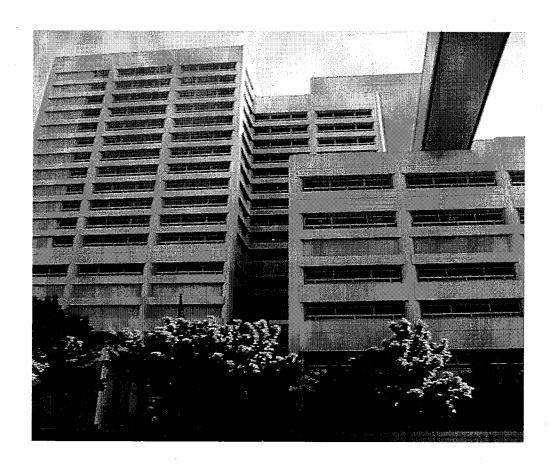
# **KING COUNTY**

# MONTHLY REPORT ON CONSTRUCTION

# **FEBRUARY 2006**



KING COUNTY CORRECTIONAL FACILITY INTEGRATED SECURITY PROJECT

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#### **SECTION 1 – EXECUTIVE SUMMARY**

This monthly report covers the status of the KCCF/ISP for the month of February 2006. The project was approximately 74% complete at the end of this period.

#### **SCHEDULE**

The Notice-to-Proceed date was September 7, 2004 and the revised project Substantial Completion date is April 23, 2007. The completion date is based upon the final outcome of negotiations for a time extension (as noted in previous Monthly Reports) that added 225 Calendar days to the contract time. The following table summarizes the revised milestone dates for the project.

<b>Project</b>	Milestone	<b>Events</b>
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Milestone Activity	Original Milestone Date	Revised Milestone Dates
Contract NTP	09.07.04	09.07.04
FAT 1 Testing Acceptance	03.03.05	10.27.05
FAT 2 Testing Acceptance	05.24.05	02.23.06
CCR Acceptance	07.05.05	02.09.06
Move Inmates off 11 <sup>th</sup> Flr.		11.07.05
11 <sup>th</sup> Floor Acceptance	07.18.05	02.21.06
Complete New ITR	10.18.05	03.15.06
Floor- by-Floor Const.	07.26.06	03.28.07
Project Substantial Completion	09.07.06	04.23.07

It should be noted that there was no new schedule growth between June 2005 and December 2005 (six months). The following critical milestones have also been achieved successfully:

- ♦ ITR activities were moved out of their previous locations on the 3<sup>rd</sup> Floor and into temporary West Wing Space. This move marked the first major operational shift for users in support of construction.
- The 3<sup>rd</sup> Floor demolition work for the new ITR was complete by the end of October and construction of the new and expanded ITR concept is within 2 months of completion,
- ◆ Factory Acceptance Testing (FAT)-1 for the electronic security system was completed successfully in October, equipment installation began in November, and the initial phase of system cutover began in December.
- ♦ Inmates were transferred off of the 11<sup>th</sup> Floor in early November into temporary space in the West Wing and construction work began on the first inmate floor (11<sup>th)</sup> at that time.
- Cutover of the electronic security system components continued throughout December and January.

Good progress continued throughout the month of February, although newly discovered existing conditions in January impacted the contractor's ability to fully maintain the schedule through that month. While NO new schedule growth occurred in February the 19 (working) day impact reported in the previous month was not resolved either. The County's management team agrees that some level of impact was encountered due to these discoveries, but is yet to receive sufficient justification to support the full 19 day delay.

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The contractor submitted a recovery schedule in January that would succeed in holding the current schedule milestones by shifting their work sequence. However, the modified work sequence in this proposal was not acceptable operationally for DAJD, and this schedule was rejected by the County. Negotiations continued throughout February and a modified alternative was developed that limits the schedule extension to approximately one (calendar) month but also requires some shift in the testing sequence for the work. This alternative is currently under review by the County.

#### COST/BUDGET

The budget summaries below delineate project costs between the current ISP project (including Jail Health Phase I, the Expanded Intake Transfer and Release (ITR), the Accelerated Major Maintenance Reserve Fund (MMRF) components, and the Shower Replacement Project) and the pending JHS Phase II improvements. **Table 1** tracks project commitments against the established budget, and adjusts/reports the impact of the previously reported "unfunded" \$1,823,323. Project changes continued to impact the budget in February and the **funding demand forecasted for pending changes will place the total cost of changes in excess of the original Contingency Budget on the project.** A summary of budget "transfers" from the Contingency budget category is also included in **Section 4** of this report for further reference.

