



Children and Family Justice Center Project Schedule at Risk



**Tina Rogers
Jane Vandenberg
Ben Thompson**

May 25, 2016

Executive Summary

Additional communication with the County Council about changes to scope and schedule are needed following the recently set project baseline for the Children and Family Justice Center project. This baseline shows completion of the new courthouse and detention building in early 2019, nine months later than anticipated last year. Cost forecasts are unchanged at \$212 million. The project oversight committee recently added the Alder Academy to the scope at an additional cost of \$2.9 million, the source of which is uncertain.



King County Auditor's Office

To Advance Performance and Accountability

Mission: Promote improved performance, accountability, and transparency in King County government through objective and independent audits and studies.

Values: Independence ~ Credibility ~ Impact

The King County Auditor's Office was created by charter in 1969 as an independent agency within the legislative branch of county government. The office conducts oversight of county government through independent audits, capital projects oversight, and other studies. The results of this work are presented to the Metropolitan King County Council and are communicated to the King County Executive and the public. This study is a non-audit service of the King County Auditor's Office and conforms to the office standards for independence, objectivity, and quality.



Children and Family Justice Center Schedule at Risk

Report Highlights

May 25, 2016

To save time and mitigate estimated construction cost increases, the Facilities Management Division (FMD) is pursuing design changes that could have future impacts needing County Council approval. The Children and Family Justice Center (CFJC) project continues to experience schedule delays due to challenges getting permits from the City of Seattle. FMD forecasts that it can still deliver the project for the total approved budget of \$212 million. The project oversight committee recently approved moving ahead with the design and construction of the Alder Academy, but not the shell and core of the two additional courthouse floors.

▼ Schedule

FMD has set the baseline schedule showing completion of the courthouse and detention building moved out approximately nine months from the project schedule prior to execution of the design build contract, due to a longer procurement period and more realistic review time to obtain permits from the City of Seattle. The courthouse and detention building is forecast to open early in 2019. Demolition of the existing structures, construction of the new parking garage, and final site work is scheduled to be done by April 2020, eight months later than the previous schedule.

▼ Scope

FMD has set the baseline scope of this project including one major addition to the Council-approved design-build contract, the Alder Academy. The source of funding for this recent addition, estimated to cost \$2.9 million is uncertain. The shell and core of two additional courthouse floors are not included in the baseline scope.

▼ Budget

The baseline budget was set at \$212 million, the appropriation amount approved by the County Council as the budget. It does not include the cost of Alder Academy; doing so would require additional budget appropriation. Despite FMD's work to control costs, schedule delays and other known risks could result in use of approximately half of the project contingency before construction. FMD is pursuing cost-saving design changes and evaluating whether the remaining contingency is adequate. Some changes deviate from contract specifications or may impact surplus county property and may need approval from the County Council.

Recommendations

We make recommendations that FMD seek appropriation authority from the County Council for the Alder Academy prior to moving beyond design of the additional scope. We also make recommendations to facilitate accountability and transparency on this and future capital projects.

● = No Current Concerns

▼ = Attention Needed

◆ = Corrective Action Needed

Table of Contents

Project Status..... I

Appendix: Implementation Status as of May 25, 2016 10



King County

Metropolitan King County Council

King County Auditor's Office

KyMBER WALTMUNSON, *King County Auditor*

King County Courthouse

516 Third Avenue, Room W1033

Seattle, WA 98104-3272

206.477.1033 Fax 206.296.0159

Email: KCAO@kingcounty.gov

TTY Relay: 711

www.kingcounty.gov/auditor

Alternative Formats Available Upon Request

Project Status

Section Summary

The Children and Family Justice Center (CFJC) project continues to face schedule challenges, scope changes, and potential cost increases. Facilities Management Division's (FMD) current schedule shows completion of the courthouse and detention building about nine months later than the previous project schedule, prior to the design-build contract execution. The estimated project cost remains \$212 million despite recently adding the Alder Academy to the scope of the project, estimated to cost \$2.9 million with the source of funding uncertain. Additionally, limited contingency and increases in construction cost estimates may require design changes or additional funds and County Council approval.

