



**KING COUNTY**

1200 King County Courthouse  
516 Third Avenue  
Seattle, WA 98104

**Signature Report**

**March 22, 2016**

**Motion 14593**

**Proposed No. 2015-0516.1**

**Sponsors McDermott**

1           A MOTION approving the delivery method for laboratory  
2           replacement report in response to the 2015/2016 Biennial  
3           Budget Ordinance, Ordinance 17941, Section 129, Proviso  
4           P6, as amended.

5           WHEREAS, the 2015/2016 Biennial Budget Ordinance, Ordinance 17941,  
6           Section 129, Proviso P6, as amended, states that \$650,000 of the appropriation for the  
7           capital improvement program shall not be expended or encumbered until the executive  
8           transmits a delivery method for laboratory replacement report, and motion that approves  
9           the report and the motion is passed by council, and

10          WHEREAS, the King County executive hereby transmits to the council a delivery  
11          method for laboratory replacement report and by this motion seeks approval of the  
12          delivery method for laboratory replacement report, and

13          WHEREAS, the delivery method for laboratory replacement report is submitted  
14          by the facilities management division to fulfill their respective proviso obligations;

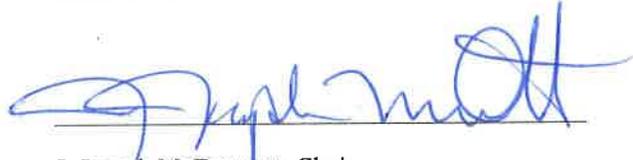
15          NOW, THEREFORE, BE IT MOVED by the Council of King County:

16           The delivery method for laboratory replacement report, Attachment A to this  
17 motion, is hereby approved.  
18

Motion 14593 was introduced on 12/14/2015 and passed by the Metropolitan King  
County Council on 3/21/2016, by the following vote:

Yes: 9 - Mr. von Reichbauer, Mr. Gossett, Ms. Lambert, Mr. Dunn,  
Mr. McDermott, Mr. Dembowski, Mr. Upthegrove, Ms. Kohl-Welles  
and Ms. Balducci  
No: 0  
Excused: 0

KING COUNTY COUNCIL  
KING COUNTY, WASHINGTON



J. Joseph McDermott, Chair

ATTEST:



Anne Noris, Clerk of the Council

**Attachments:** A. Facilities Management Division Delivery Method for AFIS Laboratory Replacement  
Report Proviso Response

Attachment A - 14593

Facilities Management Division  
Delivery Method for AFIS Laboratory  
Replacement Report  
Proviso Response

Ordinance 17941  
King County 2015/2016 Budget  
Section 129, Proviso P6

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## 1.0 Executive Summary

As required by King County Ordinance 17941, Section 129 Proviso 6, the Facilities Management Division (FMD) evaluated the various project delivery methods for the Automated Fingerprint Identification System (AFIS) Laboratory project based on the following criteria: 1) Alternative Public Works Contracting Procedures (Revised Code of Washington (RCW) 39.10 use criteria), 2) Cost Impacts, and 3) Schedule Impacts. Using these criteria, FMD evaluated three project delivery methods: design-bid-build (traditional), design build, and general contractor/construction manager (GC/CM) and determined the following:

- Design-Bid-Build (DBB): allowed by RCW 39.10 outright, has the lowest cost, and can be completed more quickly
- Design Build: does not meet the cost or critical input from constructor threshold of RCW 39.10, costs \$700,000 more than DBB, and would take about 4-5 months longer to deliver because of project approvals required by the state
- GC/CM: possibly allowed by RCW 39.10, costs \$600,000 more than DBB, and would take about 3-4 months longer to deliver because of project approvals required by the state
- Job Order Contracting: not allowed by RCW because of the \$350,000 project threshold for individual work orders.

For the above noted reasons FMD is recommending that the traditional Design-Bid-Build project delivery method be utilized for the AFIS Laboratory. This method would provide the best value to the County for delivering this project.

