Constructing a new facility, essentially from the ground up. The new facility may be connected to an existing facility, but the building must have its own identity and be a new space.

The Baystate Health project team designed and built the first two modules of the health system’s Hospital of the Future, a multiphase expansion of an existing facility.

Phase 1, completed in January 2012, comprises the entire shell and core structure for the project, plus 300,000 square feet of interior fit-out. This includes the consolidated Davis Family Heart and Vascular Center with six hybrid operating suites and four floors of patient units. Major campus infrastructure and circulation improvements also were completed in Phase 1. A 94-bed emergency and Level I trauma center was added in Phase 2, which was finished in September 2012.

The team solicited input from a large number of hospital staffers, patients, local subcontractors and community members in designing the project. Kurt Rockstroh, FAIA, FACHA, president and CEO, Steffian Bradley Architects and Sterling Planning Alliance, Boston, says this input was crucial to ensuring the quality of the project and allowing it to move forward as planned.

To save time and money on major construction, the master plan required that 40 percent of the facility be built initially as shell space, to be fitted out in subsequent phases. Previously, the Massachusetts Department of Public Health (MDPH) had allowed no more than 10 percent shell space for new construction. Rockstroh said testimony from patients, workers and neighbors at the project’s final public hearing persuaded MDPH to approve the project as presented.

By aligning operational planning with the construction schedule, the team was able to meet 100 percent of construction milestones with only minor layout refinements. Construction activity also was carefully coordinated with ongoing hospital operations in the existing facility.

“We had all the very sensitive areas of the hospital within 10–20 feet of our construction site,” says Rockstroh. Operating rooms, a laboratory with equipment sensitive to vibration, and the air-handling intake for the hospital’s surgery department and patient units, including intensive care and neonatal intensive care, are in close proximity to the new building zone. Because of good communication among key players during construction, “we did not have one minute of downtime in any of those departments,” Rockstroh says.