

MAY 2008 • VOL. 8, NO. 5

HEALTHCARE DESIGN



SHOWCASE

Cleveland Clinic Abu Dhabi Hospital

Interior Design Best Practices

Designing for Cancer Care

IN CONJUNCTION WITH

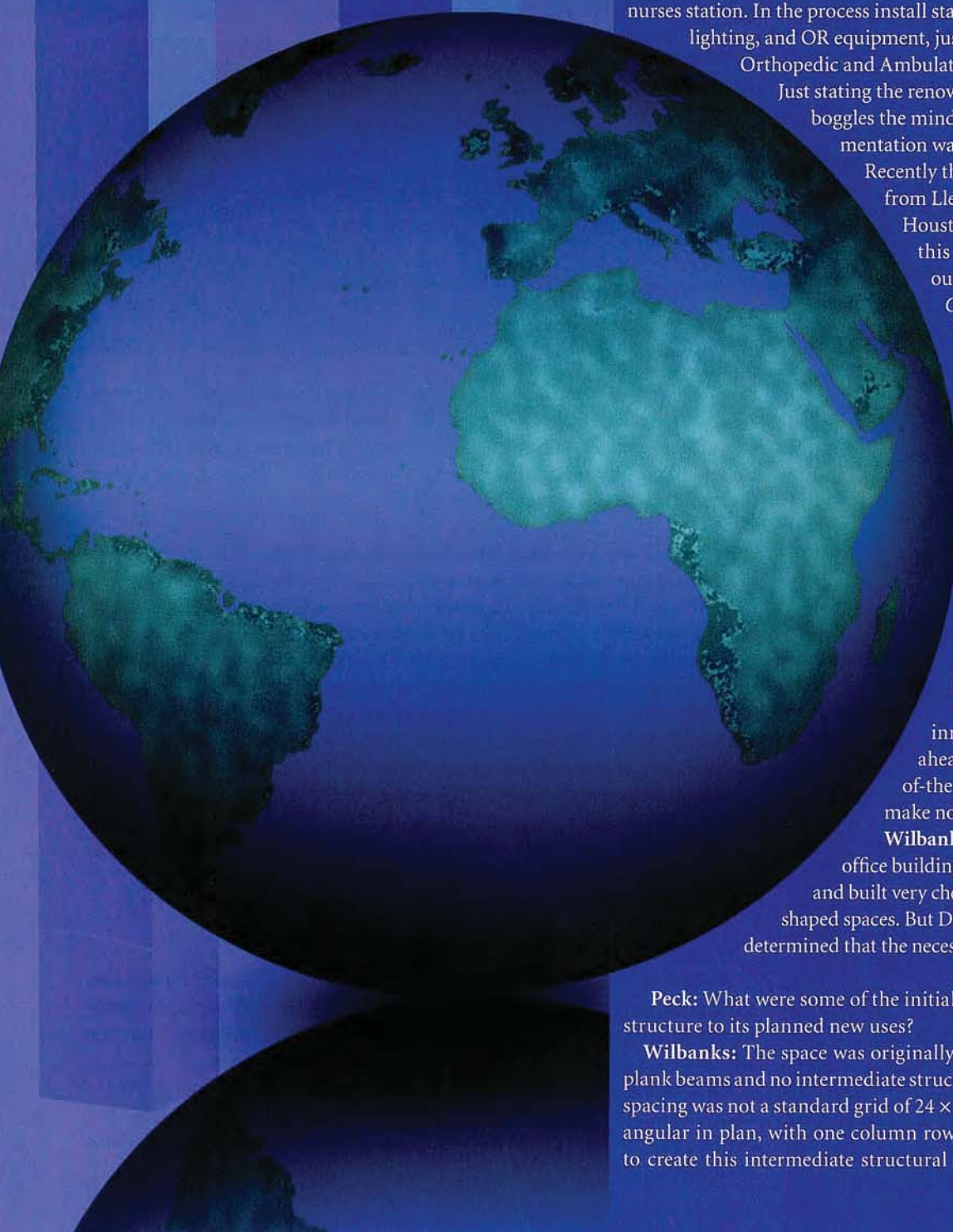


THE CENTER FOR
HEALTH DESIGN

VENDOME GROUP

TIGHT SQUEEZE





Take a 1970s administrative office building and renovate one of its suites to accommodate four orthopedic operating rooms, five post-op areas, five pre-op areas, a patient waiting area, staff office space, a clean room, a decontamination area, a pharmacy, and a nurses station. In the process install state-of-the-art electronics, surgical lighting, and OR equipment, justifying the name Reconstructive Orthopedic and Ambulatory Surgery Center of Houston.

Just stating the renovation challenge involved with this boggles the mind and, not surprisingly, implementation was a small-scale saga unto itself.

