

**KING COUNTY
MONTHLY REPORT
ON CONSTRUCTION**

March & April 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 months of March and April 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 officially April 23, 2007 as a result of project impacts encountered prior to June 2005 that added 225 Calendar days to the contract time. As reported in previous Monthly Reports, the contractor encountered unforeseen existing conditions related to the configuration of the original wiring in January of 2006. These conditions prevented them from constructing the work as it was designed and, as a result, impacted their ability to fully maintain the schedule. The forecasted time impact (including the added effort needed to remedy the problems they encountered) was 19 (working) days. **Additional wiring, system, and configuration variances were encountered by the Contractor in March and April with similar results. Based upon the latest schedule update received from the contractor, the total impact duration is now forecasted at 62 days (or approximately 2 calendar months) as a result of these unforeseen conditions.** The following table summarizes the proposed milestone dates for the project as a result of the most recent time impacts.

Project Milestone Events

Milestone Activity	Original Milestone Date	Current Contractual Milestone Dates	Proposed Revised Milestone Dates (Pending)
Contract NTP	09.07.04	09.07.04	Complete
FAT 1 Testing Acceptance	03.03.05	10.27.05	Complete
FAT 2 Testing Acceptance	05.24.05	02.23.06	05.16.06
CCR Acceptance	07.05.05	02.09.06	08.01.06
Move Inmates off 11 th Flr.		11.07.05	Complete
11 th Floor Acceptance	07.18.05	02.21.06	05.01.06 (pending Punchlist corrections)
Complete New ITR	10.18.05	03.15.06	05.17.06
Floor- by-Floor Const.	07.26.06	03.28.07	06.06.07
Project Substantial Completion	09.07.06	04.23.07	06.25.07

The County's management team agrees that some level of impact is attributable to these discoveries, and is in the process of analyzing the justification provided in support of delay request. **At the same time, the contractor has been developing recovery schedule options that may be used to help mitigate some of the milestone impacts by shifting the work sequence. Some of these mitigation measures are contained in the most recent schedule submittal (and are reflected in the dates forecasted above).**

However, it must be noted that all of the modified work sequences proposed to date have been acceptable operationally for DAJD, and have been rejected by the County. Negotiations continued throughout March and April, however, and the most recent 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. Project changes continued to impact the budget in March and April 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.

In April, the Council enacted legislation that corrected the previously reported budget error of \$1,823,323. An additional, supplemental, budget request has been prepared for submittal to Council in coming weeks, however. 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 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 continue to run for several more 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 two months due to the impacts noted between January and April. Similar circumstances could occur in future months as well due to 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 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	Budget	Current Status	Variance Over/(Under)	Comments
Design & Admin.	\$ 3,196,887	\$ 3,919,974	\$ 723,087	
Construction	\$ 20,268,326	\$ 2,3808,494	\$ 3,524,403	
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	\$ 25,713,358	\$ 29,976,613	\$ 4,247,490	
Conting. Transfers	\$ -	\$ (2,019,995)	\$ (2,019,995)	Applied to other cost categories
Subtotal	\$ 25,713,358	\$ 27,956,618	\$ 2,227,495	Current budget shortfall
DAJD Ops	\$ 4,340,816	\$ 4,340,816	\$ -	
JH Ops	\$ 511,862	\$ 511,862	\$ -	
Subtotal	\$ 4,852,678	\$ 4,852,678	\$ -	
Total	\$ 28,742,713	\$ 32,809,296	\$ 2,227,495	Min. Additional Funding Req'd-To-Date

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 the pending Supplemental Budget Request for the Jail Health Phase II. This request is currently in the final stages of review by the Executive's Budget Office.

The current Budget Status for the Jail Health Services Phase II Improvements is as summarized in the following table.



Table 2
JHS Phase II Budget Status Summary

Budget Item	Budget	Current Commitments	Budget Variance Over/(Under)	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 572 RFI's issued on the project through the month of April 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 3rd Floor and into temporary West Wing Space in August , 2005.
- ◆ The first movement of inmates off of the 11th Floor and into temporary space in the West Wing to accommodate construction was achieved successfully between November 4th and November 7th of 2005. This move involved several increments and included the movement/shuffling of over 630 inmates to accommodate appropriate classification and new placement within the DAJD system.
- ◆ Factory Acceptance Testing (FAT)-1 for the electronic security system in late October and 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.
- ◆ The next major milestones on the horizon include the repopulation of the 11th Floor with inmates,



occupancy of the newly expanded ITR, and movement of inmates off of the 10th Floor to accommodate renovation in that area. All of these activities are connected due to space utilization within the Jail and all could occur by the end of June if all work proceeds as planned.