As stated in previous Monthly Reports, an additional, supplemental, budget request is being prepared for submittal to Council in coming weeks. This request is intended to reestablish sufficient contingency funds to accommodate the anticipated costs to complete the project. Refinement of the revised funding demand is now complete also and the anticipated funding demand is reflected in Table 1. This process used historical data on conditions encountered to-date and near-term work as benchmarks to refine the range of anticipated new costs. This cost refinement reflects the following:

- Ongoing impacts of existing conditions in the facility. This includes such items as wiring irregularities that continue to be encountered. Many of these irregularities require significant re-routes and costly time impacts to rectify. Others must be resolved to satisfy code and sustain the long term operation of the new system. The trend of discovery of such conditions continues to be steady. These elements account for approximately \$740,000 in current and estimated change order exposure for identified impact conditions.
- Security system installation and cutover will run for several months. As each step in this process is achieved the degree of uncertainty related to unforeseen conditions is reduced. Nonetheless the KCCF operations will rely, at least partially, on the existing system operation until the project is finished. This system is obviously one of the "weakest links" in the current facility and any number of corrective actions could become necessary to support the interim interface between systems over the remaining course of the project. Part of the cost identified above is related to existing condition elements discovered during cutover.
- Schedule impact & Project Complexity. The schedule has expanded by 6 months officially and is anticipated to extend an additional month due to the impacts noted in January. Similar circumstances could occur in future months as well as a result of unforeseen conditions or similar events noted above. The "soft" cost impact of the current schedule expansion for ongoing design and outside management services is forecasted at \$700,000. These costs account for both the additional time project is taking and the complexity of issues encountered. The complexity factor has dictated a much more intensive level of effort on both the design and management team over the course of the work.
- Expanded IT Scope. The scope of telephone and data distribution changes to support the project was not specifically known at the time the project was designed and an allowance of \$200,000 was established for this cost category in the project budget. Changes to the telephone and data infrastructure include modifications to accommodate temporary moves (inmates, JHS, and DAJD Operations) as well as final reconfigurations. This work is performed by outside contractors under the management of the County's IT

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Department, as coordinated through DAJD. Based upon the current expenditures to date, it appears that \$300,000 in additional funds will be required to deliver the full range of revisions needed to support this project.

- Construction (Labor and Material) by County Workforce. All of the facility changes needed to accommodate the interim moves for DAJD have been performed by County Forces. Additionally, the County Trades have been enlisted to perform work related to correcting unforeseen existing conditions on a number of occasions in an effort to avoid project impacts to the Contractor (i.e. separation of Low Voltage and High Voltage wiring at exiting doors with electronic controls). There has been a standing policy to execute this work during regular work hours and utilize permanently-assigned trade staff to minimize costs to the project. Material costs, premium hours, and added staff to meet schedules have added, and will continue to have cost impacts on the project and \$500,000 is the forecasted demand.
- **Project Contingency forecast.** Based upon conditions encountered to date and the amount of work left to complete, an additional \$750,000 should be allocated to address contingency cost elements through the balance of the project.

The costs noted above total \$2,990,000 and are included in the supplemental budget request that is forthcoming to Council.

Table 1
ISP/JHS I/ITR/MMR/SRP Budget Status Summary

Budget Item	Bı	Budget		Current Status		Variance ver/(Under)	Comments
Design & Admin. \$ 3,196,88	3,196,887	\$	3,919,974	\$	723,087		
Construction	\$ 2	0,268,326	\$	2,3808,494	\$	3,540,168	
Contingency	\$	2,019,995	\$	0	\$	(2,019,995)	Includes CO reserve funds
Utilized Conting.	\$	_	\$	2,019,995	\$	2,019,995	
Art	\$	228,150	\$	228,150	\$		
Subtotal	\$ 2	5,713,358	\$	29,976,613	\$	4,263,255	
Conting. Transfers	\$	-	\$	(2,019,995)	\$	(2,019,995)	Applied to other cost categories
Subtotal	\$ 2	5,713,358	\$	27,956,618	\$	2,243,261	Current budget shortfall (excluding \$1.8M correction)
JHS Phase II	\$ (	(1,823,323)		-		V 161	Funds Held for JHS Phase II
Subtotal	\$ 2	3,890,035	\$	27,956,618	\$	4,066,584	
DAJD Ops	\$	4,340,816	\$	4,340,816	\$	-	
JH Ops	\$	511,862	\$	511,862	\$	-	
Subtotal	\$	4,852,678	\$	4,852,678	\$	· -	
Total	\$ 2	8,742,713	\$	32,809,296	\$	4,066,584	Min. Additional Funding Req'd To-Date (incl. \$1.8 M correction)