Recently the designers and project manager from Llewelyn-Davies Sahni, the intrepid Houston architectural firm that took on this challenge, discussed the ins and outs of the project with *HEALTHCARE DESIGN* Editor-in-Chief Richard L. Peck.

Peck: Where did the idea originate to undertake this particular renovation?

Wilbanks: It came up in discussions between myself and Dr. [Marcus] Masson [founder of the Reconstructive Orthopedic and Ambulatory Surgical Center]. He had a vision of what he wanted—he was looking to make a statement and I think he has done so.

Sahni: Dr. Masson is a very innovative thinker who wants to be ahead of the pack. He wanted a state-of-the-art surgical facility and would make no compromises whatsoever.

Wilbanks: But it had to fit in a professional office building that had been built in the 1970s, and built very cheaply, with shallow and odd-shaped spaces. But Dr. Masson and I studied this and determined that the necessary renovation would be feasible.

Peck: What were some of the initial challenges of adapting this structure to its planned new uses?

Wilbanks: The space was originally a large bay with hollow concrete plank beams and no intermediate structural support system. The column spacing was not a standard grid of 24 × 24 or 30 × 30, but rather was rectangular in plan, with one column row obstructing the middle. We had to create this intermediate structural support system to accommodate

RENOVATING FOR OUTPATIENT SURGERY

AN INTERVIEW WITH ROBERT WILBANKS, JASON BAEZNER, AND RANDHIR SAHNI OF LLEWELYN-DAVIES SAHNI (LDS), HOUSTON BY RICHARD L. PECK, EDITOR-IN-CHIEF



Figure 1. This sequence (A, B, C) demonstrates the evolution of the Reconstructive Orthopedic and Ambulatory Surgery Center of Houston.



Figure 2. "Before" shot of the entry way at the Reconstructive Orthopedic and Ambulatory Surgery Center of Houston.

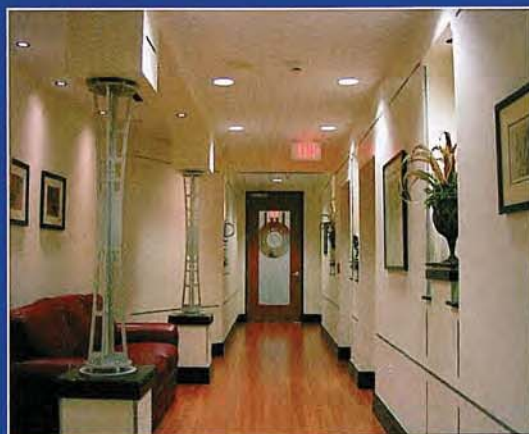


Figure 3. "After" shot of the entry way at the Reconstructive Orthopedic and Ambulatory Surgery Center of Houston.

five overhead surgical equipment arms, including medical gases, equipment controls, surgical lighting, cabling for IT (mainly for paperless record keeping and on-the-spot access to patient files during a procedure), and cabling for closed-circuit TV (not completely implemented as yet). We also had to replace the entire mechanical system for the space.

Peck: How were you able to fit so much into such limited ceiling space?

Baezner: Many of the solutions were fabricated in the field. We had a great team to bring this off, with a contractor, Millenium Contractors & Operations, LP, who worked closely with us to get it done within the proposed time frame.

Wilbanks: That's true—we put in a lot of hours in the field with the mechanical contractor customizing everything and figuring things out as we went along, but there was a lot of planning beforehand, so the result of all this is very orderly. Along the way we had several instances of having to pull everything out and reinstalling it. It took a lot of after-hours work with the contractors and early-morning meetings with Dr. Masson—many more hours than I've ever done on a renovation of this type (figure 1).

Sahni: But we were there when the contractors needed answers at all hours of the day and night. We knew we had to be there to make it work.

Wilbanks: And the absolute key to making it work was having a great team.

Peck: How is the new center working out?

Wilbanks: All four ORs were constructed with the complete infrastructure package but only two had all equipment installed. The remaining two are having some of that equipment installed currently. Clinically, it's working so well that Dr. Masson is even occasionally leasing the space to the hospital.

Baezner: Most medical/surgical facilities make you feel as though you're at a hospital, but this one doesn't. From the entry way on in (figures 2 and 3), it's just a better, more welcoming experience for patients and a more effective working environment for staff.

Peck: So will your firm now make a specialty of these super-tight renovations?

Wilbanks: Wouldn't that be great? Seriously, we are looking for another opportunity like this, maybe not quite so tight structurally. When the state inspector came to review this facility, he was amazed—he said everything needed was there but there was absolutely no extra space. We see this project as a learning experience for similar future healthcare renovations. **HD**

For more information, contact Randhir Sahni, Llewelyn-Davies Sahni, at RSahni@theldnet.com or 713.850.1500, or visit www.theldnet.com.