Heart Hospital Expansion / Campus Redevelopment



Morristown Memorial Hospital sought to expand their campus to add facilities for a 'Heart Hospital Addition', expanded OB Services, Cancer Center Addition, Main Lobby Addition, Staff Parking Garage, and Visitor Garage expansion.

Buckl Architects worked with the hospital to develop a master plan strategy to create a phased approval process in order to receive first a planning board approval for those portions of the work on the existing hospital property, followed by a zoning approval process to expand the campus into an adjacent residential zone. Town approvals for the project were received in July 2005, and construction on the first major project followed immediately.

Buckl Architects worked with the owner and the entire project team in developing the overall concept plan, detailed design, and construction oversight throughout the entire project.

Project Team

Buckl Architects Francis Caufman PWI Engineering Wm. Blanchard Co. Construction Management

Construction Cost \$ 250,000,000

Project Area 300,000 S.F.

Completion Date January 2008 BUCKL ARCHITECTS.COM

Heart Hospital – Patient Room Design

Atlantic Health - Morristown Memorial Hospital Morristown, New Jersey





A key part of the Heart Hospital design was developing a new standard patient room for the hospital. Corridors were kept quiet by locating support space doors in cross corridors, which kept primary corridor walls free for artwork which is located for the patient to easily view from their bed.

Rich materials and accents such as mosaic glass and ceramic tile, rich wood casework, wall mounted fixtures, oval mirrors and accent lighting are present to provide a rich and 'homelike feel' to the space. The family space includes a banquette (which converts to an overnight bed), a flip-up desk/table, internet connection and a flat screen TV to add to the patient and family comfort.

The patient toilet is located just behind the headwall, so that a patient can travel from bed to toilet in just a few steps, while maintaining constant contact with the headwall to improve orientation and safety, and to prevent patient falls.

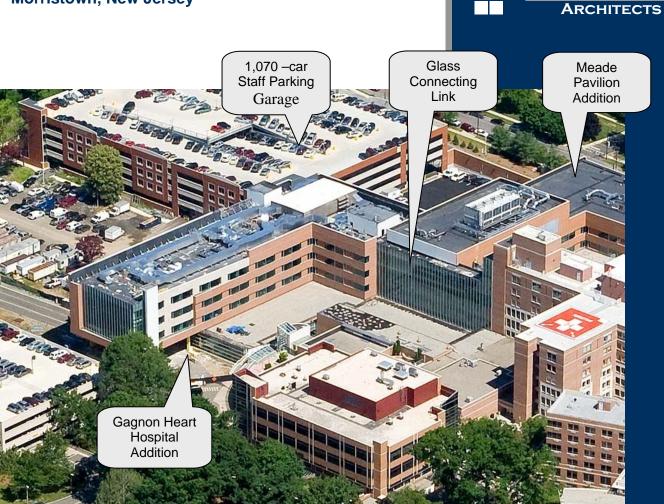
<u>Artwork in Corridor</u> <u>as Viewed from</u> <u>Patient Bed</u>

Project Team: Buckl Architects

Wm. Blanchard Co. Construction Management

Gagnon Heart Hospital Addition

Atlantic Health - Morristown Memorial Hospital Morristown, New Jersey



The final piece of the campus expansion at Morristown Hospital is the Gagnon Heart Hospital. The project includes a 5-story addition with three levels of inpatient bed units, the main entry level which includes cardiac outpatient facilities, and an expansion to the hospital surgical and interventional suites to create a new Cardiac Access unit, CPACU and Cardiac operating rooms, all integrated with the existing facilities on the campus.

The new addition will establish a new primary entrance to both cardiac services and to the west side of the hospital, with adjacent existing patient parking. The new patient floors provide 36 new beds per floors, with two of the floors including 10-bed critical care units. The glass enclosed connecting link is provided to simplify pedestrian circulation through the campus and to provide a visual milestone to simplify wayfinding for visitors.

The project is scheduled to be completed in late 2008, with occupancy in early 2009.

Project Team

Buckl Architects Francis Caufman PWI Engineering Wm. Blanchard Co. Construction Management

BUCKL

Construction Cost \$ 85,000,000

Project Area 200,000 S.F.