## 2.0 Project Background and History

King County's AFIS Program is a regional levy funded program that has provided staff and technology to support criminal fingerprint identification services to law enforcement agencies throughout the County since 1988. The program's latent fingerprint staff recovers, preserves, and examines fingerprint evidence from crime scenes and uses the information gathered to identify criminal suspects and testify to findings in court.

Since 2001, the AFIS program's latent fingerprint processing laboratory has been located at the County's Barclay-Dean building in the industrial area south of downtown Seattle. The existing laboratory facility is outdated and undersized for the program's workload, presenting efficiency, employee safety, and evidence security concerns. The 2013-2018 AFIS Levy identified up to \$11.5 million for a replacement facility, including \$9.3 million for planning, design, and construction, and \$2.2 million for property acquisition.

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In 2014, the County Council authorized the expenditure of \$730,431 for the preliminary design of the new AFIS Laboratory in Ordinance 17941 as planned for in the levy. However, the legislation included a proviso (P6) that limited expenditure for this project as shown below:

“Of the appropriation for capital project 1122048, AFIS laboratory replacement, \$650,000 shall not be expended or encumbered until the executive transmits a report on a delivery method for laboratory replacement and a motion that approves the report and the motion is passed by the council. The motion shall reference the subject matter, the proviso's ordinance, ordinance section and proviso number in both the title and body of the motion.

The report shall include, but not be limited to, the final recommended delivery method selected for replacing the laboratory. The report shall include a cost-benefit analysis for delivery methods considered and any anticipated timelines for design, permitting and occupancy associated with the selected delivery method.

The executive must file the report and motion required by this proviso by August 31, 2015, in the form of a paper original and an electronic copy with the clerk of the Council, who shall retain the original and provide an electronic copy to all councilmembers, the council chief of staff, the policy staff director and the lead staff for the budget and fiscal management committee, or its successor.”

In June of this year Facilities Management Division (FMD) requested an extension for the proviso response. The proviso response date was extended to November 30, 2015.

This report is submitted in response to this proviso.

### **3.0 Methodology**

#### **A. General Approach**

In developing this report, FMD first had to determine the location of a new laboratory and whether or not this would be in a County owned building or in a leased facility. Once a location was determined for the new laboratory, different project delivery methods could be analyzed. This included a general overview of the various methods, and an evaluation of any cost or schedule impacts of one method over another.

#### **B. Site Selection**

Following development of a needs assessment and a preliminary design program, staff from the County's FMD and the AFIS Program collaborated to identify a site for the new laboratory, beginning with development of site and location criteria. Once the site and location criteria were established, the County's existing inventory of properties (including tax title properties) was reviewed to determine if there was an existing site that could be utilized. A number of local agencies within the location criteria (including the cities of Seattle, Tukwila, Sea-tac, Renton, and Burien) were also contacted to review their surplus property inventory and to determine if there were any potential options for co-location.

Based on this review, no suitable sites were identified in the County's inventory or those of nearby cities, and none of the agencies contacted indicated they were in a position to consider a co-location project within the time frame of the AFIS project. Continuing the search, a broker was contacted to identify potentially suitable privately owned sites for sale or lease. Following an approximately one-month search, the broker identified and presented an initial list of eight sites for consideration, including six lease sites, one site for sale, and one site for lease or sale. The project team then visited and evaluated each of the eight sites and found three to be potentially suitable, including one site for purchase and two lease sites. Proposals were received for the two lease sites, but an offer by another party precluded further consideration of the purchase site.

Concurrent with receipt of the proposals for the lease sites, the project team became aware that the County's Black River Building in Renton, which had previously been declared surplus and marketed for sale, could potentially be available for development of the new AFIS laboratory and for other County uses. In reviewing the site and location criteria, it was determined that the Black River building met the project location requirements. It was also considered advantageous over lease or purchase sites because it precludes the need to acquire or lease another property (consistent with real property asset management plan (RAMP) policy) and the site is already connected to the King County Information Technology (KCIT) WAN network. A "test fit" study was performed which determined that the Black River Building could accommodate the AFIS laboratory program. A location recommendation will be included in the budget proposal transmitted to Council to allocate the AFIS levy resources for the replacement facility.

