

Description of Existing Conditions

Fairfield Hills Campus



Prepared For:

*Town of Newtown
and
The Ad Hoc Fairfield Hills Master Plan Committee*

Prepared By:

*Harrall-Michalowski Associates
Downes Group Milone & MacBroom
Fuss & O'Neill SmithGroup JJR
Kaestle Boos Associates*

JUNE 3, 2002
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Introduction

This report summarizes the results of the existing conditions analysis phase of the Fairfield Hills Campus Master Plan process completed to date. The purpose of this analysis is to provide a compilation of base data to be available to the community, Town boards and commissions as well as the Ad Hoc Advisory Committee in the discussion of the future of the Campus. The basic components of the report include:

- Physical characteristics of the site.
- Condition and general re-use potential of existing structures.
- Description of existing utility systems.
- Description of existing and future traffic conditions.
- Summary of space needs requests gained through community input.
- Market setting and economic development potential.

The data and analysis is presented both in narrative and graphic form to provide a comprehensive understanding of the site and conditions impacting future use. The graphic materials included in the report will be available at a large scale format for display and use at workshops and public meetings. This material will also be placed on file at several locations in Town as well as on the Town's web site for public review prior to the workshop/charrette scheduled for June 19th and 20th.

The report is organized in the order of the components listed above. The reader "walks" through the Campus in order to get a feel for the physical characteristics of the site. The report then moves into existing conditions which are less visible such as utility systems, traffic conditions, space needs requests and market setting. Some of the components begin the discussion of potential future conditions as well as potential impacts. Obviously, the discussion of future conditions and potential impacts will become more detailed as alternative plans for the Campus emerge. It is anticipated that three alternate plans will be

prepared during July and August following the June workshop/charrette with workshops on the alternates scheduled for September.

Section I Physical Characteristics of the Site

The Fairfield Hills Campus is characterized by several physical environments which combine to make it a premier site in Newtown's future. The voters of Newtown have recognized the value of the site by their overwhelming vote at Town Meetings to appropriate bond funds for the purchase and improvement of the Campus. The best way to describe these environments is through a series of graphics and supporting technical reports. The environments which comprise the Fairfield Hills Campus experience include the natural and built environments as well as the relationship to the surrounding area including views to the north over the agricultural land and the residential areas to the west and south.

For purposes of description, these physical characteristics are presented on three summary maps of the Campus:

- Existing Conditions/Site Photos
- Natural Systems Site Inventory
- Development Zones and Site Potential

The first map is a base map of the site and a photographic reconnaissance to acquaint the reader with the Campus. The second map is focused on the natural environment as well as how the site circulation system relates to the natural and built environment. The features shown on this map establish the framework upon which future use of the Campus will be formed. The third map begins to translate existing conditions into this framework for future use.

The Existing Conditions/Site Photos Map gives the reader a feel for the Campus as if one is standing at various locations. The key on the map locates 26 spots with a corresponding photograph for each view from that spot. The 26 spots have been selected to present both the built environment; i.e. buildings and the internal circulation system that connects the

buildings physically and visually as well as the natural environment viewed from various locations.

The Natural Systems and Site Inventory Map presents natural features which comprise the environmental framework within which the planning process will proceed. The natural features include steep terrain, wetlands, streams and drains, floodplain areas, surface drainage patterns and woodland cover. This map should be used as a guide to review the more detailed reports concerning wetland areas as well as the detailed tree inventory. In general, the areas of the site containing the most significant natural features are the eastern portion adjacent to Nunnawauk Road where steep terrain is dominant and a wetland area between Nunnawauk Meadow Housing and South Mile Hill Road. These two areas should be considered as non-developable areas. These areas have potential for trail systems and nature education within the framework of open space preservation. In addition, streams and drains as well as surface water drainage patterns will be an important factor in site planning discussions. The Aquifer Protection District Boundary designates the portions of the site within which specific uses are prohibited and others are allowed only by special exemption by the Planning and Zoning Commission.

The Preliminary Development Zones Map summarizes material presented on the first two maps and identifies in a preliminary fashion those portions of the Campus where development could most logically be located. The map also shows view sheds, existing and potential site access points and potential storm water basins as part of the site water management system. While the main parcel of the Campus totals 185 acres, it should be noted that the development zones total approximately 114 acres. The preliminary development zones have been configured to cluster buildings and/or areas of somewhat similar existing use or physical relationship. Based on some preliminary analysis these might also be areas of future use clusters based upon current uses, physical characteristics and input received from the public. However, it should be made clear that future uses will be determined as the planning process proceeds.

Three technical studies are included which support the graphic material. One report identifies the wetlands on the site and provides an evaluation of the value of these wetland areas. The second report is a detailed inventory of trees within the developed portion of the Campus and provides an assessment of the landscape value and health of 233 individual trees. This detailed inventory will be an important guide for future planning to assure that the mature vegetation which contributes greatly to the character of the Campus is retained to the greatest extent feasible.