Completion Date January 2008

Emergency Department Expansion

Atlantic Health - Morristown Memorial Hospital Morristown, New Jersey



Morristown Memorial Hospital is a regional trauma center in the central north jersey area. Their existing Emergency Department had exceeded capacity at over 70,000 visits annually. Buckl Architects, working with the Eckroth Planning Group, developed a 4-phase expansion and renovation of the department which will ultimately provide 75 private exam treatment rooms, 6 trauma bays, an internal imaging area for Radiography and CT, and will handle over 100,000 annual visits.

The first phase of the project (pictured here) provides 13 exam treatment rooms surrounding a large central staff core area. This area includes nurse charting and monitoring bays, physician charting and meeting area, medication prep room, and supply storage. The project also included a unique way finding floor pattern which will help direct visitors and patients to one of four pods of patient rooms designated by distinct colors. Phase 2 is schedule to continue once local approvals for a Trauma Room addition are granted in 2009.

Project Team:

Buckl Architects The Eckroth Planning Group PWI Engineering Fitzpatrick Construction Construction Management

BUCKL

Cardiac Access – Cath Prep / Recovery Unit

Atlantic Health - Morristown Memorial Hospital Morristown, New Jersey





<u>Private Prep /</u> <u>Recovery Rooms</u> <u>w/ Adjacent Toilet /</u> <u>Shower room</u>

Cath Prep / Recovery Nurse Station and Beds



Central Nurse Charting Area

With the construction of the Heart Hospital, Morristown Memorial was committed to providing a patient experience that was reflective of the high quality of care provided and the upscale nature of the surrounding community.

The Cardiac Access and Cath Prep / Recovery Unit are the first clinical units that most of their patients experience during their stay at the hospital, so it was imperative to provide an atmosphere that was consistent with the overall goals of the project. By designing pods of four private rooms with a toilet/shower room, a staff efficient layout was developed that provided a high sense of quality and privacy to the patient, but allowed for close monitoring of the patients by the staff.

The use of painted moldings and strong 'spa-like' finishes provides a very relaxed feel to the unit, and starts the patient experience with a strong first impression that results in a sense of confidence in the care that will be provided by the hospital.

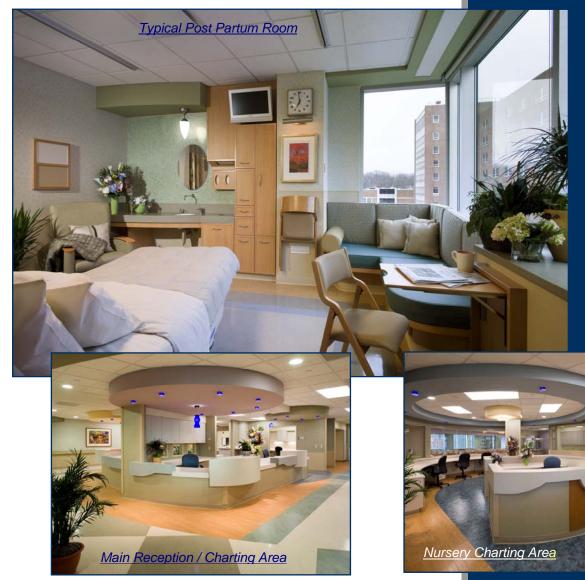
Project Team:

Buckl Architects The Eckroth Planning Group PWI Engineering Fitzpatrick Construction Construction Management

36-Bed Post Partum Unit - Meade Pavilion Addition

Atlantic Health - Morristown Memorial Hospital Morristown, New Jersey

BUCKL ARCHITECTS



As part of a larger major campus expansion to Morristown Hospital, the Meade Pavilion was the first project completed and contained a new 40-bed Cardiac Inpatient Unit and 36-bed Post-Partum unit within a four story addition.

Focus was paid in establishing a new interior standard for the hospital in both finish, detail and configuration, in order to create a more comfortable healing environment with it's focus on patients and their families. Quiet corridors and luxurious rooms with ample natural light and rich materials create a 'feel' more befitting of a luxury hotel then a hospital.