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The cost commitments noted below in **Table 2** for the JHS Phase II improvements consist of the design fees for programming and development of the contract bid documents for the Phase II JHS Scope and ISP change order work that will facilitate implementation of the proposed Phase II scope. The actual cost for this work has been determined through competitive contractor bids (via Turner's GC/CM role) based upon the completed design. The negotiation process for this work is complete, and the additional funding will be included in a 2006 Supplemental Budget Request for the Jail Health Phase II. This request is currently under review by the Executive's Budget Office.

Table 2
JHS Phase II Budget Status Summary

Budget Item	Budget	Current Budget Variance Commitments Over/(Under)		0	Comments	
Authorized Funds	\$ 1,823,323	\$ 561,383	\$	(1,261,489)	Includes Design Fees & Phase II related Construction in ISP	
Total	\$ 1,823,323	\$ 561,383	\$	(1,261,489)		

# SUBMITTALS & REQUESTS FOR INFORMATION (RFIs)

Submittals and Requests for Information (RFI's) continued to be minimal over the past several months, reflecting a more "normal" pattern of construction communication, consistent with the stage of project completion. RFI's are now focused more upon the need for refined information and the discovery of existing conditions that impact the new work. There have been a total of 541 RFI's issued on the project through the month of February and the design team response time on RFI's continues to be very good.

#### PROJECT SEQUENCING

Because the KCCF remains fully occupied, the ISP project is uniquely dependent upon a series of closely coordinated and inter-related construction "steps" that accommodate inmate movement, operational restrictions, and contractor access. Many of the project milestones reflect this sequencing and, thus far, the following stages have been achieved successfully:

- ♦ Vacant West Wing space was converted to accommodate temporary ITR activities and inmate housing. This work combined the efforts of the Contractor, County crews, DAJD staff, and JHS staff.
- ♦ ITR activities were moved out of their previous locations on the 3<sup>rd</sup> Floor and into temporary West Wing Space. This occurred on August 1, 2005 and marked the first significant shift of DAJD and JHS Staff operations as a part of the phasing and sequencing necessary to support construction of the new ITR configuration. This was a major milestone on the project and marked the first internal move with impacts on law enforcement entities and other outside users served by the facility. This move allowed the 3<sup>rd</sup> Floor demolition work to begin by the end of October and construction of the new and expanded ITR concept is underway.
- ♦ The next major milestone in internal sequencing was achieved successfully between November 4<sup>th</sup> and November 7<sup>th</sup> of 2005 with the first movement of inmates off of the 11<sup>th</sup> Floor and into temporary space in the West Wing to accommodate construction. This move involved several increments and included the **movement/shuffling of over 630 inmates** to accommodate appropriate classification and

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new placement within the DAJD system. This same process will be repeated sequentially, one inmate floor at a time until all floors are complete. DAJD staff managed this initial activity successfully and deserves the highest compliment for their support in achieving this critical milestone. They will face the same demands throughout the project

♦ After completion of the Factory Acceptance Testing (FAT)-1 for the electronic security system in late October, the electronic security equipment began shipping to the jobsite for installation in November. By mid-December, Installation of electronic security system components and the initial phases of system cutover began in December. The system cutover process requires that each individual device (door, camera, motion detector, intercom, etc.) is tested in place and physically shifted operationally to the new control panels in the new Central Control Room. The phase of the process (for the devices planned in the initial cutover) is approximately 95% complete at this time. This work represents approximately 25% of the total system in the facility and the process will have a total duration of several months.