### **C. Analysis of Project Delivery Methods**

The project delivery methods considered for the AFIS Laboratory Replacement Project include the traditional public works contracting method (also referred to as Design-Bid-Build) authorized under RCW 39.04, as well as the three Alternative Public Works Contracting Procedures authorized in RCW-39.10, which include:

- Design Build (DB)
- General Contractor/Construction Manager (GC/CM),
- Job Order Contracting (JOC) procedures.

Alternative Public Work Contracting Procedures may only be used in certain specialized applications and require approval of the Washington State Capital Projects Advisory Review Board (CPARB) Project Review Committee (PRC). Due to the high cost of financing for a relatively small project, the lease-leaseback was not included in this analysis. Each of these procedures is summarized in the following sections.

#### **C.1 Design-Bid-Build**

The Design-Bid-Build method is the most conventional and frequently used method of project delivery public work projects. In this process, the owner 1) establishes their program, 2) selects their Design Team, 3) has the design developed under a professional services contract, and then 4) bids the work publically. It is a linear process wherein the design develops incrementally with the Owner having the

ability to review, reconcile, and approve or revise it at multiple milestone review points as the design is refined. Plans and specifications are completed by the Design Team, and the Owner establishes and manages a bid process for the work. Contractors submit bids based upon the contract documents and a construction contract is awarded to the lowest responsible, responsive bidder. The design and construction phases are not intended to overlap in this model. The method is most successful on projects that do not contain complex technology, phasing, or schedule logistics, or other similar unique project elements. Relative advantages and disadvantages of the Design-Bid-Build method are summarized in Table 1.

**Table 1. Advantages/Disadvantage of D-B-B**

Advantages of Design-Bid-Build Method	Disadvantages of the Design-Bid-Build Method
<ul style="list-style-type: none"> <li>• Familiar delivery method to Owners, Designers, and Contractors</li> <li>• Non-alternative method does not require special approval from State.</li> <li>• Relatively straightforward process to manage</li> <li>• Owner has control over the program and design process with multiple touch points for validation and reconciliation with established project objectives.</li> <li>• Optimizes bidding opportunities for contractors and subcontractors including small, disadvantaged, and minority businesses.</li> <li>• Lowest construction price is established in an open, competitive environment.</li> <li>• Both Design Team and Contractor are accountable to Owner</li> </ul>	<ul style="list-style-type: none"> <li>• Linear process. May not support accelerated schedule demands.</li> <li>• No Design Phase input from Contractor on Project Planning, Budget, or Estimates</li> <li>• Actual construction price not established until bidding is complete. If bids exceed available construction funds, the project could require redesign or rebid efforts and create delays in execution.</li> <li>• Limited ability to screen the quality of contractors and subcontractors bidding the project.</li> <li>• Low bid dynamic can foster adversarial relations between parties and increase the probability for construction disputes</li> <li>• Change Orders and Claims may increase final project cost</li> <li>• Project Management reliant on Owner's business systems which may not adequately provide essential support</li> <li>• Construction Risk held primarily by Owner since he is relying on the quality of the bid documents in administering the contract.</li> </ul>

**C.2 Design Build**

In the Design Build method, the contractor and the design team are one entity, hired by the Owner to deliver a complete project. The intended benefit of this approach is to consolidate the responsibility for

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the project quality and performance with a single party, which can minimize potential conflicts between the designer and builder. This approach is also intended to allow the Design/Builder the discretion to solve project requirements in ways that possibly save money or time, or add other amenities by applying their own experience and innovation to the project solution. Under RCW 39.10.300, the design-build procedure may be used where one of the following applies:

- The total project cost exceeds \$10 million
- Construction activities are highly specialized and the approach is critical in developing the construction methodology
- The project provides opportunity for greater innovation or efficiencies between the designer and the building
- Significant savings in project delivery time would be realized

The DB method may also be used for constructing parking garages (regardless of cost) and for portable facilities, pre-engineered metal buildings, and modular buildings. When certain criteria are met, the method may also be used for projects with a total cost of between \$2 million and \$10 million.