Schedule: Completion of courthouse and detention building shifted nine months later

Scheduled completion of the courthouse and detention building have shifted nine months, from April 2018 to January 2019, since our last report in early 2015. This shift is largely the result of extra time to make early design changes, a longer procurement period, and reflects a more realistic review time to obtain permits from the City of Seattle. Scheduled completion of the courthouse and detention building have moved nine months since our last report in January 2015. Early construction activities such as sewer line relocation and some abatement work, needed before demolition of the Alder Wing, could begin in mid-summer 2016. Start of construction on the rest of the project is dependent upon obtaining a Master Use Permit (MUP), then building permits from the City of Seattle, which may not occur on schedule according to FMD.

The design-builder¹ has finished 100 percent design drawings, and final reviews of the design by FMD are underway. Obtaining the MUP remains on the critical path of the schedule, meaning that delays in getting the permit beyond what is shown in the baseline schedule will delay completion of the project. Additionally, depending on the length of time it takes, further delay in permit issuance could have impacts on the project budget.

¹ The design-builder is Howard S. Wright, a Balfour Beatty company, selected by competitive evaluation of proposals and under contract with King County to design and build new facilities and complete the demolition of existing structures for the CFJC project.

Project Status

Exhibit A: The baseline schedule shows buildings delivered nine months later than anticipated in early 2015.

Milestone	Target from January 2015 Report	Baseline Schedule (current forecast)	Change in Schedule
Begin construction: Sewer Line Relocation Alder Wing Demolition Courthouse/Detention Construction	April 2016	July 2016 July 2016 December 2016	3 + months later
Substantially complete courthouse and detention building	April 2018	January 2019	9 months later
Substantially complete parking structure and final site work	August 2019	April 2020	8 months later

Source: King County Auditor's Office analysis; Children and Family Justice Center Project Oversight Report dated January 21, 2015; and FMD's baseline March 23, 2016

The project team is also working to satisfy three other precursors that must be finished before the County can give notice to proceed with construction to the design-builder.

1. The County Council mandated the County Executive to transmit an Economic Opportunity Employment Plan 90 days in advance of beginning construction to ensure diversity in the project workforce and facilitate achievement of design-build contract hiring goals. The County Council received the plan this April 4 clearing the way for construction beginning as early July 2016.
2. FMD must prepare for parking impacts that will begin with construction of the new courthouse and detention building. Working with King County Metro, the project has funded incentives to reduce employee parking demand at the campus during construction. Sixty of the 245 day-shift employees are participating, and FMD has observed a decrease in employee parking demand. Additionally, FMD is on track to have a valet parking vendor under contract in advance of construction to meet public and employee parking needs by fitting more vehicles in the undisturbed on-site parking areas.
3. The design-build contract requires the design-builder to have a Project Labor Agreement (PLA) with the local unions in place before construction begins. The design-builder anticipated having a PLA early this year, but it has not been successful to date in reaching agreement with the local unions. The County is helping to facilitate a PLA.

Project Status

Scope: **Alder Academy** **added to project**

FMD's addition of the \$2.9 million Alder Academy² to the CFJC project represents additional scope; however funding for the addition is uncertain. When the County Council approved the design-build contract, it authorized adding the Alder Academy at the proposed cost of \$2 million. This was conditioned upon having a binding agreement for full cost recovery from the Seattle Public Schools and separate appropriation authority.³

FMD did not move forward with design of the Alder Academy at the time the design-build contract was executed because of lack of progress in discussions with Seattle Public Schools. FMD directed that the conceptual design be included in the MUP application to preserve the future option to add the school to the project.

In March 2016, the project oversight committee approved the design-builder's current proposed price for design and construction of the Alder Academy despite a 45 percent increase to \$2.9 million.⁴ FMD reported that the design-builder's revised cost proposal anticipates higher levels of inflation for academy construction, which as part of the second phase of construction, would begin in 2019. FMD considers the cost proposal reasonable, because it reflects some added cost for accommodating final features in the overall building design, and is in line with proposals received from the two design-build firms who submitted proposals, and the work does not fully benefit from economies of scale.