#### **SECTION 2 – CRITICAL ISSUES**

Critical issues are defined as those that have, or may likely have, an impact on project cost, or prevent the schedule from moving forward. The continued schedule stability experienced over the past six months suffered a potential setback in late January with the discovery that the contractor was unable to implement acceptable "work-around" logistics to absorb the impact of unforeseen existing wiring conditions. Efforts are currently underway to limit the new schedule growth to approximately one month, but success in this effort will rely on the contractor developing a "work around" schedule for the system testing functions that is acceptable to DAJD operations. If this is not achievable, additional schedule growth could occur as the entire project waits for the testing functions to be completed over an additional 2-3 month period.

Implementation of the new security system cutover started in December and has been successful thus far. This activity involves "live" shifting of security components from the old system to the new one and incremental migration from the existing control room to the newly constructed CCR. This process is "delicate" and can be impacted by unforeseen conditions within the existing system. For instance, the cutover process requires the contractor to make a series of temporary connections between existing and new control panels, test the operation of the devices, then ultimately go back and make final connections once the circuits and controls are confirmed to work properly. These steps occur in groups, over a period of time, and until the final "dress and separate" function occurs, the security system is operating via the temporary wiring connections. While this temporary functionality is a positive step, the system remains vulnerable until the final connections are made and the System Acceptance Tests (SAT) are completed successfully. (See Section 3 discussion below regarding cutover relationship to schedule as well)

Other potentially critical activities include reconciliation of the \$1.8M budget error and review and approval of future funding requests for the refined JHS scope and the ISP budget correction. It will be essential that both of these requests are completed in early 2006.

#### **SECTION 3 – SCHEDULE**

The County granted 225 days of additional time to the Contractor in November 2005, culminating a comprehensive schedule evaluation and negotiation process. Not all of this additional time was determined to be compensable. It should also be noted that the majority of the schedule impacts were due to County initiated changes in scope resulting from necessary design and operational refinements to the security electronics system that were brought to light during the contractor submittal process.

Between June and December of 2005, the project experienced no schedule growth. This pattern was

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potentially broken in January with the notification that unforeseen conditions encountered earlier in the month had resulted in a **19-day extension request.** The County management team has determined that the conditions in question did contribute to Contractor delays, although a full assessment of the 19-day total is still in progress.

Affirming efforts by both the Contractor and the County to stabilize the schedule expansion on this project, the Contractor also submitted a recovery schedule that presented an alternative sequencing of activities that could be used to maintain the schedule and avoid the 19-day delay. Unfortunately, the proposed sequencing left the system in the temporary condition (noted above) much longer than originally specified and the schedule was deemed to be unacceptable operationally by DAJD. The County is currently in the process of working with the Contractor to explore other possible options for limiting the delay. If this is found to be impossible, granting the 19 additional days will defer the final connections somewhat, but the period of temporary operation will be much shorter than proposed in the Contractor's recovery schedule.

#### **SECTION 4 – COST REPORT**

There have been eleven Change Orders executed on the project to date as listed in **Table 3** below. The first of these was the Expanded Scope ITR work (\$3,910,225) that was approved as a supplemental budget request by the Council. Change Orders 2, 3, 4, 6, 7, 9, 10, and 11 covered general scope changes as well as the 1<sup>st</sup> Floor West Wing improvements that were funded by Council to accommodate use of the space while the Expanded ITR renovations were occurring (these funds were applied to Change Order No. 4 that incorporated the work into the project). Change Order Number 5 incorporates the Shower Replacement work into the ISP Contract and Change Order Number 8 implements the time extension and increased costs associated with this additional time for both the General Contractor and the Subcontractors.

In addition to the executed change orders, pending cost adjustments consist of outstanding Change Proposals, and Field Directives issued to the Contractor for pricing that are projected to total an additional \$684,000 in future demand (approximately). None of the causes for the pending Change Proposals are in dispute and once the costs are fully negotiated, they will be converted to Contract Change Orders.

It is important to note that changed conditions continue to be encountered on the project and the projected cost growth in February jumped significantly in February as the potential impacts of new schedule delays were factored. None of the change orders issued to date can be viewed as "discretionary" either. In general they have either been the result of modifications needed to address unanticipated existing conditions in the facility or modifications (primarily to the security electronics components) needed to accommodate DAJD operational requirements.

