

Performance Audit

Legislative Joint Auditing Committee

June 9, 2006

Self-Contracted Construction Projects

Arkansas Public School Districts

INTRODUCTION

The Arkansas State Board of Education, by authority of Arkansas Code Annotated (A.C.A.) §6-21-109, established rules and regulations governing self-construction projects by public school districts. Since the adoption of these rules, the responsibility for the enforcement of these rules has shifted to the Division of Public School Academic Facilities and Transportation (the Division) (see **page 2** for more details). Self-construction is defined as “any construction where the public educational entity uses its own employees, acts as a general contractor or uses a construction manager while acting as a general contractor.” This report is being issued to inform the Legislative Joint Auditing Committee of public school district compliance with related Arkansas laws and regulations as well as public school district policies and procedures in performing self-construction projects.

OBJECTIVES

Our objectives in conducting this performance audit were as follows:

- ◆ *Determine whether selected self-contracted public school district construction projects were conducted in accordance with State laws and regulations governing such projects;*
- ◆ *Evaluate procedures for the monitoring of self-contracted public school district construction projects*
- ◆ *Compare the procedures for self-contracted construction projects by public school districts used in Arkansas with those of other states; and*
- ◆ *Determine and evaluate if public school districts have established lines of authority and assigned responsibility to ensure the quality of construction for the selected self-contracted construction projects.*

SCOPE AND METHODOLOGY

Our performance audit was conducted for January 1, 2002 through December 31, 2004, and was performed in accordance with the applicable standards contained in *Government Auditing Standards* issued by the Comptroller General of the United States. We interviewed representatives of and reviewed documentation from the Division of Public School Academic Facilities and Transportation as well as selected public school districts. We also reviewed applicable Arkansas laws, Division regulations, school district policies, and requirements used in other states selected for review.

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BACKGROUND

Act 1204 of 2001 (A.C.A. §6-21-109) authorized the State Board of Education to establish rules and regulations relating to the plans and specifications governing minimum standards for the construction of school facilities, including those projects where a school district acts as its own general contractor. Act 90 of the Second Extraordinary Session of 2003 created the Division of Public School Academic Facilities (Division) under the supervision of the State Board of Education to implement the Arkansas Public School Academic Facilities Program Act. Act 1327 of 2005 changed the name of the Division to the Division of Public School Academic Facilities and Transportation and authorized the Division to develop guidelines for competitive bidding, competitive negotiation, and other methods of procurement for school district academic facilities projects. Act 1327 also transferred supervision of the Division to the newly established Commission on Public School Academic Facilities and Transportation (Commission) which was to expire July 1, 2007. Act 33 of the First Extraordinary Session of 2006 provided for the continued existence of the Commission and its supervision of the Division.

School Districts are required to notify the Division of their intent to self-construct on any maintenance or construction project with a cost greater than \$20,000. The Division provides each district electing to self-construct a copy of the rules and regulations governing self-construction. Regulations require school districts with construction projects costing more than \$25,000 to obtain the services of a licensed engineer and to obtain a licensed architect for projects greater than \$100,000. The rules further dictate all bid, bond and licensing requirements.

In addition to the rules and regulations governing self-construction projects, school districts must follow the rules and regulations known as the “minimum schoolhouse construction standards”. These rules require approval of construction plans from:

- The Arkansas Department of Health and Human Services for all labor involving plumbing and gas work;
- The State Fire Marshal, or his local designee, for fire safety certification; and
- The Arkansas Building Authority for compliance with the federal Americans with Disabilities Act.

As currently written, these rules do not require the school district to submit these approvals to the Division but rather that the school district only obtain them.

POINTS OF INTEREST:

- *School districts were in substantial compliance with all laws and regulations. (page 3)*
- *School districts did not calculate the cost savings associated with self-construction projects versus using a general contractor. (page 4)*
- *The Division has limited oversight of school district construction projects, typically not extending beyond the preliminary construction plan phase unless the construction is under the Academic Facilities Partnership Program. (page 4)*
- *Most school districts are not receiving State Fire Marshal approval of construction plans as required by Division rules and regulations. (page 5)*

In addition, A.C.A. §6-20-1407 provides that:

- No new schoolhouse shall be built except in accordance with the plan finally approved by the Commission; and
- A copy of approved plans and specifications of all new schoolhouses or additions be filed with and approved by the Commission before construction shall be commenced.

General Contractor vs. Construction Manager

For clarity in our discussion of self-construction in this report, the difference between a “general contractor” and a “construction manager” is distinguished below.

General Contractor

A general contractor is an individual licensed by the State who typically bids a flat price for a project in hopes of being awarded a construction contract by a school district. The general contractor is not an employee of the school district, but rather an individual contracted to construct a particular facility for the district. The general contractor’s bid contains the total cost for a project allowing the general contractor to subcontract specific jobs within the project to others (e.g. plumbing work to a licensed plumber). The project cost awarded to the general contractor is typically binding, with any cost overruns being the responsibility of the general contractor and any cost savings resulting in a gain for the general contractor. Additionally, when using a general contractor, the school district generally does not bear the risk of substandard or faulty work performed by the general contractor or his subcontractors.