The third study presented below discusses the role of the Aquifer Protection District regulations in future site planning. These regulations, as well as the regulations for the Fairfield Hills Adaptive Reuse District and the Conservation and Agriculture District, which cover the site are attached to this section for the reader's information.

Pootatuck River Aquifer Protection District

Background

The northeastern one-third of FHH study area is situated on the Pootatuck River Aquifer, a federally protected sole source aquifer. The Pootatuck River Aquifer consists of inter-bedded layers of sand and gravel with lesser amounts of silt and clay. The aquifer is susceptible to contamination due to its relatively high permeability and shallow water table. The aquifer is recharged from precipitation that percolates through shallow soils and via water from the Pootatuck River and its tributaries.

In 1978, the United States Geological Survey completed a study titled *Computer Modeling of Groundwater Availability in the Pootatuck River Valley*. The modeling study confirmed that the aquifer could produce significant quantities of potable water. A review of this report revealed the following pertinent information pertaining to the Pootatuck River Valley Aquifer:

- The Pootatuck River Aquifer consists of a deposit of stratified drift that is hydraulically connected to the Pootatuck River.
- The results of a hydrogeologic analysis using a mathematical simulation model indicated that approximately 4 million gallons of water are available to be withdrawn from the stratified drift aquifer daily under long term average conditions. The total amount of groundwater that can be withdrawn is limited by the hydrologic characteristics of the aquifer in the northern part of the area, by existing pumping (FHH wells) at the center of the area and by the streamflow available for induced recharge in the southern part of the area. In order to obtain 4 mgd from the aquifer, 2.6 mgd would be derived from induced recharge of water from the Pootatuck River and the remaining 1.4 mgd would be derived from the capture of groundwater runoff. The removal of groundwater from the aquifer at this rate would result in significant flow reductions of the Pootatuck River adjacent to the FHH wells.

The FHH study area is currently served by three stratified drift wells screened in the Pootatuck River Aquifer. Yield tests conducted at the time the wells were installed indicate a combined pumping capacity of 2.43 million gallons per day (mgd). The three wells are registered for pumping capacity of 1.8 mgd and possess pumps that can produce this quantity of water. The pumping capacity is six times the quantity (0.3 mgd) that Fuss & O'Neill estimates will be required for the FHH campus and its surrounding area resulting in a significant margin of safety.

Land Use Implications

For planning and zoning purposes the Town of Newtown regulates the area located above the Pootatuck River Aquifer as an aquifer protection district (APD). The Town's intent in regulating the APD is to promote the health and general welfare of the community by preventing the contamination of groundwater resources and to protect groundwater quality to ensure a present and future supply of safe and healthy drinking water.

The zoning regulations for the APD are applicable in addition to the requirements for the underlying zoning district. In the case of the FHH study area the underlying zoning is Fairfield Hills Adaptive Reuse (FHAR). Both the regulations of the APD and FHAR zones are applicable and in the event of conflict the more restrictive regulation applies. Thirty uses are permitted in the FHAR zone subject to the obtainment of a special exemption from the Planning and Zoning Commission. In summary, these permitted uses include retail sales facilities, wholesale business facilities, educational facilities, light manufacturing facilities, office space, and several other commercial and residential uses.

Permitted uses in the APD include single family dwellings, open space/passive recreation, managed forest land, and wells and accessory equipment for the purpose of providing public water. With a special exemption from the commission, principle and accessory uses for the underlying zoning district are permitted with the exception of nineteen prohibited uses that are outlined in the planning and zoning regulations. These prohibited uses generally include activities that involve the handling of significant quantities of petroleum products and industrial chemicals.

The commercial development of the portion of the FHH study area occupied by the APD will require a special exemption from the commission to meet the requirements of both the underlying zoning (FHAR) and the APD zoning overlay district. The procedure for obtaining such an exemption requires that commission arrives at a finding of no significant environmental impact for the proposed activity with regard to the Pootatuck River Aquifer. The submission of an Aquifer Impact Assessment that provides baseline information will be required in order for the commission to evaluate the special exemption and ultimately arrive at a finding of no significant environmental impact.

**FAIRFIELD HILLS MASTER PLAN
INLAND WETLANDS MAPPING
& EVALUATION REPORT**

May 2002

MMI #1482-18

Prepared for:

Town of Newtown

Prepared by:

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A. Project Setting (See Figure 1)

1. **Ecoregion:** The site is located in the Southwest Hills Ecoregion of Connecticut in the Southern Hills – Central Hardwoods Zone (IV-A, Dowhan and Craig, 1976).

2. **Geology**

Bedrock: The site is underlain by the Brookfield gneiss formation (Rodgers, 1985). It is characterized as a dark and light, medium- to coarse-grained, dioritic gneiss.

Surficial Materials: The site is comprised of glacial till material, which is classified as both thick and very thick. There are sand and gravel deposits east and west of the site.