The post partum unit included a 54-bed nursery unit in addition to the new inpatient beds. The former adjacent post partum unit in the existing hospital is being upgraded to match the new design for long term ante-natal patients as part of a comprehensive OB Services renewal plan for the hospital. Project Team Buckl Architects Francis Caufman PWI Engineering Wm. Blanchard Co. Construction Management

Construction Cost \$ 70,000,000

Project Area 100,000 S.F.

Completion Date April 2007 BUCKL ARCHITECTS.COM

40-Bed Cardiac Inpatient Unit - Meade Pavilion Addition

Atlantic Health - Morristown Memorial Hospital Morristown, New Jersey





As part of a larger major campus expansion to Morristown Hospital, the Meade Pavilion was the first project completed and contained a new 40-bed Cardiac Inpatient Unit and 36-bed Post-Partum unit within a four story addition.

Focus was paid in establishing a new interior standard for the hospital in both finish, detail and configuration, in order to create a more comfortable healing environment with it's focus on patients and their families. Quiet corridors and luxurious rooms with ample natural light and rich materials create a 'feel' more befitting of a luxury hotel then a hospital.

The cardiac patient rooms provide all of the support and equipment required of a 'high-tech' healthcare institution, yet these features are discreetly place to work within the aesthetics of the new environment. Project Team Buckl Architects Francis Caufman PWI Engineering Wm. Blanchard Co. Construction Management

Construction Cost \$ 70,000,000

Project Area 100,000 S.F.

Completion Date November 2007

Neo-Natal Intensive Care Unit

Atlantic Health - Morristown Memorial Hospital Morristown, New Jersey



<u>Entrance</u> <u>Gallery of</u> Success



Patient Room with Staff Observation Area

When the decision was made to relocate and enlarge the existing NICU, the hospital desired to make a leap in the patient care model as well. They chose to leave the 'open NICU ward' behind, to pursue a private room design to promote a family friendly environment that promotes healing through family centered care, increased privacy and a quiet environment for the infants.

The 34 rooms are designed for singles, twin and triplets so that multiple birth families can staff together. Nurse staff can observe as many as four rooms at a time from their corridor workstations immediately outside the room. Use of state of the art communications allow the staff to work more efficiently and for equipment alarms to be signaled directly to the staff (instead of aloud) which provides a quiet, more sedate environment for patients, families and staff.



Patient Room, Footwall and Family Area

<u>Central Nurse</u> <u>Charting Area</u> Detail



Project Team:

Buckl Architects The Eckroth Planning Group PWI Engineering Fitzpatrick Construction Construction Management

1,070-Car Staff Parking Garage

Atlantic Health - Morristown Memorial Hospital Morristown, New Jersey

BUCKL ARCHITECTS



As part of the overall campus redevelopment plan, Morristown Hospital sought to construct a new parking structure for its staff. The parking structure needed to accommodate over 1,000 vehicles.

The neighbors and town had particular concern to the impact of such a large structure on the streetscape and the local neighborhood. With sensitivity to their concerns, Buckl Architects developed an exterior design which sought to break down the large mass of the overall structure and to reflect some of the federal detailing that is common to the town. The end result is a concrete, brick and glass facade that disguises the true purpose of the building, and blends well into the local streetscape.

The original design included the structural capacity to expand the garage by two additional decks which provides parking for nearly 500 additional cars. That expansion has now been designed and will be constructed following local town approvals.

Project Team: Buckl Architects DiStasio Van Buren Engineers PWI Engineering Wm. Blanchard Co. Construction Management

Construction Cost: \$ 18,500,000

Project Area: 275,000 S.F.

Completion Date: October 2006



Cafeteria Renovation







Mountainside Hospital requested a quick and inexpensive upgrade to an old and weary cafeteria space.

Buckl Architects achieved an entirely new look that added much excitement to a space which desperately needed it. With some carefully planned changes to lighting, finishes and eating areas, the changes transformed the look of the entire food services operation, on a relatively modest budget, creating an exciting new space to meet and dine for the hospital.



Project Team: Buckl Architects Aramark Services W. Blanchard Co., Inc. Construction Management

Construction Cost: \$ 300,000

Project Area: 6,200 S.F.