The process for selecting a Design/Build Team (or Design/Builder) is multi-phased and includes solicitation of initial responses (via a *Request For Qualifications* solicitation) to obtain the prospective team's qualifications for planning, designing, managing and building construction projects. The second step of the selection process consists of soliciting scope and pricing proposals (via a *Request for Proposals* solicitation) for delivering a project that complies with the programmatic and functional requirements of the building specified in the RFP provided by the Owner. In many cases, the final selection of the successful Design/Builder may be based on the proposal deemed to provide the "best value" to the owner rather than merely the least cost (combination of quality, amenities, special features, and price).

Ultimately, a guaranteed maximum price (GMP) is provided by the D/B as a result of their proposal and acceptance by the Owner. The D/B then executes the balance of the design, secures permits, and constructs the project. The Owner's review and input during the design and construction phases is focused (or limited) to compliance with the project requirements and the proposal commitments. This subtle nuance of the methodology can be considered a primary shortcoming of the delivery option since the Owner's *control* of the design can be quite limited. To address this issue "bridging" is an additional and optional step in the design-build process wherein the owner engages a designer to develop schematic design documents, specifications and/or performance standards that provide the basis for design and establish expectations for design and construction of the project prior to the selection of the design build contractor." Relative advantages and disadvantages of the DB method are summarized in Table 2.

**Table 2. Advantages/Disadvantages of D-B**

Advantages	Disadvantages
<ul style="list-style-type: none"><li>• Single point of accountability for design and construction. Eliminates change orders for design errors and omissions.</li></ul>	<ul style="list-style-type: none"><li>• Owner must have a clear idea of scope and concept before selection.</li><li>• Bridging (an additional and optional step in the</li></ul>

<ul style="list-style-type: none"> <li>• Project requirements are established by the public agency</li> <li>• Selection of contractor based upon qualifications, experience and team capabilities</li> <li>• Can enable fast track delivery and possibly shorter overall schedule durations - construction begins before design is complete</li> <li>• Guaranteed price early in the process</li> <li>• Price tends to match quality (also a disadvantage)</li> <li>• Early GMP facilitates alternative financing methods</li> <li>• Construction risk with A/E / Builder except when there is a tenant improvement allowance as part of the GMP</li> </ul>	<p>design-build process where the owner engages a designer to develop schematic design documents, specifications and/or performance standards that provide the basis for design and establish expectations for design and construction of the project prior to the selection of the design build contractor) required the more complex the project becomes or the owner/user control of design cannot be relieved. The more extensive and comprehensive the bridging becomes, the more it works against many of the cost and schedule advantages of the process</p> <ul style="list-style-type: none"> <li>• Owner programming and decision-making forced into start of program and limited ability to change over the course of the development</li> <li>• Owner not a party to the checks and balances between the Design Team and Builder. Difficult for the Owner to influence quality/cost trade-offs</li> <li>• Quality can range because design/build team must only meet minimum criteria standards</li> <li>• Difficult for Owner to determine whether the best price has been achieved for the work.</li> <li>• Initial costs possibly higher than traditional bid due to increased contractor risk, reduced competition in pricing of contractor overhead, fee and sub-contract costs.</li> <li>• Changes difficult to make once construction begins, due to phased construction and cost driven, inflexible budget.</li> <li>• Over-emphasis on price may compromise quality.</li> <li>• Design is completed after GMP is given</li> <li>• Price tends to match quality</li> <li>• Must develop justification and get State approval to move forward as alternative construction delivery</li> </ul>
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**C.3 Construction Manager At-Risk (General Contractor/Construction Manager)**

In the GC/CM method, the Owner selects and contracts directly with a Design Team (as is done in the conventional Design-bid-build approach), but also selects the construction general contractor and construction manager (GC/CM) using a qualifications-based process. As specified under RCW 39.10.340, the GC/CM method may be utilized when at least one of the following is met:

- The project involves complex scheduling, phasing, or coordination;
- The project involves construction at an occupied facility that must continue to operate during construction;

- Involvement of the GC/CM is critical to the success of the project;
- The project encompasses a complex or technical work environment;
- The project requires specialized work of a building of historic significance;
- The project is (and the public body elects to procure the project as) a heavy civil construction project.

