



LACH³



NEW UNITED STATES COURTHOUSE - LOS ANGELES, CA

March 2015

The structural steel erection completed this month with the “Topping Out” on Thursday, the 12th of March. The Contractor arranged to have the final steel member available for all dignitaries and workers to sign, a tradition common in the building industry.



Topping-Out of the Structure

Appreciation is given to Clark for their efforts to make this date and to the Contractors for having achieved this milestone.

We continued with numerous other activities this period by bringing the concrete shear walls up to Level 10 and placing the floor slab on the east side of Level 10. Concrete formwork continued at Level 1 for the perimeter “board-form” walls of the Cafeteria, Vehicle Sallyport, and Jury Assembly areas. These areas will be ones of emphasis over the next few months.

To help meet the life safety requirements of the project, horizontal fire shutters are being installed in the light court (Atrium) to control the spread of smoke to upper floors in the event of fire in the building. These units will close off levels of the building and create barriers to provide safety to the occupants. The first of the six units (as seen below) was installed this month and will continue through April until complete.



Other life safety activities have continued with the spray-applied fireproofing on the structural steel and the installation of the fire sprinkler piping immediately following the fireproofing. Fire alarm conduit installation is also continuing which will provide the raceways necessary for communication between the various systems of the building.



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In conjunction with the before mentioned life safety features, the building will have an emergency generator that will come on-line in the event of a power loss to keep life safety and security systems functioning and the building safe for the occupants. This transition to emergency power is made possible through Automatic Transfer Switches (ATS's) which were delivered and installed in the building this month. The photo below shows some of these units being delivered.



Installation of drywall framing and hanging of drywall continued with the first walls being painted in the Basement to permit the installation of the ATS panels and other electrical panels. Efforts are being made to start many of the priority walls up through the building, which are the walls/rooms that will permit the start of more equipment/panels installations and the pulling of wire. It is a matter of identifying the work that is most critical to the schedule and doing what needs to be done to get it started which will permit other work to commence.

We were pleased to have a visit this month by the recently appointed GSA Acting Administrator, Denise Turner Roth and the

Acting Regional Administrator Samuel (Chip) Morris. The Courthouse is truly a project of which we can be proud and it is fun to tour guests through the facility. The Courts are getting more excited as well with the start of Chamber selections by the Judges. This process requires numerous tours through the building and will continue until the expected conclusion in April.

Design & Construction Activities

Completed This Period

- The last of the SME Design Review Comments were closed this month, concluding the process.
- Completed erection of steel for the main structure.
- Commenced shear walls up to Level 10
- Completed concrete slab on the east side of Level 10
- Spray-applied fireproofing on Level 7, the framing for underside of Level 8
- Delivered and set in place the Automatic Transfer Switches (ATS's)
- Commenced drywall for the Basement Electrical Room walls and painted them as well
- Continued the forms for the Board Form walls of the Jury Assembly and Sallyport areas
- Installed the south Fire Shutter at Level 5 (first of six units)
- Commenced testing of the Air Barrier System on the perimeter walls of Level 1, west side
- Delivered the Security Detention door frames.



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Activities for Next Period

- Complete slab on Level 10
- Complete shear wall concrete placement up to the bottom of the Roof Trusses
- Complete welding of steel for Tier #6, the Penthouse and Roof Levels and prepare for “jacking” of the building
- Deliver AHU’s for the remaining floors

Project Milestones

- Delivered Automatic Transfer Switches (ATS’s)
- Place Concrete Beams above Garage Entry
- Commenced Building Enclosure testing of Air Barrier – 27 March 2015
- Structural Steel “Topping-Out” – 12 March 2015

Sustainability Features: Fundamental and Enhanced Commissioning

Commissioning (Cx), the process by which the project team can ensure that all building systems operate as intended, interactively and in accordance with the contract documents is one of the critical steps to achieve sustainability. On the LA Federal Courthouse the team is pursuing both fundamental and enhanced commissioning as well as measurement and verification (M&V) which provides a plan

and system to compare the building's actual performance against design predictions. Pursuing the Commissioning process helps to reduce future energy usage and required maintenance and Measurement and Verification allows the Owner to analyze and understand the results of building performance and take action if necessary.

Fundamental commissioning is a LEED prerequisite (EAp1) and best practice. Typically taking these steps alone will improve the energy efficiency 5-10% and ensure that facility personnel are able to operate key building systems. EAc3- Enhanced Commissioning goes a step beyond and incorporates a broader scope of systems and participation. Jacobs is serving in the role of the Commissioning Agent (CxA) to provide the owner with expert oversight. The process is continuous from design through occupancy. Construction documents are reviewed at various stages throughout the design process to ensure that design is compatible with future commissioning efforts. Submittals are reviewed for relevant systems such as heating, cooling, ventilation, electrical, lighting and controls, domestic hot water systems, sewage, irrigation, and renewable energy. Metering devices are designed and installed to support future M&V efforts to monitor energy and provide data points for tracking.



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The Commissioning team led by Jacobs and comprised of personnel from GSA, Clark, SOM, Consultants, and Subcontractors, has held the kick-off meetings to establish plans for both Commissioning and Measurement and Verification. On site, equipment has begun to arrive so per the plans the team must verify installation and performance of building systems and perform functional performance testing.

As the project progresses the team will develop a System Manual for commissioned systems, verify training requirements are completed, and develop a final commissioning report. The last and critical component to ensure the longtime success of this process is the review of building operation 8-10 months after substantial completion. Despite best efforts to design efficient building systems, buildings don't always perform as well as expected. Commissioning and Measurement & Verification are great ways to help operators identify performance issues, locate source of problems, and better understand energy-saving strategies.

Progress Photos



Courtroom Mockup Progress



Detention Door Frame Delivery



Drywall Taping