Jail Escort hours to date remain below those budgeted for the planned activities on the project. The tracking results through February 2006 showed the total number of escort hours used for the planned work at 22,360. This total was 676 hours less than budgeted for the planned work activities they supported. In addition, work supporting the closeout of ITR Phase 1 work is also nearly complete and there is an estimated savings of approximately 1,000 hours associated with that work still pending. There has been a new demand of approximately 2,350 hours (through February) offsetting this savings. This new demand has resulted from the need to support code-related investigations and improvements required as a result of newly encountered conditions and additional discovery work needed to clarify existing electrical/Security Electronics conditions on the project. The need for corrective action is not anticipated at this time.

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# Table 3 Project Changes & Contingency Utilization Summary

Cost Item			Comments
Executed Change Orders			Comments
CO No. 1- Implement Expanded ITR	\$	3,910,226	Funded as ITR
CO No. 2- Misc. Mech., Elect. & Div 17 Revisions	\$	41,556	Funded out of Contingency
CO No. 3 – Control Panels, Multiple Cell Monitoring & latent/existing conditions	\$	190,886	Funded out of Contingency
CO No. 4- Add DAJD upgrades in West Wing, Relocate HVAC for future JHS	\$	352,874	Partially Funded by WW Supplemental, the balance out of Contingency
CO No. 5 – Implement Shower Replacement Project	\$	786,165	Funded by Shower Replacement CIP
CO No. 6 – Existing Conditions & Code	\$	134,169	Funded out of Contingency
CO No. 7- Exist. Cond., Design Refinemnt.	\$	68,190	Funded out of Contingency
CO No. 8 – Settlement of contract time	\$	762,415	Funded out of Contingency
CO No. 9- Design refinements, Elevator recall corrections, New elevator opening to support phasing & schedule	\$	175,016	Funded out of Contingency
CO No. 10-Design refinements & exist. conditions	\$	151,593	
CO No. 11- Design refinements reroute existing wiring, other existing conditions.	\$	216,277	
Less JHS CO's	\$	(84,406)	Funding by JHS Phase II
Subtotal Executed CO's	\$	6,704,961	
Pending COP's Reserve			
PCO's -various changes pending	\$	328,342	Identified Changes currently submitted & pending further pricing and negotiation
Subtotal Changes / Impacts-To-Date	-\$	7,333,303	Total \$'s
Tax on CO's	\$	635,210	Funded by Contingency & ITR, MMR, WW Supplemental, and SRP (Each @ per funding Ratio)
<b>Subtotal Construction Contract Changes</b>	\$	7,968,513	
Less Authorized funds for work executed by CO	\$	(5,205,258)	Work executed by CO but funded by own source or offset by savings in other budget categories
Total Contingency Demand-To-Date	\$	4,263,256	

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#### SECTION 5 – CONSTRUCTION REPORT/ ACTIVITIES over CURRENT REPORTING PERIOD

#### **Work In Progress:**

- Central Control Operator training continues
- CCR Cutover
- Pulling branch and device wiring for Security Electronics distribution throughout the 11<sup>th</sup> Floor & ITR
- Installing end devises for Phase 1 System Cut-over
- Completing first stage of "hot" cut-over on Security Electronics (several doors)
- 11<sup>th</sup> Floor construction Electronic Security System cameras, call buttons, door controls, intercom, etc;
- Punchlist Shower Replacement and General Construction at 11 & ITR.
- 3<sup>rd</sup> Floor ITR New Construction Security Electronics
- Elevator upgrade work

**Disputes Resolution Board (DRB):** The DRB (John Byer; Shawna Ryan, and Jim Donaldson) continued its Monthly site tours and meetings with the Project Team. To date, they have not been asked to officially intervene on any issues, although the monthly updates serve to keep them current on project conditions and expedite their input on issues at the working project level. Ongoing monthly project review and site visit sessions have been scheduled for the balance of the project.

#### **SECTION 6 – LOOK AHEAD**

Summary of the notable activities planned for the next period (March 2006).

- Continued installation of Electronic Security System components (11 & ITR)
- CCR Cutover
- Dress & Separate Temporary wiring connections
- Install end devises
- Continue "hot" cut-over on Security Electronics
- Cutover new PLC's
- Fire Alarm revision
- Elevator upgrade work