Completion Date: December 2003

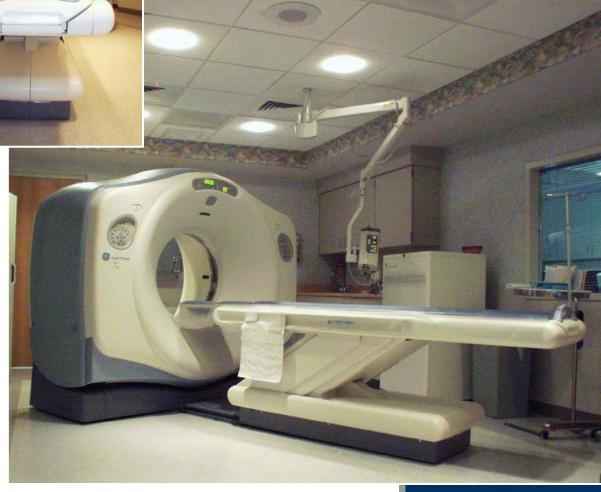
CT Suite – Radiology Department

Atlantic Health - Mountainside Hospital Montclair, New Jersey





<u>Detail photo</u> <u>on axis</u>



<u>View of CT</u> <u>Suite</u>

Mountainside Hospital sought to create a new CT suite in its existing Radiology Department. The project included a reorganization of existing spaces sufficient to create the new CT suite, control room, and patient holding space.

Project challenges ranged from the delicate phasing of the project to allow the construction to occurs and to deal with alterations to major corridor locations and challenging alterations to the existing mechanical systems. This project was done prior to the adjacent PET/CT installation, but the general and systems planning had to account for that future installation.

Project Team:

Buckl Architects Brinjac Engineering Wm. Blanchard Co. Construction Management

CT Simulator Equipment Replacement

Atlantic Health - Mountainside Hospital Montclair, New Jersey



Detail photo during from Control Room



Mountainside Hospital sought to replace its existing traditional linear accelerator simulator with a new generation CT simulator unit to facilitate its radiation oncology program. The challenge to this project was fitting a much larger piece of equipment with the required control room and support space, into a limited footprint which could not be easily expanded.

Buckl Architects developed a layout to facilitate all the needs, and oversaw the construction and equipment replacement which included the demolition and infill of a 6-foot deep concrete pit required by the old equipment to be removed. All construction work was successfully executed with no disruption to the routine ongoing cancer center operations which continued in the adjoining spaces.

Project Team:

Buckl Architects Brinjac Engineering Wm. Blanchard Co. Construction Management

BUCKL

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High Energy Linear Accelerator Replacement

Atlantic Health - Mountainside Hospital Montclair, New Jersey



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<u>View of</u> <u>accelerator</u> <u>with mold</u> <u>storage</u> <u>beyond</u> <u>Linear</u> <u>Accelerator</u> <u>Suite</u>

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Mountainside Hospital sought to replace its existing linear accelerator with a new high energy machine. This was a significant challenge because of the location of the existing vault, and the potential to add the additional gamma and neutron shielding in the severely restricted space available.

Buckl Architects crafted a shielding solution and new room layout to facilitate a new generation of linear accelerator equipment, and fully coordinated and integrated the significant engineering and equipment requirements to complete a successful installation.

Project Team:

Buckl Architects Brinjac Engineering Wm. Blanchard Co. Construction Management

PET / CT Suite

Atlantic Health - Mountainside Hospital Montclair, New Jersey





Detail photo during equipment installation

PET / CT Suite from patient entrry

One of the first ten installations in the country, the PET/CT at Mountainside provided a new integrated cancer diagnostic tool for a thriving cancer program at the hospital. The suite provides a consolidated and staff efficient layout that allows the staff to monitor both the patient prep area and the PET / CT suite.

The prep area includes a hot lab and four patient holding bays, so that the sucrose based isotope can be injected into the patient, and allowed to circulate through the body prior to the imaging process. The cancer cells consume the isotope in high density which causes them to glow during the PET scan. The simultaneous CT scan provides an integrated image that allows a dramatically increased level of accuracy in identifying and locating malignant cells and tumors throughout the body.

Project Team:

Buckl Architects Brinjac Engineering Wm. Blanchard Co. Construction Management



Atlantic HEALTH SYSTEM Overlook Hospital • Summit, NJ



CT Suite





The proposed CT Suite expansion provides an additional procedure room for the Radiology Department with a 64-slice GE Lightspeed CT. The support spaces include patient prep / holding area for both inpatients and outpatients, control room, reading room and storage space.