FMD has authorized the design-builder to begin design work for the academy without having the scope addition or a separate appropriation approved by the County Council. FMD states moving forward on design now is necessary to preserve the proposed price and to meet the 2019 construction start. The County Executive continues to seek an agreement with the school district for recovering the county's costs to create replacement space for the Alder Academy in the new CFJC.

It remains uncertain when and if the school district will agree to fully reimburse the county's costs. The risk of exceeding the project budget can be reduced by not moving beyond design of the academy before there is greater certainty for the funding source. This would limit expenditures to approximately 10 percent of the proposed cost of the academy while

² Alder Academy is an alternative high school operated by the Seattle Public Schools within the secure environment at the existing facility. Providing replacement space for the academy in the new CFJC was not part of the original scope of the project.

³ Ordinance 17972 adopted February 2015.

⁴ The time period for accepting the \$2 million price offer expired July 5, 2015.

Project Status

producing a completed design for construction sometime in the future. Postponing the building permit application could limit spending money on fees and project team resources to obtain a permit that may expire before construction funding is identified.

Recommendation 8⁵

We recommend that the County Executive obtain appropriation authority from the County Council for the Alder Academy to confirm adequate available funding for construction before moving beyond design of the added scope.

The baseline scope does not include a potential addition to the design-build contract, the shell and core, for two additional floors on the courthouse. The project oversight committee recently decided not to pursue design of the additional floors, because of uncertainty of the outcome and timing for approval from the City of Seattle to increase the maximum allowable height to allow the additional floors on the building.

Budget:
Appropriations cover estimated costs except for added scope

Project cost estimate held to \$212 million, resulting from cost containment activities by FMD, although not reflecting Alder Academy scope addition. FMD set the baseline cost estimate, unchanged from the original \$210 million budget approved in 2012 plus \$1.96 million added by supplemental appropriation approved in February 2015. The County Council added this funding for a targeted hiring program described in the schedule section. To date, FMD has exercised effective cost control strategies to keep project costs within the estimated amount anticipated when voters approved the levy for the project in 2012. The project oversight committee has exercised restraint in approving scope additions. However, the baseline cost estimate does not include the estimated \$2.9 million cost of the Alder Academy recently added to the project scope.

FMD plans to deliver the project within budget with the available contingency. The baseline estimate includes \$9.4 million remaining in project contingency (down from \$13.2 million in earlier estimates). In addition, the design-build contract transfers much of the cost risk to the design-builder and includes a \$6.5 million contingency for the design-builder to use for unanticipated cost overruns.

⁵ Previous oversight reports contained seven recommendations. The December 13, 2013 CFJC report included recommendations 1 through 5, and the January 21, 2015 report included recommendations 6 and 7. See the Appendix for the status of implementation of these recommendations.

Project Status

FMD’s analysis of the project contingency indicates need for continued effective cost containment. In setting the baseline, FMD assessed the adequacy of the remaining project contingency given the major known project risks. Major known risks with potential cost impacts include appeals and protracted delay in obtaining the MUP and dealing with higher volumes of contaminated groundwater if excavation work is done during the wet-weather season. FMD predicts the County could use approximately half of the remaining project contingency if these risks materialize leaving the County with contingency funds of approximately 4 percent of the estimated construction costs. Combined with a 4 percent contingency controlled by the design-builder, the total contingency is less than the ten-percent contingency that most large county projects carry into construction. With effective management of the design build method of contracting, a lower level of contingency may be adequate.

FMD plans to continue to evaluate and advise the oversight committee on whether this level of contingency is adequate given other uncertainties and risks on the project. If risks materialize and impacts are more costly than estimated, the County Executive may need to seek additional appropriation later in the project to cover unforeseen costs.⁶

Exhibit B: Baseline cost estimate reflects additional \$1,955,000 appropriation, higher preliminary design costs, and expenditures through March 2016 representing 11 percent of budget.