Typically, this selection process is multi-phased and includes an initial response (via an RFQ solicitation) that presents the contractor qualifications for building, planning, and managing construction projects (CM). The second step of the selection process (RFP) consists of interviews and presentation of a pricing proposal for construction (fee and known general conditions costs) and a preconstruction service proposal for providing construction planning input during the design phase (cost estimates, phasing plans, contracting strategy, scheduling, etc.). The GC/CM entity that is chosen by the owner through this process also contracts directly with the owner. Qualifications-based selections are also allowed for Mechanical and Electrical Subcontractors under the Washington State GC/CM legislation.

During the design phase, the GC/CM and the Design Team collaborate with the Owner to refine the design and estimate its cost, plan its logistics, and fix its schedule. Ultimately, a Maximum Allowable Construction Cost and Total Contract Cost are negotiated and fixed in a construction phase contract between the Owner and the GC/CM. The total contract cost includes the fixed amount for the detailed specified general conditions work, the negotiated maximum allowable construction cost, the negotiated support services, and the percent fee on the negotiated maximum allowable construction cost. This cost cannot be changed except to account for changes in the work or variances in the conditions stated in the GC/CM's pricing as agreed with the owner.

When sufficiently developed for bid, the "construction packages" containing the detailed information on the construction components are bid publically, by the GC/CM. The subcontractors with the successful bids on the construction packages then contract with the GC/CM for the performance of their work and the GC/CM is responsible for delivering the construction in largely the same fashion as with conventional bidding. Relative advantages and disadvantages of the GC/CM method are summarized in Table 3.

**Table 3. Advantages/Disadvantages of CC/CM**

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• Has become a familiar alternative delivery approach after several years of use and refinement in Washington</li> <li>• Owner selects Design Team and GC/CM separately and allows for collaboration between Owner, Design Team, and Contractor</li> <li>• Selection of contractor based upon qualifications, experience and team characteristics. The same is true for major Mechanical and Electrical subcontractors under certain conditions</li> </ul>	<ul style="list-style-type: none"> <li>• Can be difficult for Owner to validate cost input during design or determine whether the most competitive price has been achieved for the work</li> <li>• First cost construction pricing tends to be higher than traditional bid due to reduced competition in pricing of GC/CM overhead, fee, and inclusion of project construction contingency in pricing</li> <li>• Actual costs can increase due to exclusions, assumptions, and allowances used in MACC</li> </ul>

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<ul style="list-style-type: none"><li>• Contractor provides design phase assistance in budget, schedule, constructability, and planning</li><li>• Design phase estimates transition into construction phase pricing (continuity and accountability)</li><li>• Possibly faster schedule delivery than tradition bid since "fast track" construction or early phase starts are possible</li><li>• Ability to obtain pricing guarantees earlier than with tradition bid. Generally more conducive to maintaining cost stability.</li><li>• Provides improved ability to manage change in design and scope</li><li>• Potentially reduced number of changes and claims once construction commences</li><li>• Savings incentives are possible</li><li>• Both Design Team and Contractor Accountable to Owner</li><li>• Construction risk held by contractor once GMP established</li></ul>	<p>pricing and in scope changes</p> <ul style="list-style-type: none"><li>• Can be misinterpreted by agencies as easier to manage and/or providing "guaranteed" fixed cost stability</li><li>• Requires owner management familiarity with the process for ultimate success</li><li>• Must develop justification and await approval by the State of Washington</li></ul>
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### ***C.4 Job order Contracting (JOC)***

Under the Job Order Contracting process, a contractor is selected through a competitive process for a fixed period, indefinite quantity delivery order contract which allows for use of negotiated work orders for public work projects. However, the maximum total dollar amount that can be awarded under a Job Order contact is \$4 million per year over a maximum of three years, and the maximum amount for individual work order is \$350,000. Work orders can include architectural and engineering services, but only if they specifically associated with the work of the individual work order. All work orders issued for a single project shall be treated as single work order in terms of the dollar limit. Because of the dollar limits on the Job Order contracting are far below the estimated costs for design and construction of the AFIS Replacement Laboratory, it is not considered a feasible method of project delivery.