Project Team Buckl Architects Brinjac Engineering Wm. Blanchard, Co. Construction Management

Construction Cost \$ 760,000

Project Area 3,500 S.F.

Completion Date September 2004

Interventional Radiology Suite Expansion

Atlantic Health - Overlook Hospital Summit, New Jersey

<u>Toshiba</u> <u>Aquiulion</u> <u>CT</u>

BUCKL

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<u>Siemens Axiom Artis Zee</u> Bi-Plane Equipment

In order to support the growing Neuroscience Institute at Overlook Hospital, a new Siemen's Axiom Artis Zee bi-plane interventional suite needed to be added to the existing 2 procedure room interventional unit. In order to accomplish this, a multi-phase project was developed which included the installation of a new Toshiba

Aquilion 256 slice CT scanner and the relocation of a new Toshiba GE Light Speed unit into a comprehensive diagnostic CT suite area in order to create space for the new interventional suite.

With the completion of the two CT suites in phase 1, the area will be clear to create the new Siemens bi-plane suite. The new interventional suite creates a 780 s.f. procedure room with control room, equipment and support space located adjacent to the existing patient prep / holding area. The control room is located for a future renovation to the existing bi-plane room, which will provide a consolidated control room for the two neuro bi-plane rooms in the future.



STAFF ASSAGE

Project Team:

Buckl Architects Eckroth Planning Group The Procz Group Fitzpatrick Construction Construction Management

Completion Date:

April 2009



The Overlook Outpatient Cancer Center provides comprehensive high quality diagnostic and treatment services in a consolidated wing of the hospital. Patients arrive at a dedicated Cancer Center Entrance where their healing experience and comfort is a primary concern. The cancer center project included a 2-story addition to the existing building to house the cancer center administrative office, the hospital's cancer program and services, and offices for two private physician practices. The remainder of the project included renovations for the major physician practice which required significant expansion and changed their patient care model as well. Their space included exams and offices surrounding a central 'concierge station' for staff to guide patients through the process. The space also includes a light and open 20-bay infusion center.

Other Cancer related projects completed at Overlook include two 'High Energy Linear Accelerator' replacements, CT Simulator, PET / CT Scanner Suite, Cyberknife Addition, Breast Imaging Center and Radiology Services.

PROJECT TEAM

Buckl Architects Brinjac Engineers HB Engineers Distasio VanBuren CMX Engineers W. Blanchard Co., Inc. Core and Shell Fitzpatirick and Associates Renovations and Fit-Out

CONSTRUCTION COST \$ 7,460,400

PROJECT AREA 17,450 S.F.

COMPLETION DATE December 2008



The Emergency Department project at Overlook Hospital required a significant building addition on a difficult site with a relatively tight budget. In addition, the new façade and exterior treatment would set the stage for an entirely new look for the hospital with a following main lobby and cancer center additions.

The new 46 bed E.D. features a dedicated Pediatric Emergency Department with 8 child-friendly rooms and waiting area. It also incorporates a 10 bed Fast-Track unit, Radiology Suite, Trauma and Isolation Rooms, and 20 adult exam / treatment rooms. The adult and pediatrics nurse stations were designed for functionality as the hubs of the exam room areas. An innovative approach was taken in the use of lighting, colors, and materials to lend warmth and interest throughout the facility. Project Team: Buckl Architects Brinjac Engineering W. Blanchard Co., Inc. Construction Management

Construction Cost: \$ 8,500,000

Project Area: 24,000 S.F.

Completion Date: 2005



Atlantic Physical Health Suite





"... central staff location enables this facility to provide optimal sevice by utilizing its visibility."

Atlantic Physical Health Suite is an outpatient facility for Morristown Memorial Hospitalconsisting of private treatment rooms, occupational therapy, cardio vascular equipment, free weights and semi-private therapy bays.

The design of a central staff location enables this facility to provide optimal service by utilizing its visibility - convenient for both staff and clientele.







Project Team Buckl Architects PWI Engineering Troast Construction

Project Area 7,600 sf

Completion Date 2003