Phase	Working Cost Estimate January 2015	Baseline Cost Estimate March 2016	Expenditures through March 2016
Preliminary design	\$5,035,268	7,711,111	7,505,556
Final design	14,162,661	13,121,463	10,206,729
Implementation	190,319,443	190,633,558	4,884,626
Close out	482,628	488,868	0
Total	\$210,000,000	211,955,000	\$22,596,911

Source: King County Auditor’s Office analysis, Auditor’s Office report January 21, 2015, FMD’s Baseline Cost Estimate March 23, 2016 and from the county’s financial system through March 2016

⁶ A supplemental appropriation of \$7.5 million in additional levy funds was approved by the County Council in February 2016, however it is not available for use on the current scope of the project. Expenditure of this supplemental appropriation is restricted by proviso P15 to Ordinance 18239 to only be encumbered after construction is completed and for activities to improve access to services intended to prevent youth involvement with the criminal justice system.

Project Status

The County is not obligated to pay the \$10 million increase in the design-builder's revised cost estimates. In February 2016, FMD received a revised cost estimate from the design-builder based on subcontractor quotes on 100 percent design development plans. The estimate exceeded the guaranteed maximum price by approximately \$10 million, which according to FMD, the County is not obligated to pay under the terms of the design-build contract. FMD describes that some areas of higher cost result from the design-builder's design are inefficient or exceed the county's specifications. FMD has agreed to approximately \$5 million worth of such cost saving measures without compromising the contract specifications.

The design-builder has identified ways to offset much of the remaining \$5 million in cost increases. For instance, FMD is considering the design-builder's proposal for a lower cost and simpler heating/cooling plant, that FMD says meets all the contract specifications but is different from the one proposed in the study provided to the County Council in July 2015. Other proposed changes do not meet the contract specifications. The County is not obligated to allow these changes, but FMD is evaluating the merits of the proposals. If the design-builder is not successful finding acceptable ways to bring costs within the guaranteed maximum price, the design-builder will need to draw upon the \$6.5 million design-builder's contingency or profit margin. Therefore, FMD's baseline cost estimate keeps the design-build cost at the \$154 million contract amount.

To save time and mitigate estimated construction cost increases, the project oversight committee approved design changes that could have future impacts and may need approval by the County Council.⁷ The design-builder has proposed several changes to the parking structure. FMD evaluated and the project oversight committee approved the changes on May 4, 2016. FMD recommended these changes in the parking structure, providing some deviation from the contract requirements, that are estimated to lower the design-builder's costs by approximately \$1 million. FMD stated that this will encourage the design-builder to keep its chosen subcontractors involved with the project rather than seeking lower prices from other subcontractors, which could impair quality.

We have not fully reviewed FMD's analysis and are concerned that these changes may have impacts that warrant consideration or approval of the

⁷ Ordinance 17304 was passed by the County Council in 2012 to provide for the ballot proposition for a tax levy to fund the CFJC project. It states, "The exact project specifications shall be determined by the county council."

Project Status

County Council. Construction of the parking structure is not scheduled to begin until 2019, so there is ample time to evaluate and fully vet these changes. Other changes are being made in permit applications to address the City of Seattle’s comments and avoid delays in permitting, with some potential to revise at a later date.

Exhibit C: Recent changes may have future impacts to the county.

Change	Potential Future Impacts
Reduced depth of excavation for parking structure to lower construction cost.	Reduces ultimate capacity of parking structure for future development, limiting future addition of one floor, rather than two, unless the city approves changes to existing height restrictions.
Changed shape of parking structure for more efficient use of footprint to lower construction cost.	Changes to circulation within parking structure. Increase surplus property by 1106 sf. FMD’s consultants believe the impact will be negligible and potentially positive.
Allow steel rather than concrete on some components of the parking structure to lower construction cost.	Will add to operating costs to paint steel components at an estimated cost of \$150,000 every 15 years. FMD’s life cycle cost analysis of this change shows it to be the lowest cost alternative overall, but adequate funding for the county’s future operating costs is uncertain.
Consider changing location of driveway off Spruce Street from west to east side of parking structure.	Could impact value of west surplus property parcel by eliminating potential to share access with parking structure if in the county’s interests.
Changed location of main public driveway off 12 Avenue 50 feet to the south to address permit review comments.	If the County is not successful gaining approval from the city for a better driveway location before construction of access in 2020, there would be a reduction in total sf of the west surplus property, which has not been quantified.
Adjusted a lot boundary to divide courthouse and surplus property to the north to expedite permitting.	Avoids need to add windows to the north side of the courthouse/detention building. Creates a separate, rectangular surplus parcel in northwest corner of property that is approximately 500 sf smaller than planned. FMD expects the change in value will be negligible.