- ◆ The complete SAT for the new CCR is scheduled for August of this year. Once this step is complete, the vast majority of risk related to the existing security system will have been mitigated.

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 schedule stability experienced over the six month period between June and December of 2005 suffered a setback in late January that continued in March and April 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 mitigate the full impact of the new schedule growth, 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).

The full SAT for the 11th Floor and new ITR are scheduled to occur in May. Success in this function will serve as a good forecasting and troubleshooting tool for the balance of the system as it is integrated on a floor-by-floor basis over the balance of the project.

Other potentially critical activities include approval of future funding requests for the refined JHS scope and the ISP supplemental budget. 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 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 and the 19-day total is no longer in question.

Additional wiring, system, and configuration variances were encountered by the Contractor in March and April



with similar results. Based upon the latest schedule update received from the contractor, **the total impact duration is now forecasted at 62 days (or approximately 2 calendar months including the 19-day impact noted above)** as a result of these unforeseen conditions.

Affirming efforts by both the Contractor and the County to stabilize the schedule expansion on this project, the contractor has been working with the County to develop recovery schedule options that may be used to help mitigate some of the milestone impacts by shifting the work sequences. Some of these mitigation measures are contained in the most recent schedule submittal (and are reflected in the dates forecasted above). However, it must be noted that all of the modified work sequences proposed to date have been acceptable operationally for DAJD, and have been rejected by the County. Negotiations continued throughout March and April, however, and the most recent alternative is currently under review by the County.

SECTION 4 – COST REPORT

There have been twelve 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, 11, and 12 cover general scope changes as well as the 1st 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 \$544,000 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 although they have stayed within the projected cost growth identified in February over the months of March and April. 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.



Table 3
Project Changes & Contingency Utilization Summary

Cost Item		Comments
Executed Change Orders		
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	
CO No. 12 - Design refinements reroute existing wiring, other existing conditions.	\$ 69,650	
Less JHS CO's	\$ (84,406)	Funding by JHS Phase II
Subtotal Executed CO's	\$ 6,774,661	
Pending PCO's -various changes pending	\$ 544,202	Identified Changes currently submitted & pending further pricing and negotiation
Subtotal Changes / Impacts-To-Date	\$ 7,318,813	Total \$'s
Tax on CO's	\$ 633,935	Funded by Contingency & ITR, MMR, WW Supplemental, and SRP (Each @ per funding Ratio)
Subtotal Construction Contract Changes	\$ 7,952,748	
Less Authorized funds for work executed by CO	\$ (3,705,258)	Work executed by CO but funded by own source or offset by savings in other budget categories
Total Contingency Demand-To-Date	\$ 4,247,490	



SECTION 5 – CONSTRUCTION REPORT/ ACTIVITIES over CURRENT REPORTING PERIOD

Work In Progress:

- Central Control Operator training continues
- CCR Cutover Continues
- Pulling branch and device wiring for Security Electronics distribution at ITR
- “Dress and Separate” new and old wiring systems
- Clean-out of old security cabinets and old CCR
- 11th Floor SAT and Punchlist development for Electronics Security System – cameras, call buttons, door controls, intercom, etc;
- Punchlist Shower Replacement and General Construction at 11 & ITR.
- 3rd 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).

- Complete SAT at 11th Floor Electronic Security System components
- Start SAT at new ITR
- Continued CCR Cutover
- Continue Dress & Separate Temporary wiring connections
- Fire Alarm revisions
- Elevator upgrade work
- Prepare Punchlists for 11th Floor and ITR
- Execute Punchlist repairs for 11th Floor and ITR
- Complete 11th Floor
- Complete ITR
- Prepare for moves and occupancy of 11th Floor and ITR
- Prepare 4th Floor for expanded capacity of 10th Floor inmates (relocation of 10th Floor Inmates to West Wing to follow.