3. **Watershed**

- **Drainage Basins:** The eastern half of the site is in the Pootatuck River sub-regional drainage basin (6020) of the Housatonic River main stem drainage basin (6). The western half of the site drains to Deep Brook (6019) and then to the Housatonic River.
- **Watercourses:** There are no watercourses depicted on the USGS quadrangle sheet, or other resource mapping, for the site. Some minor intermittent watercourses were noted during the field evaluation. Deep Brook is approximately 2000 feet to the west and the Pootatuck River is approximately 3000 feet east of the site. The Water Quality Classification Map of Connecticut (Murphy, 1987) rates both as Class B/A waterbodies indicating that they are not meeting the state's current water quality goals.

4. Groundwater: The site is classified as GB/GA. This means it may be unsuitable for direct human consumption without further treatment. To the southeast is a Level B Groundwater Protection Area with public water supply wells.
5. Biological Resources: The Natural Diversity Data Base is maintained by the Connecticut DEP and is available on the web via the University of Connecticut's MAGIC web site. A review of this information identified no areas of concern for threatened, endangered or special concern species or critical habitats at the site.
6. Soils: The current USDA – NRCS mapping of the site identifies the following mapping units:

- Upland Soils

Udorthents and Urban Land Complex comprises the majority of the site. These soils have been disturbed by cut and fill operations and include paved areas and buildings as well.

Canton and Charlton soils lie to the southeast of the central campus core. These are non-hydric, non-wetland soils. Both are prime farmland soils.

Woodbridge soil is found north and south of the central campus core. This is a non-hydric, non-wetland soil. It is also classified as a prime farmland soil.

- Wetland Soils

Leicester is a poorly drained hydric soil found south of the central campus core. It is categorized as an additional statewide important farmland soil.

Ridgebury is a poorly drained hydric soil found northeast of the central campus core. It is also categorized as an additional statewide important farmland soil.

Ridgebury, Leicester and Whitman soils are poorly drained to very poorly drained hydric soils. This mapping unit is found south of the central campus core. It is not an important farmland soil.

B. Field Evaluation (See Figure 2)

The field evaluation substantially confirmed the published resource mapping. Wetland areas 1 – 4 were found in the general location mapped by the USDA – NRCS and the soil types reported were accurate. No other wetlands were observed but small pockets of wetland may occur within upland mapping units. Several unmapped intermittent watercourses and drainage ditches were observed but should not impact any proposed redevelopment of the site.

WETLAND FUNCTIONS AND VALUES ASSESSMENT

Wetland 1

This wetland is a narrow forested band of poorly drained Leicester soil lying between existing baseball fields and the development on Nunnawauk Road. It includes a small area of open water (100' x 200') at its southern limit where it meets Nunnawauk Road and an intermittent watercourse that flows north toward the central campus. The trees are smaller than the nearby Wetland 2 due to more recent clearing. The aging cedars are characteristic of reforesting field habitats and attest to the prior land use. The area shows some ill effects from the adjoining ball fields, particularly dumping. There is a woods road crossing the wetland that provides convenient access for walkers. Wetland 1 has no Principal Valuable Function in this watershed.

Dominant vegetation includes:

- Trees: Red maple, Black cherry, White ash, Red cedar, American elm
- Shrubs: Highbush blueberry, Japanese barberry, Northern arrowwood, poison ivy
- Herbs: Sensitive fern, Jack-in-the-pulpit, spotted jewelweed, Virginia creeper, wood anemone, tussock sedge, iris, mosses

	<i>Wetland 1 - Functions and Values</i>	Existing Conditions
	Groundwater Recharge and Discharge	Low
	Floodflow Alteration/ Storage Capacity / Desynchronization	Low
	Fisheries	None
	Sediment / Toxicant Retention	Low
	Nutrient Retention / Removal / Transformation	Low
	Production Export / Food Chain Support / Nutrients	Low
	Shoreline Anchoring / Dissipation of Erosive Forces	None
	Wildlife	Moderate
	Recreation	Low
	Education / Scientific Value	None
	Uniqueness / Heritage	None
	Visual Quality / Aesthetics	None
ES	Species of Special Concern, Endangered, or Threatened Status	None

Wetland 2

This wetland area is a circular depression of poorly drained and very poorly drained soil (Ridgebury, Leicester and Whitman). It is forested including some very large oaks and ashes. The area has varied microtopography including some ephemeral pools and intermittent watercourses. This adds structural diversity to the habitat. The forest and woods road provide a good link to Wetland 1 for walkers. Wetland 2 has no Principal Valuable Function in this watershed.