Construction Manager

Alternatively, a construction manager is an individual contracted by the school district whose fee is typically based upon a predetermined percentage of the total cost of the project (e.g. 5.0% of the total project cost). State law requires any person or entity that oversees a construction project over \$20,000 to be licensed as a commercial contractor unless the construction is for the person or entity’s own property. The construction manager functions as an overseer of the project for the school district in awarding subcontracts to individual laborers. In this situation the subcontractor is technically hired directly by the school district and the school district is at risk for incomplete or faulty work performed by the subcontractor. Construction managers routinely assist the school district during the construction planning, budgeting, and development stages. As a result, the number of change orders needed should be reduced.

AUDIT CONCLUSIONS

As identified in **Schedule 1** on **page 7**, we randomly selected fifteen (15) school district projects from the fifty-eight (58) self-contracted construction projects started during calendar years 2002, 2003, and 2004. As a result of our review of self-contracted construction projects at the fifteen (15) school districts selected, we found **the districts were in substantial compliance with Arkansas Law, Division rules and regulations, and/or local school district policies**. However, we did find exceptions to the requirement of receiving prior written approval from the State Fire Marshal and the designation of seismic ratings as discussed below. We also noted concerns relating to the self-construction process currently practiced by Arkansas public school districts.

Conflict of Interest

When using a construction manager there is an inherent conflict of interest. The construction manager's fee is based on a percentage of total project costs. This method places the school district at a disadvantage of possibly having its project overseer benefit from cost overruns unless the contract is written to prevent this from occurring.

We also noted in our visits to selected school districts with self-construction projects several instances where the construction manager was awarded subcontracting work on the same projects he was charged to oversee. Act 2154 of 2005 prohibits construction managers from holding subcontracts for the project they are managing except when the construction manager also acts as a general contractor.

Decision to Self-Construct

During our visits to selected school districts, we asked district officials why they chose to self-construct instead of hiring a general contractor. The following reasons were given:

- General contractors are reluctant to allow school district officials to visit building sites at will;
- General contractors lack a willingness to address concerns relating to unsatisfactory work;
- District officials felt more in control of the overall project when using a construction manager; and
- Even though no pre-construction comparison of expected costs of self-construction versus expected costs using a general contractor was

performed, district officials felt self-construction resulted in cost savings.

We recommend the Division require a cost analysis be submitted by school districts before determining if self-construction is the preferred method of construction.

Division Oversight

The Division has a limited oversight role relating to self-construction projects. The Division requires each school district to submit a Self-Construction Assurance form signed by the school district superintendent and the school board president on a project-by-project basis assuring the Division that the school district understands its responsibility to:

1. Have all plans completed by the appropriate design professional,
2. Submit the plans to the appropriate state agencies for approval, and
3. Agree to abide by all Arkansas statutes for purchasing, bidding, and licensing requirements.

Division procedures do not involve follow-up to determine whether the laws were complied with or if the construction was completed with the exception of projects to be completed under the recently adopted Academic Facilities Partnership Program (Program).

The Program allows school districts to apply for state financial aid before undertaking a construction project. The district must agree to abide by certain stipulations including, but not limited to:

- Changes to construction plans may be made only after consultation with the Division; and

- Inspections may be performed by the Division or any person acting on its behalf as frequently as the Division deems necessary.

The Program is available to school districts beginning July 1, 2006. Construction projects not completed under the Program must be completed in accordance with the rules already established governing school construction.

By contrast, most state agencies and universities fall under the review of the Arkansas Building Authority when undertaking construction or renovation projects over \$20,000. ABA is involved in the whole construction process from the bidding to the project closeout. ABA performs construction observations throughout the process to ensure the project is being completed on schedule and in accordance with all contracts. Also, ABA is available to resolve any construction issues the agency or university may have with any contractors. These construction projects are typically done through a general contractor who is responsible for contracting with individual subcontractors.

We recommend the Division and the General Assembly consider whether more oversight or support is needed for public school district construction projects that are not conducted under the Academic Facilities Partnership Program to better ensure construction projects are being completed in accordance with applicable laws and contract provisions.

Fire Marshal

The Division requires all preliminary construction plans be reviewed and approved by the Arkansas State Fire Marshal, or his local representative, for fire prevention code standards. However,

documentation of the approval is not required to be submitted to the Division prior to construction. Only one (1) of the fifteen (15) school districts with self-construction projects we selected for review received local fire department approval before starting construction. However, all had written approval from fire officials before occupying the facility.

Like Fire Marshal approval, Division rules do not require the school district to submit approvals from DHHS or the Arkansas Building Authority. According to Division rules, the school district is only mandated to obtain approvals.

We recommend the Division modify its rules to specifically require either the public school districts submit the proper approvals from the Arkansas State Fire Marshal, the Arkansas Department of Health and Human Services, and the Arkansas Building Authority before construction plans are approved or require direct confirmation of approvals from the agencies.

