

Paul Baril expressed that the Association for Learning Environments (A4LE) is highly excited to provide its membership's expertise, ranging from architects and engineers to facilities planners and facilities maintenance personnel. They would like to provide support to committee in development of construction standards.

Tim continued to highlight elements of the briefing paper. Envisions end result is likely to be a document that establishes rules for the design of a high-performing school, with construction standards that deal with a variety of building systems, system selection and implementation.

Rep. Kito joined the meeting.

Original legislative intent was not clear regarding construction standards. The committee formed a subcommittee around 2002, but its efforts were not completed. Two differing documents were

offered by individuals involved with the subcommittee. One, by then-DEED Architect Assistant Nathan Coffee, is a short draft guidelines giving narrative support for particular systems and providing a framework for standards. The other, by Harly Hightower, is a long (200+ page) document with a traditional Construction Specifications Institute (CSI) specification standard for 36 architectural sections. Mr. Hightower estimated that there would need to be over 100 sections (900+ pages) to cover all building systems.

Tim believes that the committee will be able to identify a particular standard or a "sweet spot" in the range of construction standards content and format that is applicable and unique to Alaska for cost-effective school construction. The two examples provide a clear example, by sheer size, of the level of effort that would be needed by the committee to develop a standard.

Bob Tucker joined the meeting.

Dale sought clarification that the end goal of reviewing design standards is the reduction of school construction and operating costs and whether there has been a perception that recent schools have not met a quality standard. Rep. Kito noted that what turned into the energy efficiency standards was a look at the U.S. Green Building Council LEED for School Standards, which have efficiency of cost and operations as part of their criteria. Taking a renewed look may be beneficial.

In response to Dale, Tim stated that reducing the cost of school construction is important, but really looking at trying to provide an increased, more transparent, more well-developed framework for supporting the costs of schools at an appropriate level for Alaska. There have been lots of efforts to reduce or remove pieces of projects to contain costs; the department has many tools at its discretion, but it may be difficult to know when those will be applied. It can depend on the capabilities of the department in any particular year or CIP cycle. Cost reduction is always on the table and will be a part of this effort, but the discussion does not need to be limited to reducing school costs. The department needs to be able to support costs to constituencies as cost-effective, i.e. getting the most "bang for the buck".

Dale agreed with Rep. Kito on including operational costs as good value. A goal is also, where needed, a reduction of operating costs, and to insure quality facilities. Helpful to define what the real goal is in reexamining the standards, to provide a clear direction before starting.

Tim noted he would like to work towards developing design and building material standards that allow for more even-handedness, because there can be different school projects applying current standards and arriving at very different project costs, even at neighboring schools.

Tim offered discussion on the construction standards and cost control elements outlined in the briefing paper. *Program Demand Cost Model*, first developed as a tool for managing debt reimbursement projects in the 1980s, contains a "model Alaskan school" that lists the systems and features based on an Anchorage school project. The state could determine which systems and features would be eligible for state aid. Alternatively, the *Cost Model* could be used to determine a maximum cost per square foot for schools, beyond which the local education agency would be responsible for the cost; this is a common way of allocating in some other states, but is an admittedly challenging standard to maintain due to changing costs. Discussion followed regarding current and potential uses of existing *Cost Model*.

Tim reviewed the examples of material and systems standards, noting it was likely more than half of districts had some variation of standards based on lessons learned from accomplishing projects. It would be challenging to implement a set of standards across the state. Bob stated his preference for districts to be able to establish individual standards, with a central database maintained to allow districts to review what standards others have determined successful for a geographic area.

Tim noted that design ratios are a common tool to tell how efficiently a building is performing. Life-span standards try to identify what the life expectancy of particular building materials and systems should be; this can be valuable for forecasting capital renewal. Value analysis and commissioning may be useful in incorporating into other adopted standards.

CONSTRUCTION STANDARDS FOR COST-EFFECTIVE CONSTRUCTION - STRATEGY

Tim proposed the department's recommendation of a standard based on building systems, in cost formatting; focusing on model Alaska school, design ratios, and life-span standards.

Mark stated his advocacy of commissioning, as it is money well-spent to establish an initial benchmark, and recommissioning every few years can provide valuable feedback on building system operations. Bob agreed that commissioning is valuable, but noted it is expensive. Julie remarked that including commissioning has the potential to put the project over the grant's percentage allowances.

Don expressed that the model school seems a manageable way to proceed; it is already being updated for materials and costs, it allows districts to choose options within the cost limits. He is more supportive of life-span costs than specific material standards, due to large amount of variables technologically, geographically, etc. Bob agreed with upgrading the cost standards and including commissioning as a line item. He suggested a requirement in regulation, akin to the current energy and custodial requirements, to have the districts do a districtwide material systems analysis. Bill stated his concern for any standards based on a cost per square foot, transportation costs in particular can vary hugely from site to site. Tim agreed that cost per square foot allocations can have limited use beyond new construction projects. Dale noted that DEED may have historical data of past five to ten years of project costs, which could be used to look into regional costs.

Don believes that an overhaul and enhancement of the *Cost Model* tool would be a way to go, it has been an accurate tool over the years. Comments at prior meetings noted that the *Cost Model* was more accurate than some professional design estimates. Bob suggested individual meetings to focus on each of the various construction standards topics and review potential implementation.