Source: CFJC Oversight Committee meeting 5/4/16, and CFJC Auditor’s Office oversight meeting 4/29/16.

Recommendation 9 The County Executive should clearly communicate scope changes and their impacts to the County Council and confirm Council support.

FMD has some positive monitoring practices

FMD is effectively monitoring schedule and budget. FMD’s monitoring of schedule and budget is effective and using best practices. For instance, although not required by code to do so, the project is using earned value management to objectively monitor the project performance against its planned schedule and cost and estimate impacts of unplanned project

Project Status

development. FMD presents its forecasting and progress monitoring to the project oversight committee each month, and the committee is very engaged in the review, understands the information, and is attentive to trends. The project committee also provides input on mitigation actions taken to address areas of concern. FMD reports that using a sub-consultant audit firm to review pay requests from the design-builder, which the Auditor's Office recommended, has proven to be a worthwhile exercise. The audit firm's questioning of inappropriate pay items saves contract dollars for construction on this project and identifies language that should be clarified in future county contracts.

More should be done to improve transparency and compliance

Breaking out costs to show courthouse and detention costs separately would increase transparency. The design-builder contract documents and project accounting are organized such that estimates and costs for the courthouse and detention functions are no longer separately tracked. Since both functions are within the same building structure and they share common systems, such as the heating plant, FMD has not required the design-builder to break out costs by function. This is unlike how the planning level cost estimates were developed, in which the county's planned investment for each function was separately identified. Categorizing costs during the construction phase will provide the following benefits:

- identify what the County has invested in courthouse facilities compared to the investment in detention facilities
- collect data on the cost per square foot for construction of court and detention types of building specific to King County's experience⁸
- improve cost estimating for future county projects such as downtown civic campus planning, courthouse alternatives analysis, or future expansion of the Maleng Regional Justice Center.

Recommendation 10

Facilities Management Division should develop and implement a strategy to break out actual construction costs by detention and courthouse functional areas and to allocate the costs of shared building systems and project development costs.

The project baseline was set eight months later than what is required in King County Code delaying performance reporting on the county website. The project was well beyond the milestone where the county code required setting a baseline scope, schedule, and budget for accountability and

⁸ Industry data sources show that construction of detention facilities can be 40 percent higher per square foot than courthouse construction.

Project Status

reporting. Code requires a baseline be set and quarterly reporting begin at approximately 30 to 40 percent design, at the end of the preliminary design phase. Despite reaching this milestone in July 2015, FMD did not formally set the baseline until March 23, 2016. The design-builder's contract set a guaranteed maximum price for the contract work approximately one year ago, and the design-builder provided a 100 percent design development and cost estimate in February 2016, giving FMD more comprehensive and reliable information than usually available when required to set a baseline.

Not having a baseline also means that the CFJC project progress has not been part of the county's quarterly reporting available online. Unfortunately, the practice of not setting a baseline when required is not unique to this project nor to FMD. We have observed several large capital projects in other divisions where baselines were set later than expected by code, also resulting in delays in beginning quarterly online reporting, reducing transparency, and accountability.

Recommendation II

The County Executive should develop a mechanism to hold agencies accountable for establishing project baselines at the end of preliminary design phase work, consistent with county code.

Conclusion

FMD and the project oversight committee will need to continue to use effective cost control strategies and engage the County Council and City of Seattle officials to obtain policy input and timely approvals to avoid further delays and keep costs within the baseline budget and the project on schedule.

Appendix

Implementation Status as of May 25, 2016

This table reports on the status of implementation of recommendations from the previous oversight reports dated December 13, 2013 and January 21, 2015.

