**Meeting Agenda**

**Date:** May 18, 2012

**Time:** 8:30 am – 4:00 pm

**Location:** **Sacramento Delta King**

1000 Front Street

Old Sacramento, CA 95814

**Joint meeting with California Counties Facilities Services Association (CCFSA)**

Operations participation in the design/construction/post-construction process

*• Operations involvement in design and spec development*

* Consider Facility Operations as one of the clients
  + Schedule a distinct, focused programming meeting to discuss needs and objectives
  + Ask about what hasn’t worked and what needs to be corrected, particularly in remodels
  + Divide involvement of Ops by division for guided, focused review
    - Enlist the Supervisor for acknowledgment of the importance to devote time and input
    - Include custodial/maintenance service contracting for their input
  + Identify a primary Ops liaison for the project
* Develop and maintain design guidelines/standards for key systems and equipment
* Approaching new technologies
  + Keep it simple; if it offers energy savings, or what does it take to operate?
  + It is important for both sides to be flexible in selection, as well as designing for future flexibility since functions and organizations will change
  + Keep it practical, straightforward – recognize inventory count of items (such as lamps)
  + Consider staff capabilities and workforce skills
* Quality of equipment assembly/fabrication, quality control may need to be verified
* Provide interactive training sessions, hands-on and video-taped, and scheduled to recognize Ops staff have day jobs outside the project
* Consider having Project and Ops staff job shadow each other to get an appreciation for their colleague’s work and issues
* Maintenance Management system – capturing and maintaining asset history
* Consider including a post-occupancy evaluation in contracts to review project 1 to 2 years following completion and move-in
* Retro-commissioning older buildings can offer significant savings/efficiencies
* Include 1-year warranty/commissioning review in contracts
* Have end-user included in such reviews

*• Transition from Construction to Operations*

* Placer County holds a “close-out planning” meeting of internal DGS divisions that have some responsibility for the project/building/assets/records
  + Scope review to identify needs, such as update drawings if existing building, or record new drawings; assess staffing requirements; identify new utility accounts/payees and timing; plan recording of new assets/equipment or disposition of old; plan accounting changes

*• Making Commissioning work – establishing expectations and assuring total system performance*

* Use and independent commissioning agent
  + Few counties self-perform
* Run systems as a whole, simulate variety of situations
* Use integrated system test plans
* Work with utilities to develop load shed options to test load shed operations

*• Translate incremental maintenance/operational facility modifications to accurate as-built drawings*

* Placer – FAMIS system accepts CAD polylined plans, using pdf format for portability in field use
* Important to establish a task to update equipment assets when replaced by a maintenance WO
* Translation of BIM data to CMMS is a new issue, determining which level of data to transfer, apps and staff capability, means and responsibility for import and verification
  + Consider ability to scan bar-codes on tablets in field to ID equipment
* Resources to update as-builts and maintenance asset data are difficult to justify
* Leased facilities often managed separately, so collaboration with Real Estate is important
* Processes to maintain up-to-date data while tracking historical information and changes is a constant challenge; what level of data and history is important and supportable?
  + Routine equipment changes need to be captured
* GPS-linked facilities map with building data can be useful for emergency operations
* Photo documentation of construction progress to monitor concealed work can be very useful
  + A formal process of regular progress photos at set key locations that may shift through the work can be particularly useful for future repairs
* The format and timing of As-Built delivery is inconsistent
  + The industry is still working through ownership of BIM models, whether it is a product of service or a means of production
  + There are a variety of formats and systems requirements, that do not always communicate
  + Indemnification is an issue to be resolved
* Use of “backgrounds” for future, follow-on remodel projects has been a recognized use
  + Contract language should address ownership and license for use/re-use
  + Ownership of liability for conditions on re-use can be contentious
  + Standard should address “clouding” RFIs, ASIs, Change Orders, and should be stipulated in the contract
* Construction project “partnering” process should include key Operations personnel