### **D. Delivery Method Evaluation & Selection**

Evaluation and selection of a delivery method for the AFIS laboratory project included 1) reviewing applicable Revised Code of Washington (RCW) criteria, 2) comparing costs differences between the methods, and 3) comparing schedule differences for each method. The evaluation of these three areas is indicated in the following paragraphs.

#### **D.1 Contracting procedure use analysis**

Applicable use criteria for each of the contracting procedures considered for the AFIS laboratory were described in the previous sections and also are summarized in Table 4, which also indicated whether the criteria applies to the AFIS laboratory replacement project.

##### D1.1 Design-build

The RCW allows the use of the design-bid-build approach for all public work projects without limitations.

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## D1.2 Design-build

For the design-build method, the project did not appear to meet the initial criteria that the total project value exceed \$10 million. While the total project cost was previously estimate at \$11.5 million, an amount of \$2.2 million was allocated for property acquisition. Deducting this amount (based on the assumption the project will be developed at the Black River site) yields a presumed project cost of \$9.3 million. However, under RCW 39.10.300 public agencies may still use the procedure for projects between \$2 million and \$10 million when one of the following three criteria apply:

1. Construction activities are highly specialized and a design-build approach is critical in developing the construction methodology.
2. The project provides opportunity for greater innovation or efficiencies between the designer and the builder.
3. Significant savings in project time would be realized.

For the first criteria above, the construction activities for the AFIS laboratory are not considered highly specialized. While the laboratory itself is of a specialized design, it can be constructed using routine carpentry, electrical, mechanical, and plumbing techniques.

For the second criteria, all projects can benefit from innovation and efficiencies between the designer and builder. However, the successful delivery of the AFIS laboratory will not depend on those criteria alone as much of the specialized equipment that will be used in the project would be purchased by the county.

For the third criteria, no significant time saving would be anticipated using the design-build procedure. Such savings are typically realized through the ability to begin construction (usually site work), while building design and permitting are still in process. The AFIS laboratory project does not have a significant site work component, so any such saving would be considered minimal.

## D.1.3 General Contractor/Construction Manager

For the General Contractor/Construction Manager method, the only one of the five use criteria that would reasonably apply would be location at an occupied facility that must remain in operation during construction. The Black River building currently houses the County Assessor's Office, which would need to remain in operation. However, the Assessor's Office is located in a separate wing of the Black River building and construction of the laboratory would have minimal impact. Other tenants may also be located in the building by the time the AFIS laboratory begin construction, but construction impacts can be minimized through scheduling noisy or vibration inducing activities after hours.

**Table 4. Contracting procedure use summary.**

<b>Delivery Method</b>	<b>Use (RCW 39.10)</b>	<b>Applies to AFIS Lab (yes/no/possibly)</b>	<b>Comment</b>
<b>Design-bid-build</b>	All projects	Yes	DBB is not an alternative delivery method and is the most commonly used procedure for delivery of public work. FMD is familiar with process and