Dominant vegetation includes:

- Trees: Red oak, White oak, American beech, Shagbark hickory, Sugar maple, Black birch, Red maple, Black cherry, White ash, American elm
- Shrubs: Highbush blueberry, Spicebush, Japanese barberry, Northern arrowwood, Poison ivy, Bramble, Winged euonymus
- Herbs: Sensitive fern, Jack-in-the-pulpit, Skunk cabbage, Spotted jewelweed, Virginia creeper, Wood anemone, Marsh violet, Trout lily, Interrupted fern, mosses

<i>Wetland 2 - Functions and Values</i>		Existing Conditions
	Groundwater Recharge and Discharge	Low
	Floodflow Alteration/ Storage Capacity / Desynchronization	Low
	Fisheries	None
	Sediment / Toxicant Retention	Low

	Nutrient Retention / Removal / Transformation	Low
	Production Export / Food Chain Support / Nutrients	Moderate
	Shoreline Anchoring / Dissipation of Erosive Forces	None
	Wildlife	Moderate
	Recreation	Low
	Education / Scientific Value	None
	Uniqueness / Heritage	None
	Visual Quality / Aesthetics	Low
ES	Species of Special Concern, Endangered, or Threatened Status	None

Wetland 3

This wetland area is a small hillside seep comprised of poorly drained Ridgebury soil. It occurs at a slope break between cleared fields. The underlying soil has a dense layer commonly called ‘hardpan’ which restricts the downward movement of water. As a result, the water table becomes perched and breaks out to the surface, normally in the spring. Often, an intermittent watercourse provides the outlet. Here, there is an old farm track to the adjoining fields that carries runoff to the east. Wetland 3 has no Principal Valuable Function in this watershed.

Dominant vegetation includes:

- Trees: Red oak, Sugar maple, American elm
- Shrubs: Japanese barberry, Northern arrowwood, Poison ivy, Honeysuckle

- Herbs: Sensitive fern, Jack-in-the-pulpit, Skunk cabbage, Spotted jewelweed, Cinnamon fern

<i>Wetland 3 - Functions and Values</i>		Existing Conditions
	Groundwater Recharge and Discharge	Low
	Floodflow Alteration/ Storage Capacity / Desynchronization	None
	Fisheries	None
	Sediment / Toxicant Retention	None
	Nutrient Retention / Removal / Transformation	None
	Production Export / Food Chain Support / Nutrients	Low
	Shoreline Anchoring / Dissipation of Erosive Forces	None
	Wildlife	Low
	Recreation	None
	Education / Scientific Value	None
	Uniqueness / Heritage	None
	Visual Quality / Aesthetics	None
ES	Species of Special Concern, Endangered, or Threatened Status	None

Wetland 4

This area is another small hillside seep similar to Wetland 3 except that it has been completely altered by the construction of Wasserman Way (SR 860). A catch basin collects groundwater discharge and transports it to the road drainage system that outlets to the rest of this wetland north of the road. This area is within fenced pastureland for horses. Wetland 4 has no Principal Valuable Function in this watershed.

Dominant vegetation includes:

- Trees: None
- Shrubs: None
- Herbs: Spike rush, soft rush, vetch, other rushes and grasses

<i>Wetland 4 - Functions and Values</i>		Existing Conditions
	Groundwater Recharge and Discharge	Low
	Floodflow Alteration/ Storage Capacity / Desynchronization	None
	Fisheries	None
	Sediment / Toxicant Retention	None
	Nutrient Retention / Removal / Transformation	None
	Production Export / Food Chain Support / Nutrients	None

	Shoreline Anchoring / Dissipation of Erosive Forces	None
	Wildlife	None
	Recreation	None
	Education / Scientific Value	None
	Uniqueness / Heritage	None
	Visual Quality / Aesthetics	None
ES	Species of Special Concern, Endangered, or Threatened Status	None

Section II Condition and General Re-Use Potential of Existing Structures

Just as the natural environment and the existing internal circulation pattern forms the framework for future use of the Campus, the existing structures form a framework for future use. This framework is both in regards to the physical appearance and relationship of structures which creates the campus environment but also the future use of structures which will accommodate the day to day activities of the Campus in the future. As discussed later, several of the existing structures have been identified by groups in the community for potential use to meet their needs. There are also Town needs including a Town Hall which have been identified.

The following presents a summary of existing conditions and potential uses for 8 buildings on the Campus. As described, these 8 buildings include those which seem to have the greatest potential for re-use based upon input received to date, location, physical characteristics and condition. This list may be expended, revised or reduced as the planning process proceeds.

FAIRFIELD HILLS MASTER PLAN

Newtown, Connecticut

Building Summaries

Bridgeport Hall

The Canaan House

Cochran House

Greenwich House

The Kent House

Newtown Hall

Plymouth Hall

The Shelton House

Stratford Hall

Woodbury Hall

The following building summaries represent the team's findings and are based on numerous tours of each facility, detailed field observations, and existing condition information. These reports represent the research of all team members and take into account, data gathered from town-wide resident input. Where recommendations are made for the potential re-use of an existing structure, the need as compiled from town-wide discussions as well as the existing attributes of the specific structure, both play a role. Attributes may include a building's location within the context of the campus and size, its overall condition, its flexibility for modifications, any unique spaces it may have, and its overall sense of character. Many buildings have not been included in our initial study since their location, condition, or some other aspect of its characteristics do not necessarily warrant re-use.

