



Project Renew Witherell

Building and Design Specifications

November 2007

OVERVIEW

The Nathaniel Witherell is a 202-bed skilled nursing facility located on twenty (20) landscaped and wooded acres in mid-country, Greenwich, CT. The facility is owned and operated by the Town of Greenwich. The nursing facility has evolved to include dementia, Alzheimer and short-term rehabilitation units in addition to long term care. It is primarily comprised of three buildings:

- 1) THE FIVE STORY TOWER WING, which was constructed and opened in the mid 1970's. This building consists of a ground floor and four upper stories. The four upper stories house 150 residents in four separate nursing units. Its areas include:
 - a) Tower Nursing Unit #1 houses 32 resident beds, but this unit actually services 40 residents, since 8 beds (two quad rooms) physically located in the West Wing are serviced by the Tower Unit #1 staff.
 - b) The Auditorium.
 - c) The ground floor houses many support services such as the kitchen, the laundry, the electric switching gear, major air handling units, the fire alarm system panel, housekeeping and dietary offices, the former employee cafeteria and the generator.

- 2) THE THREE STORY WEST WING, which opened in the early 1960's. Its areas include:
 - a) The upper floor, which contains the 44 bed West Wing Nursing Unit. (This area physically contains 52 beds, but 8 of these beds are allocated to Nursing Unit #1 Tower).
 - b) The ground floor, which houses the boilers, the maintenance offices and shops, Housekeeping offices and storage.
 - c) The basement level, which is the current home to the Greenwich Adult Day Care dementia facility (departing by year-end). This space is available for project renew.

- 3) THE ADMINISTRATIVE WING, opened in 1933 to renovate and replace the original hospital building constructed in 1902-03. This wing is a four-story building that contains the front entrance of Witherell. It does not “sleep” any residents. This wing consists of:
 - a) The Ground Floor, which includes the primary and renovated Greenwich Adult Day Care (departing by year end), the phone and technology switching station, storage and crawl space. This space is available for project renew.
 - b) The Main Floor, which includes the lobby and reception areas, the Administration, Admitting, Social Work and Recreation offices, the Beauty and Gift shops, the Café, the Library and the Chapel (built at the time of the Tower construction).
 - c) The Second Floor, which includes additional offices including the Development and Volunteer Coordinator Office, the Board of Directors Meeting Room, and other meeting rooms.
 - d) The Third Floor contains six apartments occupied by Town employees. This space is available for Project Renew.

Also located on the property is the Pavilion. The Pavilion is the original 1912 Greenwich Tuberculosis Hospital that now has five two-room one-bedroom apartments for fixed income elderly residents of the TOG.

Over the years, healthcare environments in both long term care and acute care have changed dramatically. Uses of space have changed and the needs of residents and patients have also changed. Clinical advances in healthcare, both acute and sub-acute, indicate a dramatic movement to “person-centered resident care” environments as the current standard. Innovations in designs for health, mobility, independence and cognitive recognition for the occupant are the focal points in long-term care design in the current decade. These, along with “person-centered resident care” (with its attributes such as maximizing private rooms, more natural lighting, better views and a more homelike environment with maximum independence) are the goals of Project Renew Witherell.

These changes, combined with the fact that Witherell has continued to transition into the sub-acute short term post acute healthcare area, another high priority goal: to create an identified, “Short Term” program space with the necessary in-patient beds and support space to position Witherell as a recognized leader in this field. Project Renew Witherell should create two identifiable spaces for separate, but related, programs:

- 1) Chronic Long Term Care
- 2) Sub Acute Short-Term care

To the extent possible, the design should be such that co-mingling these two populations is minimized. Each has different physiological and psychological needs. Yet they must be contiguous, since both receive all their support services from the same set of support departments. Also, Rehab therapy is not limited to the short term resident and therefore this service must also be near to both programs.

The West Wing building houses one nursing unit with Witherell's ten 4-bedded rooms (totaling 40 beds, or 20% of Witherell's capacity). These "quads" are out of date and must be eliminated.

Additionally, the four other nursing units in the Tower Wing are also out of date and are in need of renovation. Both the West Wing and the four Tower units are obsolete when considering their fixtures, finishes, furniture and equipment. Resident room furniture in some areas is over 20 years old.

To summarize, after 32 years of use for the Tower Wing, 45 years of use for the West Wing, and 74 years of use for the Administration Building, Witherell is in need of a major upgrade, rehabilitation, and to some extent redesign and replacement, especially in the oldest areas of the West Wing which houses and sleeps residents.