Tim assured committee that the department would continue to invest in the *Cost Model*, with regular review of components and systems incorporated in the model school. Currently identifying costs of updating geographic cost factor. Proposes to remove material/system standards from current discussion of a construction cost standard element to be put in regulation. Reiterated that the purpose of presenting it was to have committee give up or down vote on whether it should be incorporated into regulation. He has no objection to developing a

department "cost limit". Can the committee and department identify a base model Alaskan school that can provide an adequate education? Incorporating geographic adjustments and other factors.

Suggests focusing on design ratios to see what kinds of effective design elements can be measured or identified; possibly reviewing plans of last 20 schools and trying to quantify and evaluate design ratios. Broaden from energy codes looking at watts per square foot to building volume per square foot, or number of doors or entries, length of piling, etc. This is an area the state could influence that would be outside of what national codes do and what districts get involved in.

Life-span standards were presented because of Tim's belief that the state needs to get more involved in forecasting capital spending. The state needs to work with districts on a better methodology for forecasting capital renewal, and lifespans need to be established as part of that. Bob commented that the state needs to forecast farther than six years, and it needs to provide funding. District six-year plans are not being funded and turn into twenty-year plans.

Kathy Christy commented that the information on the renewal and replacement schedules could be refined, but it is being collected in a general sense. Years ago there was a formula used to project out future renewal costs, but the number was so huge the state could never afford to do it. Based on her work with both urban and rural districts, she expressed satisfaction with the square footage allocation based on student population. A community or district can be told they have this amount of square feet and they can make the choices to support their educational program. If the model school gave everyone the same types of spaces, vocational education or other, it would be a departure from the current 21st century school.

Doug agreed with the last comment, the temptation to define a model school can lead to defining education to fit the model. Local communities need to be able to choose the types of spaces to include or not, to define their own education program.

Tim agreed and noted that until the last few days he hadn't considered the educational components of the model school. As being a place to define gym sizes, etc. Defining sizes of space can get complicated. However, Tim's perspective is this is the place to establish minimum system standards: e.g., does every school get flush toilets? Is that a standard in Alaska, because the cost of it varies widely. The "model school" has that. But what about headbolt heaters? Is that part of the model school or would that be a local choice? These kinds of elements of the building he was looking at, not whether there is a classroom or if teaching would happen in a project area. Tim's recommendation would be to identify features of a model Alaskan school that can be extrapolated across the state and doesn't support a turf field with a six lane running track as part of the model, then that would not be a part of the model.

Doug agreed that that makes sense, elements of a building could be done. There should be caution; you don't want a model school to limit program choices.

Bob asked Tim which of the standards listed will save the state the most money, because that is what the legislature is going to look for and focus on. Relating to the materials and systems item, if districts were required make standard determination, they would save money in maintenance costs; Kodiak is an example of this. Commissioning saves money in the long run.

Bob expressed uncertainty on how other items would save districts money. Tim summarized that other items place limitations on state monetary involvement.

Tim noted a current concern is that schools are being built with a lot of double height volume in common areas and other public spaces, but if there were a design ratio of a volume per foot of floor area, it could limit that feature without prohibiting it. Reducing double height volumes to achieve a design ratio would save the state and districts money.

Don referred back to the cost model, noting there is an existing "kit of parts" of different spaces that have different costs associated with them. District are given a maximum square footage based on enrollment projection and then determine the configuration of those defined spaces; geographic and other factors are added on as well. It gives the districts maximum flexibility.

Dale agrees that the space allocation method works, although he would like to see a few tweaks. He has the most trouble with setting the budget number that can be comparable across the state. The piece he sees as missing from state regulation is design ratios for monitoring energy use or cost consumption. No means for the state or district to track how much fuel a district is using per year. He would like to see some of those elements of energy savings incorporated into this discussion. Tim agreed that this is not a focus in any one of these areas.

SUBCOMMITTEE ASSIGNMENTS

Heidi asked for members what subcommittees would be useful at this time. Dale suggested that members be solicited for subcommittee ideas, ask them to provide the idea, intent, and reason for the subcommittee. He would like one on energy management or further development of cost consumption reporting. Heidi concurred with the process, the committee can conduct the process via e-mail. Tim commented that the framework can be started from the meeting notes, with proposed subcommittees and via e-mail gather feedback and members to serve. General agreement to have process of subcommittee determination by e-mail.

FUTURE MEETING DATE

Heidi noted a tentative May meeting to discuss the *Preventive Maintenance Handbook* is on the calendar. Tim stated that based on department workload it is unlikely to occur. However, the committee may wish to have another May meeting on the topic of construction standards.

CLOSING COMMENTS

Members expressed their consensus with the plan as discussed. Bob and Heidi included their appreciation for the department's work that went into gathering the data and presenting.

Heidi asked the members of the public in attendance if there was interest in being involved in the subcommittee process. Kathy Christy, Kevin Lyon, Paul Baril, and Craig Fredeen would like to be informed as ideas progress. Paul also asked if the information could be forwarded to the A4LE statewide membership to see if they would be interested in serving on any subcommittees once established.

MEETING ADJOURNED

The committee adjourned at 4:09 p.m.