This report represents only a Summary of our initial findings. Existing structures require a detailed analysis of mechanical, electrical, plumbing, and structural systems to fully understand the scope of restoration and renovation work required. A thorough code analysis of each structure relative to its reuse or change of use is also required. Finally, further study of environmental issues and the abatement of these materials will also be necessary to comprise a more comprehensive study.

Bridgeport Hall
Fairfield Hills Park
Second Avenue
Newtown, Connecticut



Building Summary

Similar to many other Fairfield Hills structures, Bridgeport was constructed in 1933. The total structure houses approximately 68,000 square feet, and includes a partial basement. Consisting of one story with varying ceiling heights, this building remains in excellent condition. Its primary use included central food preparation, as well as patient and staff dining, hence the vaulted ceiling heights ranging from 11'-6" to 19'-0". Similar to other campus structures, Bridgeport is arranged symmetrically, its spacious areas are naturally lit from large round top and palladian style windows. Constructed of brick, pre-cast, and an asbestos shingled sloped roof, it sits in the center of the campus. Bridgeport's interiors generally consist of beige brick wainscoting and plaster with wood trim and banding accents.

The roof structure consists of long span roof trusses that bear on load bearing masonry walls. Wood planking spans between truss members. Curved bottom cords of each truss form the structure of the rounded ceilings and arched areas. The floor structure over the basement area is a cast-in-place ribbed slab bearing on a steel frame encased in concrete. From the exterior, there appears to be crawl spaces below the dining areas. Bridgeport also contains an elevator that was used to cart food to the basement area where it was delivered to each patient building.

Much of the exterior remains in good condition; however, some masonry requires restoration and re-pointing. All exterior exposed woodwork at fascias, rakes and cupolas show signs of peeling and localized areas of rot and are also in need of restoration. Further analysis of the existing window units are required to determine their condition and their ability to perform relative to the re-use of the existing building.

Currently a steam heating system is in place but is not served by a boiler plant. The building is not heated, and is not fitted out for air-conditioning. Further analysis of these systems as well as plumbing, electrical, telephone, etc. is required to determine the extent of renovation required relative to the re-use of the existing structure.

Insulating values of exterior walls, attic separations, etc. do not conform to current energy codes and need further consideration for any change of use modifications that may take place.

Similar to all the structures at Fairfield Hills, the floor level at Bridgeport is two to four feet above grade and is not handicapped accessible. New wheelchair ramping, door clearance changes, and numerous handicapped accessible improvements will be necessary to meet ADA compliance.

Bridgeport Hall lends itself to many different options for future use. Its excellent condition, dramatic spaces, and durable finishes set the structure apart as one of the finest buildings at the campus. The taller spaces could serve as multi-purpose rooms accommodating the building user as well as miscellaneous town-wide needs. The opportunities for kitchen services also pose the option for revenue generating banquet spaces. The halls at Bridgeport could be rented for private venues. The limited height, however, makes these spaces less desirable as gymnasium space.

The Canaan House

Fairfield Hills Park
Fairfield Circle South
Newtown, Connecticut



Building Summary

Completed in 1940, and added to and improved during its tenure, the Canaan House houses approximately 208,800 square feet on three floors. The structure also includes a full basement and attic. Primarily used for patient care and residency the building remains in good condition. The character of the existing brick structure is simply adorned with sloped pediments at entrances, arched window openings, a limestone cornice and white trim. Many interior spaces are also tastefully detailed with original woodwork and subtly detailed plaster surfaces.

Vented at a center cupola, the asbestos shingle roofing sits on a nailable pre-cast concrete plank. This planking spans steel roof trusses and forms the shape of the pitched roof. The floor of the attic space consists of a concrete ribbed slab. The remaining floor slabs are also cast-in-place ribbed concrete bearing on concrete encased steel beams at interior locations, and a load bearing brick wall at the exterior perimeter. The interior partitions are plaster over terra-cotta clay tile. Although these walls are not load bearing many may be bracing the exterior walls and would need to be assessed if any demolition is required.

Several steel lintels show signs of corrosion with spalling masonry above. The re-pointing of the masonry and the replacement of the steel lintels are required at each location. Exterior sills and miscellaneous masonry areas including the limestone watertables and cornices will also need re-pointing in the future.

Several areas of exterior woodwork, particularly at the cupola areas show signs of peeling and localized areas of rot indicating the need for repair and repainting. The original windows should also be replaced to conform to new energy codes and the modern demands of any change in building usage.

Currently a steam heating system is in place and is served by a portable boiler plant. The building is also fully air-conditioned and is served by an on site chiller. Further analysis of these systems including plumbing, electrical, telephone, etc. is required to determine the extent of renovation required relative to the re-use of the existing structure.

Insulating values of exterior walls, attic separations, etc. do not conform to current energy codes and need further consideration for any change of use modifications that may take place.