In 2000 the Nathaniel Witherell Board conceived of a full replacement project. The project was deemed too costly by the Town and may have exceeded the floor to area ratio (FAR) formula of the Town. It also resulted in a reduction of beds to 190, and had site location, parking, and light emission issues, which were not addressed. This plan was challenged in court by neighbors, and although these challenges have been put on hold, the new plans must take into account neighbor and FAR issues. The State of CT Division of Social Services (DSS) Certificate of Need (CON) process approved this project.

The Board evaluated the continued need for a modernized facility to meet the needs of Greenwich and be within the constraints of its financial plan. Project Renew Witherell is based on a financial plan to increase operating efficiencies including staff productivity, layout, infrastructure, utility usage and maintenance while maintaining 202 beds. Consistent with the financial plan, limitations noted and the budget mandates of Witherell's Board of Directors, Project Renew Witherell should be undertaken with an approach toward upgrading what is good in the existing buildings and replacing what is not. The selected Architect must review and analyze the February 2007 Robert A. M. Stern Architects (RAMSA) report and all of its components completed in and give the Project Renew Witherell Building Committee a list of proposed recommended changes.

According to the RAMSA report, and more specifically the ENTECH portion of that report, and even more importantly the Bardwell Program of Space Needs analysis of that report, Project Renew Witherell requires the building of approximately 36,000 to 40,000 square feet of new space. **The term "new space" or "space" shall be defined as new construction, or reconfigured and renovated space to meet the program requirements outlined in this specification.** Please be advised that due to Town of Greenwich FAR limitations and State requirements there may be no new square footage allowed. This new space may be dedicated primarily to the Rehabilitation Program at Witherell, including the beds, the gym and required support space and possibly a proposed Hospice Program currently under consideration.. The goal is to build a separately identifiable Short-Term Program. Current literature and feedback from staff and current Witherell short-term residents all confirm the need to separate the Short-Term Program from the Chronic Long-Term program while keeping both programs centrally located (to be located near central Witherell services such as dietary and laundry) as the Rehab Department also services the chronic care resident, and needs to be contiguous to both populations.

In June 2007, the Town of Greenwich formed a building committee called “TOG TNW Building Committee” (or Building Committee). The Building Committee is authorized by Town Charter and charged with the construction of Project Renew Witherell, with the filing of a new application for a Certificate of Need (CON) and with the hiring of a Construction Manager (CM) and Architect. The Building Committee is also responsible for successfully delivering an on-time and on-budget completion of the project. Any program changes or changes to the Specifications as approved by the Nathaniel Witherell Board have to be presented to the Nathaniel Witherell Building Committee (or Witherell Building Committee), which is a sub-committee of the Witherell Board and approved by the Witherell Board (Board or Witherell). The Nathaniel Witherell Board operates under the Charter of the Town of Greenwich and is responsible for the operation of The Nathaniel Witherell facility.

THE PROPOSED PROJECT

The proposed project will consist of construction of new space, which may house Witherell’s Rehabilitation Program and possibly a Hospice Program, with space for inpatient beds and the necessary ancillary space to support both programs. This space should be connected to and be contiguous to existing Witherell space but have a separate identity. In addition, the remaining 1975 Tower and 1933 Administration buildings will be upgraded and renovated per the requirements below to make it current in the Long-Term Care Healthcare environment. Furthermore, the project will replace or rehabilitate the antiquated mechanical infrastructure at Witherell that supports the Wings listed above. Lastly, the project must remain FAR compliant. Each of these distinct yet connected goals has to be completed within budget as noted below with the full 202-bed capacity completely operational throughout the pre construction and construction phases. The resultant facility must also contain no less than 202 beds and fully comply with all Town, State and Federal long-term care and building requirements.

ARCHITECT AND CONSTRUCTION MANAGER SELECTION

This specification requires the use of a Construction Manager. It also requires that both the Architect and the Construction Manager have previous nursing home construction, restoration and renovation experience and both the company and team member levels. Witherell requires that the knowledgeable nursing home Architect chosen elicit from Witherell staff (and approved by the Witherell Building Committee and the Witherell Board) their needs, to ensure a design that delivers a facility that meets the needs of current and future Witherell programs, incorporating the current technology available in the Skilled Nursing and Sub-Acute Care Healthcare environment. The Architect and the CM must have the experience that will bring sensitivity to a project that will happen in and around occupied spaces. The Architect and CM will report to the Building Committee.

The architect will be responsible for assisting in filing the application for the Certificate of Need with the State of Connecticut.