From Report Dated December 13, 2013			
#	Status	Recommendation	Status Detail
1	DONE	To ensure that expenditure monitoring is consistent with other county projects, we recommend that FMD's cost estimates and expenditure reporting separate the final design and construction phases.	The project working estimate and expenditures are shown in the county's adopted standard phases for capital projects. This provides FMD management and oversight entities more reliable information when assessing the project's cost and schedule performance.
2	PROGRESS	We recommend that as FMD develops their cash flow forecasting tool, they consult with the Oversight Committee, Finance and Business Operations Division, and council staff to ensure that the tool provides information useful for formulation of project and policy decisions.	FMD's expenditure forecasts are well developed and are refined based on the design-builder's current schedule. Revenue receipts are being monitored. To fully implement this recommendation, FMD needs to integrate forecasts of revenue receipts and expenditures to monitor how changes in project progress impact borrowing decisions.
3	DONE	We recommend that FMD transparently quantify the impacts of schedule risks to avoid over or under emphasizing the impact of delays on overall project outcomes.	As reported, FMD is using a cost of \$500,000 as the estimated impact per month of schedule delay. This has been useful in estimating the potential impact of known risks on the adequacy of project contingency.
4	PROGRESS	To maximize potential benefits from improved functionality and economy of operation at the new facilities, we recommend that the County Executive work with the Oversight Committee to continue to evaluate existing business processes and develop procedures in preparation for moving to the new buildings.	FMD has developed a list of county agency responsibilities associated with the project. The list includes coordination with user agencies during design, which could cover many, but not all, of the areas where business process evaluation and change could be beneficial. A specific example of progress is planning for how and when the county will select operators for housing units that will not

Appendix (continued)

From Report Dated December 13, 2013			
#	Status	Recommendation	Status Detail
			<p>be used for detention. To fully implement this recommendation the County Executive and the project oversight committee need to assign resources to examine priority business processes that either must change to function in the new facility, or if changed, would more effectively and efficiently deliver services in the new facilities.</p> <p>Implementation of the business process changes should be planned to maximize the benefits of the new facility.</p>
5	PROGRESS	<p>To ensure that the project continues on schedule, we recommend that the County Executive establish a well-defined and systematic communication process with the County Council.</p>	<p>The County Executive increased formal and informal communication with the County Council to obtain approval of the design-build contract. To fully implement this recommendation, the County Executive should maintain regular and timely communications with the County Council, beyond the project oversight committee, to avoid delays and prepare for future County Council approvals such as interlocal agreements, labor agreements, project interim borrowing, and changes to project scope.</p>

From Report Dated January 21, 2015			
#	Status	Recommendation	Status Detail
6	PROGRESS	<p>The County Executive should clearly communicate to the County Council what is known about the impacts of scope changes under consideration with the design-build contract including: changes to operating costs, the need for labor contract or policy changes, and changes to the value of surplus property on the site. For those impacts not quantified at this time,</p>	<p>Limited work has been done in this area. To fully implement this recommendation, the County Executive should analyze and communicate to the County Council the impacts of past and recent scope changes. These changes are listed in this report and the one published on January 21, 2015.</p>

Appendix (continued)

From Report Dated January 21, 2015			
#	Status	Recommendation	Status Detail
		the County Executive should advise the County Council of the planned timeline for analysis and additional communication.	
7	DONE	FMD should conduct and document a comprehensive lessons learned process focused on assessing permitting and regulatory options and identify changes to approach where needed to improve the effectiveness of obtaining future approvals.	Session held and draft written up. We have observed that the county's consultants are checking in with the City of Seattle, when city timelines and actions depart from expectations based on previous city guidance. Escalation of issues through consultants of higher "rank" occurs and has resulted in city staff engagement on solutions to unexpected technical issues. An example is using a Lot Boundary Adjustment to resolve an unintended consequence of removal of the county's short plat to subdivide the project site from the four surplus parcels. This quick resolution, if successful could save costly redesign and additional delay.

Status definitions:

DONE	3	Recommendations have been fully implemented Auditor will no longer monitor
PROGRESS	4	Recommendations are in progress or partially implemented Auditor will continue to monitor
OPEN	0	Recommendations remain unresolved Auditor will continue to monitor