The entry level of the Canaan House sits approximately ½ story above grade and is not handicapped accessible. Along with new wheelchair ramping at several locations and numerous ADA required improvements to all the Lavatories, hallways, stairways, etc., the replacement of the existing elevator will be required to accommodate accessibility.

The potential flexibility of interior partitions, existing structural column spacing, and significant floor area give the Canaan House an advantage for re-use as a municipal town office building. The existing structure also offers several opportunities for clean demolition lines where excess square footage may not be required. Along with its integral flexibility, the Canaan House poses advantages from a mechanical infrastructure perspective with a recently installed air-conditioning system. Additional attributes include the good condition of the building and the strong sense of arrival at its entrance.

The Cochran House

Fairfield Hills Park
Mile Hill South Road
Newtown, Connecticut



Building Summary

The Cochran House was completed in 1956, and houses approximately 188,422 sq.ft. on three floors. The structure also includes a basement and penthouse areas at the roof level. Vacant for several years, Cochran was primarily used as a patient care hospital and the location for the assessment of incoming patients. One of the newer buildings on the campus, Cochran presently stands in fair condition at best. The existing structure lacks the architectural character present at most of the campus; instead it embodies a very utilitarian style representative of its use.

Primarily brick, the exterior of Cochran is banded horizontally with limestone, and is minimally detailed with simulated coins formed by brick reveals at all the outside corners. A low-sloped roofing system and parapet wall with limestone coping cap the 1956 structure. Red polished granite surrounds the aluminum and glass entry, and forms the balustrade flanking the approach. The exterior walls are a composite assembly of brick and cinder masonry units, cladding a reinforced concrete frame. This frame consists of cast in place ribbed concrete slabs at each floor level supported by reinforced concrete beams and columns. Most of the interior partitions do not appear to be load bearing, however; since some may be acting as structural shear walls, further assessment is required.

Most of Cochran's brick and limestone exterior is showing significant signs of water infiltration. Cracking and brick movement was noted at several locations, as well as substantial spalling. The water infiltration appears to be significant enough to potentially deteriorate structural steel supporting the brick masonry. In many cases the spalling has perpetuated to the point of "popping" brick faces. Long term failure of joint sealants of the limestone bands and parapet coping has also contributed to extensive decay at many areas, particularly the horizontal coping surfaces. Typically pitched to the roof, these sections of stone are level allowing additional rainwater to infiltrate. At a minimum the veneer at Cochran will need to undergo significant restoration. The entire roof parapet down to the third floor window heads will need to be removed and rebuilt. Further analysis could conclude with the recommendation to rebuild the entire exterior wall.

Along with the extensive exterior repairs required at Cochran, new windows would be required to conform to energy codes and the needs of any change in building usage. The refurbishment and repair of the entrance granite work is also required. A preliminary roof inspection also shows areas of roofing and flashing failures and will require repair or re-roofing based on further analysis.

Cochran is fully air-conditioned and is served by an on site chiller. Although the electrical heating and plumbing systems are original, the entire mechanical system has been renovated within the past 10-12 years. Required work for the reuse of this system would include duct cleaning of the entire system. Further analysis of these systems is required relative to the re-use of the existing structure.

Like all the buildings at the Fairfield Hills Campus the main floor at Cochran sits above grade and is not handicapped accessible. Wheelchair ramping and numerous ADA required improvements are required to make this structure code compliant.

Cochran's lack of architectural character and need for extensive renovation hinder the opportunities for reuse of this structure.

The Greenwich House

Fairfield Hills Park
Third Avenue
Newtown, Connecticut



Building Summary

The Greenwich House was built in 1933 and houses approximately 99,986 square feet of space on 3 stories. Primarily used as the patient hospital prior to the erection of the Cochran house, and nearly identical to the Shelton House, Greenwich stands in fair condition at a mirrored location to Shelton. The structure also includes a full basement and attic. The existing brick building is capped with sloping asbestos shingle roofs and copulas, but lacks the grand portico synonymous to the Shelton House and Fairfield Hills. At one point several years back, a fire moved through the first floor wing. Although there was significant damage to the finishes and furnishings the structure remains intact. The condition of the building is fair and like Shelton in need of restoration.

The floor slabs are cast-in-place ribbed concrete bearing on concrete encased steel beams at interior locations, and a load bearing brick wall at the exterior perimeter. The interior partitions are plaster over terra-cotta clay tile.

Many steel lintels show signs of corrosion with spalling masonry above and alongside window openings. Years of water penetration and cyclical freeze/ thaw damage have deteriorated many areas of masonry. Re-pointing of the masonry and the replacement of the steel lintels are required at these locations.

All areas of exterior woodwork, particularly at the sunrooms, cupolas, and cornices, have significant signs of peeling and rot, much of which will need replacement. All the original windows will need replacement.

Although the building is unheated, a steam heating system is in place and in need of a boiler plant. Further analysis of these systems including plumbing, electrical, telephone, etc. is required to determine the extent of renovation required relative to the re-use of the existing structure.