70 PARSONAGE ROAD, GREENWICH, CONNECTICUT 06830 (203) 618-2400 FAX (203) 869-2922
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BASIC DESIGN OBJECTIVES

- 1) The design shall respond to the budget limitations and also consider on-going life cycle costs associated with energy, maintenance and personnel expenses. Witherell seeks the highest verifiable value for the design over the life of the facility.
- 2) The Architect shall include under its contract; all required sub-consultants, including but not limited to; surveying, civil, landscape, environmental, structural, MEP, acoustical, lighting and other required services and permits for a complete project. LEED Certification shall be listed as an add alternate.
- 3) The design shall evolve from user group input in a collaborative, engaging process, reflecting the needs of the residents we serve, allowing our residents to move through the facility in a safe and efficient manner, while ensuring high patient satisfaction and contributing to superior clinical and care outcomes.
- 3) The design shall recognize and respond to on-going changes in long-term care technology, the evolution of home-like capabilities and transfers to Witherell after shorter hospital stays. Accordingly, the design must provide for the multiple life cycle equipment replacements during the life of the structure and mechanical, electrical, and plumbing (MEP) systems.
1. The design shall provide for convenient and intuitively directed resident access to the entire facility.
- 4) The design shall minimize the intrusion of the project building on the site and sensitive abutting properties.
- 5) The design shall provide a caring, sensitive but secure home-like environment while ensuring resident privacy by maintaining appropriate separation of resident and public populations, appropriate separation of resident sleeping and resident recreating spaces, and appropriate use of materials and sound control.
- 6) The design shall integrate the new space in a compatible and cohesive manner with the adjoining existing buildings.
- 7) High quality, energy efficient, quiet and responsive HVAC systems shall be designed to ensure resident satisfaction and comfort during the four seasons.
- 8) Design shall be “evidence based,” and in accord with the standards set forth in the Guidelines for Design and Construction of Healthcare Facilities and Hospitals, AIA 2006 Edition, and shall meet all code requirements as specified and currently adopted by Federal, State and Local municipal authorities and permit-granting jurisdictions.
- 9) Witherell is committed to on-going environmental stewardship in order to minimize our environmental footprint by utilizing design and building practices that, to the extent possible, minimize the consumption of energy and natural resources. Witherell desires that LEED - Certification techniques (Leadership in Energy and Environmental Design), as specified by the U. S. Green Building Council, be used in the proposed design and construction where applicable and cost effective. LEED Certification is not required under this specification. The Architect shall list as an add alternate all the costs associated with the LEED certification process, including commission agents.

- 10) Connection to Witherell's Town of Greenwich (TOG) IT/Telecom systems, building automation, fire alarm and security infrastructure is required.
- 11) There needs to be recommendation on how to utilize the same MEP systems for all of TNW

SPECIFIC DESIGN OBJECTIVES

All new space built and all pre-existing space that will be retained and upgraded shall fully comply with the following:

- 1) Maintain the 202 certified and licensed bed count at all times during.
- 2) Be fully ADA compliant.
- 3) Eliminate Witherell's ten quad rooms and replace them with private and semi-private rooms.
- 4) Be in compliance with all State, Federal and Local requirements including, but not limited to, State of Connecticut DSS nursing home building and operating codes.
- 5) Include an updated infrastructure including HVAC systems with specific emphasis on maintaining State Code required temperatures and air exchanges throughout the building.
- 6) Include the creation of a resident/patient-focused environment in all areas including, but not limited to, FF&E.
- 7) Include the maximization of natural light for residents and staff, with no excessive light emission to the neighborhood in dusk or evening hours.
- 8) Include the maximization of resident privacy according to HIPPA guidelines.
- 9) Include the reduction of noise transmission from resident room to resident room, and from common spaces to resident rooms.
- 10) Create a current communication system that includes fire safety and alert systems, television, voice, overhead and wireless Internet connectivity.
- 11) Address the safety and access needs and issues of the elderly wheelchair-bound resident, the ambulatory resident and the dementia patient.
- 12) Address the convenience needs and issues of modern technology and amenities for the short-term patient.
- 13) If possible, create additional resident/family privacy meeting spaces in the four Tower floor units. (However, public space relative to patient space must be within standard nursing home parameters for cost-effective management).
- 14) Make the number, size and types of spaces including, but not limited to resident rooms, offices, clean and soil utility rooms, medication rooms, dining and recreation rooms, rehabilitation gyms, entrance lobbies and other support spaces, consistent with current long-term and short-term standards, and to the extent possible, future thinking in the LTC industry.
- 15) This is a Medicaid reimbursable project, and the design must take into account "Fair Rent Value" calculations, which tend to maximize the patient space to total space, achieving the lowest possible floor area ratio.
- 16) Be designed creating a neighborhood-like environment.
- 17) Provide adequate wiring to obtain 80% Emergency Backup generator coverage.

