

A WEST WING UPDATE

Ben Abernathy, Chair of the Building Committee

Construction on the West Wing Addition (Weeks III) began in earnest on April 28, 2003, with the erection of a construction fence and removal of the first floor “gun ports” on the south side of the existing building. A few days later, a crane appeared.

After the initial intrusions into the existing building, the construction activity moved back outside. During the ground excavation and debris removal stages, progress seemed slow but once the grade beams and slabs were poured it was very apparent—we were building a new addition.



Fig. 1. Late summer: first floor window wings were removed from the south side of Weeks I.

It was interesting to watch the various tradesmen bring their own specialty to the job. Starting at the end of June they poured rebar-reinforced concrete columns that would be the permanent support for the floors: Steel for each reinforced support column was assembled by hand (cut and welded) and hoisted into position. Then forms were assembled around the rebar, and finally filled with concrete. This job took approximately four different specialists, each supervising a stage of the process.



Fig. 2. The loading dock was removed and foundations poured.



Fig. 3. Concrete and rebar support beams were constructed in stages.

To prepare for pouring the floors they laid out plywood decking over temporary supports. The floor itself would be concrete, but to create cavities within it, to lighten the weight of the floor, they laid out a honeycomb of upside-down black steel pans, which resembled bathtubs. In between these upside-down “bathtubs,” they created a webbing of steel rebar for further reinforcement. When all that was done, they would pour the concrete, let it set and cure for a few days, and then and knock out the original plywood decking. The progress of each floor was actually quite rapid, despite the fact that they could not start the next floor until the strength of the existing one had been verified by independent tests.

After the floors were poured, the roof, cinder block exterior walls, and window frames were installed. By late December any points open to the outdoors were sealed up with plastic sheeting, so that the heat could be turned on. This was not as simple as flipping a switch—pipe fitters, electricians, and duct workers had been working for months installing the necessary connections. But the cold didn’t stop work from being done on the exterior. In a heated, adjustable scaffolding, bricklayers worked up and down the building laying the exterior finishing bricks. Meanwhile, in the heated indoors, workers were installing metal framing to define rooms and hallways.

Inside the addition the floors still look pretty rough and skeletal, and need extensive electrical work, plumbing, and many hours of detailed finishing to prepare labs, the high-tech lecture hall, compact storage and shelving, classrooms and offices. As I write this note, the rooms and hallways are just beginning to get sheet rock walls.

Although I have left out quite a few of the steps involved in the construction, it has been a careful and complex process. The many skilled tradesmen deserve our thanks for the fine job they are doing for us. The West Wing Addition should be completed by summertime, approximately



Fig. 4. The "bathtubs," forms for the underside of the floors.



Fig. 5. Concrete mixed at ground-level was delivered overhead via lengthy piping. Pouring the floors was a real team effort.

one year after the start of construction. We look forward to moving in before the start of the fall 2004 semester.

If you would like to monitor the progress of the new building, you can visit our construction web site: <http://www.weeks3.ssec.edu>, or use the link on our main web page: <http://www.geology.wisc.edu>. There, you can see a live picture updated every few seconds. Or you can watch the time-lapse movie that has been generated by these stills since the beginning of construction.



Fig. 6. Early fall. Temporary plywood decking for the fourth floor is in place and the decking between the second and third floors has been removed.



Figs. 7a, 7b. As floors were poured concrete samples were tested in an independent lab.



Fig. 9. With winter here, window openings are covered by plastic and workers frame in corridor walls.



Fig. 8. December, the west face. Bricklayers are working in heated scaffolding. The new brick matches that on Weeks I and II.

Photos by Ben Abernathy and Mary Diman.