Insulating values of exterior walls, attic separations, etc. do not conform to current energy codes and need further consideration for any change of use modifications that may take place.

The entry level of Greenwich, similar to Shelton House, sits approximately ½ story above grade and is not handicapped accessible. Along with new wheelchair ramping at several locations and numerous ADA required improvements to all the lavatories, hallways, stairways, etc., the installation of a new elevator will be required to accommodate accessibility.

The Greenwich House, although very similar to the Shelton House, lacks its prominent location. The Greenwich House also lacks the drama of a main entry. Due to the structure's rigid symmetry, there are additional challenges for the demolition of any one area or the construction of a new one. The marginally fair condition of Greenwich and its lack of interior character make for a questionable reuse of the structure.

The Kent House
Fairfield Hills Park
Fairfield Circle North
Newtown, Connecticut



Building Summary

The mirror image of the Canaan House, Kent was completed in 1940. Added to and improved during its tenure, it houses approximately 208,800 square feet on three floors. The structure also includes a full basement and attic and was primarily used for patient care and residency. Very similar to Canaan, the character of the existing brick structure is simply adorned with sloped pediments at entrances, arched window openings, a limestone cornice and white trim. Many interior spaces are also tastefully detailed with original woodwork and subtly detailed plaster surfaces. However, due to the lack of heat, the interior has deteriorated and is not equal to Canaan House in its present condition.

Vented at a center cupola, the asbestos shingle roofing sits on a nailable pre-cast concrete plank. This planking spans steel roof trusses and forms the shape of the pitched roof. The floor of the attic space consists of a concrete ribbed slab. The remaining floor slabs are also cast-in-place ribbed concrete bearing on concrete encased steel beams at interior locations, and a load bearing brick wall at the exterior perimeter. The interior partitions are plaster over terra-cotta clay tile. Although these walls are not load bearing many may be bracing the exterior walls and would need to be assessed if any demolition is required.

Although a steam heating system is in place, the building stands unheated or air-conditioned. Further analysis of the systems including plumbing, electrical, telephone, etc. is required to determine the extent of renovation required relative to the re-use of the existing structure.

Insulating values of exterior walls, attic separations, etc. do not conform to current energy codes and need further consideration for any change of use modifications that may take place.

The entry level of the Kent House sits approximately ½ story above grade and is not handicapped accessible. Along with new wheelchair ramping at several locations and numerous ADA required improvements to all the lavatories, hallways, stairways, etc., the replacement of the existing elevator will be required to accommodate accessibility.

The potential flexibility of interior partitions, existing structural column spacing, and significant floor area give the Kent House an advantage for re-use as office spaces. The existing structure also offers several opportunities for clean demolition lines were excess square footage or a change of use is necessary. The Kent house also plays an important role from a campus planning perspective. Its location adjacent to Bridgeport symmetrically balances the campus plan sitting opposite the Canaan House. The requests for a gymnasium, pool, and YMCA, coupled with the pivotal planning role Kent plays makes this structure a possibility for reuse with recreation related office space at the front of the building and newly built recreation spaces added to the rear as a possible option.

Newtown Hall
Fairfield Hills Park
Mile Hill Road
Newtown, Connecticut



Building Summary

Constructed in 1933, Newtown Hall remains one of the finest buildings on the Fairfield Hills campus. Originally used as an administration building. Newtown Hall is in excellent condition and could house a use of approximately 16,500 square feet within its two stories. This building also houses an attic and a basement. The simple, yet handsome brick structure, is capped by a symmetrical hipped roof. A large cupola reinforces the symmetry along with a large, ornamental pre-cast entry colonnade and pediment. Although simply organized, the interior of Newtown Hall is very tastefully detailed. The main entry is adorned with plaster and wood moldings and proportioned comfortably. Most remaining office spaces are still fitted out with the original wood doors, transoms, and trim, all in excellent condition.

The sloping asbestos shingle roofing sits on a 2x12 wood rafter structure, supported by a steel frame. The floor slabs are cast-in-place ribbed concrete bearing on concrete encased steel beams at interior locations, and a load bearing brick wall at the exterior. Steel columns carry much of the interior structural loads from the roof and floors down to the basement. The interior partitions are plaster over terra-cotta clay tile. Although these walls are not load bearing many may be bracing the exterior walls and would need to be assessed if any demolition is required.

Much of the exterior remains in good condition with the exception of some miscellaneous re-pointing and concrete restoration at the main entrance

Currently a steam heating system is in place but is not served by a boiler plant. The building is not heated, and is not fitted out for air-conditioning. Further analysis of these systems including plumbing, electrical, telephone, etc. is required to determine the extent of renovation required relative to the re-use of the existing structure.

Insulating values of exterior walls, attic separations, etc. do not conform to current energy codes and need further consideration for any change of use modifications that may take place.