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			has used extensively.
<b>Design-build</b>	Construction activities are highly specialized and the approach is critical in developing the construction methodology.	No	Not applicable. While the AFIS lab provides a specialized purpose, the construction methods, materials, and procedures are not specialized.
	The project provides opportunity for greater innovation or efficiencies between the designer and the builder	Possibly	Project could provide some opportunity for innovation/efficiencies. However, use of existing building will somewhat constrain these opportunities.
	Significant savings in project delivery time would be realized	Possibly	Shorter project delivery time is traditionally one of the key benefits of DB, in that separate procurements are not needed for design and construction, and some construction activities (usually site work) may be able to begin prior to completion of design. However, the time savings would be offset to some degree by the time required for 1) application, review, and approval by the Capital Projects Advisory Review Board (CPARB), and 2) preparation, issue, and review of separate Request for Qualifications (RFQ) and Request for Procurement (RFP) documents. In addition, the project does not have significant site work components that could begin prior to completion of design and building permits.
	Project is a parking garage, modular or pre-fabricated building	N	Not applicable.
	Total project cost >\$10M	N	Project cost is anticipated to be <\$10M.
<b>General Contractor/ Construction Manager</b>	The project involves complex scheduling, phasing, or coordination;	N	Not applicable. Construction is anticipated to occur in a single phase.
	The project involves construction at an occupied facility that must continue to operate during construction	Yes	Building will be occupied during construction. However, construction will not occur within the occupied areas, and it is expected that construction impacts can be reasonably mitigated using the conventional DBB method.
	Involvement of the GC/CM is critical to the success of the project;	N	Not applicable. Project can be successfully delivered via the traditional D-B-B method.
	The project		

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	encompasses a complex or technical work environment;	N	The laboratory will serve a technical and specialized function, but construction methods and materials are relatively standard.
	The project requires specialized work of a building of historic significance;	N	The subject building is not historically significant.
	The project is (and the public body elects to procure the project as) a heavy civil construction project.	N	The project is not a heavy civil construction project.
<b>Job Order Contract</b>	Project cost <\$350,000	N	Project cost exceeds JOC threshold.

### **D.2 Cost Analysis**

Costs for each of the delivery methods were developed using FMD’s standardized Capital Improvement Project (CIP) estimating form. Included are the estimated costs for design, permitting, construction, moving, equipment and furnishings, contingency, administration (project management), and public art (1%). For the purposes of this report, cost estimates for the design-build and GC/CM methods were compared to the cost for the traditional design-bid-build method, which was used as the baseline. The estimated total project costs for each of the methods are presented in Table 6 and are summarized as follows:

**Table 5. Cost Summary of Project Delivery Methods**

<b>Method</b>	<b>Estimated project cost</b>	<b>Difference (from baseline)</b>
Design-bid-build (baseline)	\$9.1 to \$10.1 million	\$0
Design-build	\$9.7 to \$10.7 million	+\$600,000,
General Contractor/ Construction Manager	\$9.7 to \$10.7 million	+\$600,000

In summary, the costs for both of the alternative delivery methods were higher than the design-bid-build method. The reasons for the higher costs associated with the alternative delivery method include a number of cost items not typically included in the traditional design-bid-build method. These costs include:

- **Cost of a project management consultant:** Because FMD does not routinely use these delivery methods, the project management consultant would be needed to assist FMD with obtaining CPARB approval for the project, and to assist with procuring and administering the project contracts.

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- Cost of pre-construction services: Both of the alternative delivery methods would include pre-construction services by the Contractor during the design phase that would not be incurred using the Design-Bid-Build method.
- Honorariums: The design-build procurement process typically provides for honorarium payments to the finalists that submitted responsive proposals but were not awarded the design-build contract. (GC/CM projects do not have this expense)