Seismic Zone

Division regulations require project engineers (required on construction projects exceeding \$25,000) to provide seismic zone information on construction plans as designated by A.C.A. § 12-80-101 through 106. The code divides the State's seventy-five (75) counties into three (3) seismic zones according to their proximity to the New Madrid fault. During the course of our review, we noted some design plans did not include the applicable seismic zone as designated by Arkansas Code. The plans did, however, contain seismic information as required by the International Building Code. According to the ABA State Engineer, the Arkansas Fire Prevention Code provides guidance as to the seismic design requirements of the International

Building Code and engineers are required by law to follow those standards. During our review, no instances of school districts having been placed in a lower seismic zone than allowed by Arkansas Code were identified.

We recommend the Division revise its rules and regulations to clarify what seismic information is to be included on design plans. We further recommend, if deemed necessary, the Division enforce the requirement that engineers list the seismic zone designated by Arkansas Code.

Change Orders

As illustrated in **Schedule 1** on **page 7**, several of the construction projects involved amended contracts with the various subcontractors and/or construction managers. The schedule shows the total number of change orders for the various projects as well as the net dollar amount change associated with those contract amendments. Not all change orders involved a change in the negotiated price. Change orders must be agreed upon and signed by a school district official, the subcontractor, the appropriate design professional (engineer, architect, etc.), if applicable, and the construction manager if one is being used by the district. All change orders we reviewed were correctly approved by the necessary individuals.

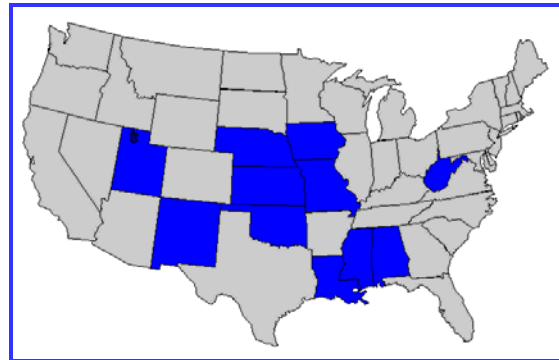
REVIEW OF OTHER STATES

In order to obtain a broader understanding of self-construction, we selected eleven (11) states, shown in **Exhibit I** below, and reviewed their procedures and regulations regarding self-contracted construction projects in order to compare with the policies and procedures established in Arkansas.

Nine (9) of the eleven (11) states reviewed (Alabama, Iowa, Kansas, Mississippi, Missouri, Nebraska, New Mexico, Oklahoma, and West Virginia) had policies and procedures similar to Arkansas governing self-construction projects with each state's respective Departments of Education having little or no oversight of such projects. The remaining two (2) states reviewed (Louisiana and Utah) did not allow self-construction projects at public schools.

Exhibit I

States Selected for Review



**Self-Contracted Construction Projects Selected for Review
Calendar Years 2002 through 2004**

School District	County	2003-2004 ADM	Project Description	Total Project Cost	Number of Change Orders	Net Dollar Amount of Change Orders	New Square Footage	Cost per Square Foot
Ashdown	Little River	1,379	Roofing & HVAC replacement - Junior High School & Margaret Primary School	\$940,382	2	\$38,802	0	N/A
Benton (1)	Saline	4,242	Science building & renovations at Junior High School	\$1,842,000	29	\$62,108	14,700	N/A
Cabot	Lonoke	7,743	"M" building entrance and renovations	\$173,367	1	\$4,080	502	N/A
Cross County	Cross	720	Concession stand	\$24,585	0	\$0	900	\$27
Greenwood (1)	Sebastian	3,175	N. Main elementary renovation phase 2	\$454,960	7	\$21,875	0	N/A
Hamburg	Ashley	1,617	Bus garage	\$300,000	0	\$0	10,944	\$27
Hector (1)	Pope	703	Concession building addition, sidewalks and handrails	\$91,968	0	\$0	624	N/A
Jonesboro	Craighead	4,778	Visitor concession - High School	\$56,000	0	\$0	560	\$100
Mayflower (1)	Faulkner	843	High School cafeteria addition & renovation	\$951,562	12	\$12,218	11,236	N/A
Mount Ida (1)	Montgomery	576	Gymnasium & classroom building	\$2,505,059	22	\$173,226	43,633	\$57
Paragould (1)	Greene	2,654	High School science/tech, choral & PE addition	\$3,565,867	8	\$781,163	39,764	\$90
Searcy (1)	White	3,654	McRae Elementary cafeteria addition	\$1,227,372	12	(\$26,082)	9,384	\$131
South Side	Independence	1,359	Field house dressing room/training facility addition	\$150,000	1	\$2,546	4,618	\$32
White County	White	671	Administration building addition	\$62,947	0	\$0	795	\$79
White Hall (1)	Jefferson	3,076	Junior High School	\$7,524,098	5	\$15,018	100,000	\$75

Note: ADM - Average Daily Membership

N/A—Not applicable. A cost per square foot was not presented for these projects since the total project cost included expenses for renovations which did not result in additional square footage. Therefore, the resulting cost per square foot calculation would not be accurate.

(1) Indicates the district contracted with a construction manager to oversee the project.

Source: The information presented above was self-reported by the individual school districts and has not been audited by the Division of Legislative Audit.