ENERGY REQUIREMENTS

Prepare a three-year analysis of the energy usage for the existing and proposed MEP systems, in terms of the thousands of gallons, and equivalent energy costs based on the use of oil, gas and electricity.

Analyze the current method used to create hot water with the two boilers both in cost per day and per week on a yearly basis and suggest cost effective alternatives taking into account all costs such as energy, maintenance, and the cost of capital. Provide a present worth analysis for 5, 10 and 15 years for each alternative.

Finally, provide an estimate of the hot water equipment costs for the proposed alternative and theoretical life cycle, and the wear/tear versus the large boilers "In Action Savings".

Energy Incentives: Incorporate cost effective energy saving alternatives for chillers, cool storage, micro-turbines, gas engine chillers, co-generation, gas cooling, absorption chillers, combined heat & power systems and other energy saving processes.

Provide a whole building energy performance standard analysis and operations manual with total energy planning and ongoing accountability provisions.

SPACE ALLOCATION REQUIREMENTS

The Architect shall validate with Witherell Administration and staff, and then use as an outline the space program as written by Bardwell Associates, and dated 4/21/06, and contained in the RAMSA report with the following additions listed below. The Architect is required to update and validate the Program of Space Needs contained in the Bardwell Report, and is free to make suggestions based on current information. The Witherell Building Committee of the Witherell Board of Directors should review any changes by the Architect to the Bardwell Program of Space Needs.

- 1) New space may contain approximately 60 replacement beds. If a Hospice program is best located here, 4 to 5 of these rooms should be sized larger to accommodate hospice patients.
- 2) New space to be utilized by short-term residents, with an emphasis on separation of that program from the long-term care program.
- 3) New space and renovated existing buildings should maximize the number of private resident rooms permitted by the budget, with approximately 40 private rooms in the new space (there are currently 26 private rooms throughout the entire facility).
- 4) If possible, the existing Witherell lobby should be enlarged and/or reconfigured, to accommodate 3-5 small seating areas in an open space.
- 5) If possible, the entry space leading into the Rehab area should contain a general public seating area exclusive to that program that could accommodate 2-3 small groups in an open space.

- 6) Dining rooms on all units should be capable of supporting a decentralized dining program with a “country kitchen” or similar concept design.

OTHER PROGRAMS OF SPACE NEEDS NOT COVERED BY BARDWELL

- 1) Project Renew Witherell shall provide access by the handicapped to the property of Witherell with wheelchair-accessible “walking paths” located throughout the acreage, while being sensitive to the neighbors and the environment
- 2) New patient rooms should be sized to accommodate the equipment of rehab patients.
- 3) New patient rooms, to the extent possible, should be multi-purpose, to accommodate LTC and STC patients, as well as future trends in long-term care.
- 4) The number of beds per unit should be determined to create efficient staffing ratios of beds to nursing staff.

OCCUPATION DURING RENOVATION AND OTHER CONSTRUCTION LIMITATIONS

It is mandatory that Witherell maintain full bed capacity throughout all phases of Project Renew Witherell. The long-term care residents of Witherell are excited and eager to see their “home” receive this renovation. They have been included in discussions and have given significant input into this specification. The challenge for the entire team is to convert the residents’ enthusiasm into an understanding of the possible disruptions that take place during a project of this magnitude and to translate those possible disruptions into activities and times of fun for the long-term residents. More difficult jobs in healthcare have been successfully done in occupied adjacent spaces, and the Architect and CM need to achieve that same outcome.

Both the Architect and CM should note that the timeline and funding provided anticipate a phased project. An early conceptual design is needed to obtain the remaining approvals and funding. As part of the conceptual design, renderings of the facility and spaces (rooms, common spaces, dining areas, rehabilitation and other important spaces) are included in this specification. Presentation of the design before Town of Greenwich Boards and Commissions, neighbor groups and other interested parties is required.

FURNITURE, FIXTURES AND EQUIPMENT

Furniture, fixtures and equipment are to be recommended and specified by the Architect but may not be part of the construction contract. The Building Committee reserves the right to bid this item separately. Aesthetically, to the extent possible, furniture should be home-like. Dementia-floor furniture should trigger memory reminiscence. Short-term care furniture should be consistent throughout. Color and texture selections are critical in

environments where dementia and incontinence are factors. A flooring solution (carpet versus no carpet) is required. Writing surfaces should be provided in the resident rooms as appropriate.