**Table 6. Project Delivery Procedure Cost Comparison**

	Design-Bid Build	Design-Build	GC/CM
<b>DESIGN</b>			
Basic A/E Fee	\$640,023	\$640,023	\$640,023
Add. Services (incl. services during construction)	\$133,500	\$133,500	\$133,500
Reimbursable	\$12,625	\$12,625	\$12,625
Total - Design Cost	\$786,148	\$786,148	\$786,148
<b>CONSTRUCTION</b>			
Max. Allowable Construction Cost (MACC)	\$6,167,428	\$6,167,428	\$6,167,428
Sales Tax	\$585,906	\$585,906	\$585,906
Building Permit Fees	\$92,511	\$92,511	\$92,511
Commissioning	\$25,000	\$25,000	\$25,000
Moving Cost	\$50,000	\$50,000	\$50,000
Telephone Cost	\$3,500	\$3,500	\$3,500
Data Communications Costs	\$10,000	\$10,000	\$10,000
IT Project Manager costs	\$675	\$675	\$675
Pre-Construction Services During Design	\$0	\$61,674	\$61,674
Project management Consultant	\$0	\$431,720	\$431,720
DB Procurement Honorarium	\$0	\$30,837	\$0
Special Inspection & Testing Fee	\$46,256	\$46,256	\$46,256
Printing Cost (Bid Documents)	\$33,134	\$33,134	\$33,134
Total - Construction	\$7,014,410	\$7,538,641	\$7,507,804
<b>EQUIPMENT &amp; FURNISHINGS</b>			
Total 04 - Equipment & Furnish. Cost	\$148,633	\$148,633	\$148,633
<b>CONTINGENCY</b>			
Project Contingency @ 10%	\$815,737	\$874,970	\$872,664
<b>COUNTY FORCE ADMINISTRATION</b>			
Project Management Time*	\$208,179	\$276,275	\$284,058
<b>1% ART</b>			
	\$88,245	\$94,760	\$94,507

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<b>TOTAL PROJECT COST</b>	\$9.1 - \$10.1M	\$9.7 - \$10.7 M	\$9.7 - \$10.7 M

\*Additional County project management time would be incurred for procurement of the project management consultant and to coordinate the RFP processes for the design-build or general contractor/construction manager team.

### **D.3 Schedule Analysis**

Project schedules for each of the three delivery methods from the initial Notice to Proceed to Substantial Completion are summarized below:

**Table 7 Schedule Summary of Project Delivery Methods**

<b>Method</b>	<b>Estimated Project Duration to Closeout (months)</b>
Design-bid-build	25
Design-build	30
General Contractor/Construction Manager	28

In summary, both of the alternative delivery methods are expected to result in longer timelines for project delivery than the traditional design-bid-build method. The primary reasons are similar those attributable to the higher estimated costs, and include the increased time needed to procure a project management consultant, obtain CPARB approval, and to issue the RFPs for the design-build or general construction manager team.

#### **4.0 Recommendation and Timeline**

Based on the analysis presented in the previous section, FMD recommends the design-bid-build delivery method for the AFIS Laboratory Replacement project. Key to this recommendation is the following factors:

- **Not a Specialized or Complex project:** The two alternative delivery methods considered can be beneficial over the traditional design-bid-build method for certain uses when a high level of collaboration is needed between the designer and the contractor to insure the success of the project. Such projects are generally highly specialized or technical in nature and/or involve complex scheduling or phasing. While the AFIS laboratory will serve a specialized function, its design and construction are not highly specialized and the project does not clearly meet the use criteria for the design build and general contractor/construction manager procedures under RCW 39.10. FMD believes the project can be delivered successfully through selection of a qualified design team and responsive bidder via the traditional design-bid-build method. The additional costs and time that would be required to utilize an alternative delivery method do not appear to be warranted.
- **Cost:** The alternative delivery methods are expected to add more than \$600,000 to the project.
- **Schedule:** The alternative delivery methods are expected to add three to five months to the delivery of the project.
- **Experience:** While FMD staff have experience in the alternative delivery methods, FMD project management staff have considerably more experience with the traditional design-bid-build delivery methods. This experience will help insure efficiency during the process and minimize

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the potential for change orders through careful selection of a qualified consultant design team, ensuring all program requirements are included in the design, carefully reviewing construction documents for completeness and accuracy. Furthermore, the Black River building is relatively new (25 years) and the County has complete as-built drawings. FMD's knowledge and familiarity with the building will help mitigate the potential for changes due to unforeseen conditions.

The timeline for delivery of the AFIS Replacement Laboratory is illustrated below, with the goal of completing the project within the period of the 2012-2018 AFIS Operational Levy.

**Timeline for Delivery – AFIS Laboratory Replacement (Design-Bid-Build)**

Activity	2016				2017				2018			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Motion approving report												
Advertise, Select A & E Team												
Design & Permitting												
Bidding												
Construction												
Move-in												
Closeout												