DESIGN CONSIDERATIONS, GENERAL

The following is a listing of design considerations:

- 1) Maximize southern exposure for resident rooms and public spaces.
- 2) To the extent possible, semi-private rooms in the new space should have beds either toe-to-toe, or configured to maximize internal roommate privacy.
- 3) Maximize visual cueing and use of color, art and finish materials.
- 4) Resident rooms should be equipped to accommodate wall-hung flat screen TVs, with speakers located at the head wall.
- 5) Head walls should be equipped with bed/wall guards to minimize damage to room walls.
- 6) To the extent possible, consider recessed toilet tissue and paper towel dispensers.
- 7) Where possible, in new and existing space, create recreational space and storage on each unit.
- 8) Where possible, create on-the-floor dining space that allows for sub-groups with special needs (such as residents who need feeding assistance).
- 9) Where possible, provide for adequate on-the-unit storage of mobility and therapy equipment, as well as for oxygen and other medical or non-medical supplies.
- 10) Design new and, to the extent possible, renovated nursing stations that allow for privacy, use current thinking in the LTC design environment and are technologically current.
- 11) In the new space and, to the extent possible, in the existing space, create space behind the current nursing stations for auditory silence.
- 12) Make a recommendation regarding decentralized nursing stations. In the new space this should be part of the neighborhood design approach.
- 13) To the extent possible, create an on-unit treatment room/medical exam room in the new and existing space.
- 14) To the extent possible, create a small, cozy, home-like “family parlor” OR seating areas in the new and existing space.
- 15) To the extent possible, create an ADA compliant toilet in proximity to the floor dining room in the new and existing space.
- 16) Should the dementia unit be relocated, its location should be such that resident elopement and resident safety and security are of primary concern.
- 17) To the extent possible, the Witherell Auditorium needs to be enlarged by as much as 50% contain an updated communication/public address and TV system with increased storage and a coat closet.
- 18) The current Beauty Salon requires increased resident capacity with improved air temperature and air exchange systems, (with venting to the outside) and should have an audio/visual system to include TV and music.

DESIGN CONSIDERATIONS, REHABILITATION DEPARTMENT

- 1) Create a separation for Witherell's Rehab Program from the Witherell Chronic Care Program and, to the extent possible, maintain separate Rehab common spaces.
- 2) Relocate the Rehab residents' rooms to the newly built Rehab Area, closer to, and preferably contiguous to, the Rehab Gym. This will increase staff productivity by minimizing time walking to residents' rooms and transporting Rehab residents.
- 3) On-the-unit Rehab space to be sized to include a kitchen as well as a seating area with a sofa and table for occupational therapy.
- 4) On-the-unit Rehab space to be sized to include an area for a business center/computer area.
- 5) Provide showers in the Rehab Gym area.
- 6) If possible, upgrade and improve the existing Greenhouse/ garden (adjacent to the current Rehab department), designated for plant therapy.
- 7) Exercise mats capacity = 3
- 8) Parallel bar capacity = 2
- 9) Treadmill capacity = 2
- 10) Exercise bike capacity = 2
- 11) Training stairwell capacity = 1
- 12) Consider the possibility of installing the "front end of a car" in the Rehab gym to teach car transfers
- 13) The Rehab space should have a maximum number of private rooms. There should be built-in closets in Rehab residents' rooms, with smaller closets.

FINANCIAL AND BUDGET REQUIREMENTS

Prior study has produced a budget of \$36.883 million for Project Renew Witherell. The Architect and the CM should become familiar with that information. All parties must respect this financial limitation. Attached, as Tab #3, Section #3-4(g) is the budget summary.

PROPOSED TIMELINE

An estimated timeline is attached Tab #4, Section #4-1. The Architect and the CM must proceed with an understanding that this Timeline is a goal of Project Renew Witherell.

BARDWELL PROGRAM OF SPACE NEEDS

For informational purposes, the Bardwell Functional Analysis and Program of Space Needs are attached as Tab #3, Section #3-4. The complete report is available.

WITHERELL BED ANALYSIS

The Nathaniel Witherell Beds

Current Configuration:

UNIT	<u># OF ROOMS</u>	<u># OF BEDS IN Building wing</u>	<u># OF BEDS ON THE Nursing Unit</u>	<u>PVT Beds</u>	<u>Semi Pvt. Beds</u>	<u>Quad Beds</u>	<u>Total Total</u>
#1 Tower	21	32	40	10	22		32
#2 Tower	22	40	40	4	36		40
#3 Tower	22	40	40	4	36		40
#4 Tower	22	38	38	6	32		38
West Wing	16	52	44	2	10	40	52
Totals	103	202	202	26	136	40	202