The entry level of Newtown Hall, like many other structures at Fairfield Hills sits approximately ½ story above grade and is not handicapped accessible. Along with new wheelchair ramping at several locations and numerous ADA required improvements to all the lavatories, stairways, etc., a new elevator will need to be installed depending on the proposed use to accommodate accessibility.

Newtown Hall, lends itself as an existing structure, to a very straight forward reuse as a leaseable office building. Its layout, condition, quality of architecture and construction clearly lead to this use. Although an elevator will need to be added to this building, many of the existing rooms are the appropriate size and proportion for new offices.

Plymouth Hall
Fairfield Hills Park
Fairfield Circle South
Newtown, Connecticut



Building Summary

Built in 1956 Plymouth Hall stands as a newer structure against the original 1930's buildings. Its diversified original usage included a gymnasium, auditorium and stage with a fly loft, and a small bowling alley in the basement level. Arts and crafts spaces and a chapel were also part of the original building. Plymouth's façade fronts on Fairfield Circle and is reminiscent of the Fairfield Hills original architecture. The remaining sides and rear of the structure; however, deviate from the character of the main campus with an oversimplified 50's look. Primarily built of brick, the structure includes a sloped roof in the front areas and flat roofs over the remaining portions. Isolated areas of pre-cast concrete and painted wood add detail at the entry façade. The interior of Plymouth, like the rear and side portions of the exterior, is of a 50's vernacular and lacks the character and detail of many of the 1930's campus buildings.

In general, both the interior and exterior of Plymouth is in fair condition. Along with the required re-pointing and wood restoration necessary at most of the Fairfield Hills structures, some of Plymouth's steel roof purlins at the gymnasium show corrosion and will need to be replaced. Most steel lintels show significant signs of rust and deterioration, and diagonal masonry cracking below windowsills, is prominent outside the Gymnasium. Most steel lintels will need replacement.

The primary structure at the Gymnasium is pre-cast concrete hinged arches spanned with steel beam roof purlins. Cementitious wood fiber decking, span between purlins. Brick on concrete masonry units comprise the infill between the structure. The structure over the auditorium appears to be long span steel trusses with lightweight pre-cast plank decking.

A steam heating system is in place and is not served by a boiler plant. The building is not heated, and is not equipped for air-conditioning. Further analysis of these systems including plumbing, electrical, telephone, etc. is required to determine the extent of renovation required relative to the re-use of the existing structure.

Insulating values of exterior walls, attic separations, etc. do not conform to current energy codes and need further consideration for any change of use modifications that may take place.

Plymouth Hall's main level sits two to three feet above grade. Along with wheelchair ramping and new door clearance requirements, numerous additional ADA required improvements are necessary for handicapped accessibility.

Plymouth Hall certainly has unique attributes relative to the remaining campus. The auditorium space and the arts and crafts related spaces lend this structure to be a community based Cultural and performing Arts Center. The renovated auditorium could help fill the need for such space within the community. Although this building lacks some of the character and richness in other Fairfield Hills buildings, a tastefully done renovation could define an enjoyable experience. The court within the gymnasium at Plymouth, however, is far smaller than a regulation size. Furthermore, this part of the structure is in need of repair. This is an area of the building that could be demolished and rebuilt to serve a similar purpose correctly.

The Shelton House

Fairfield Hills Park
Mile Hill Road
Newtown, Connecticut



Building Summary

The Shelton House was built in 1933 and houses approximately 89,000 square feet of space on 2 ½ stories. Primarily used for patient housing and some administration, the Shelton House is the entry structure of the complex and serves as the front of the campus. The structure also includes a full basement and attic. The existing brick building is capped with sloping asbestos shingle roofs and cupolas and is recognized by its monumental pre-cast concrete pediment and colonnade at the entrance. The condition of the building is fair and in general need of significant restoration.

The floor slabs are cast-in-place ribbed concrete bearing on concrete encased steel beams at interior locations, and a load bearing brick wall at the exterior perimeter. The interior partitions are plaster over terra-cotta clay tile.

Most steel lintels show signs of corrosion with spalling masonry above and alongside window openings. Years of water penetration and cyclical freeze/ thaw damage have deteriorated many areas of masonry. Re-pointing of the masonry and the replacement of the steel lintels are required at all of these locations.

All areas of exterior woodwork, particularly at the sunrooms, cupolas, and cornices, there is significant signs of peeling and rot, much of which will need replacement. All the original windows will need replacement.

Although the building is unheated, a steam heating system is in place and in need of a boiler plant. Further analysis of these systems including plumbing, electrical, telephone, etc. is required to determine the extent of renovation required relative to the re-use of the existing structure.

Insulating values of exterior walls, attic separations, etc. do not conform to current energy codes and need further consideration for any change of use modifications that may take place.

The entry level of the Shelton House sits approximately ½ story above grade and is not handicapped accessible. Along with new wheelchair ramping at several locations and numerous ADA required improvements to all the lavatories, hallways, stairways, etc., the installation of a new elevator will be required to accommodate accessibility.

The Shelton House, although the most prominent Fairfield Hills structure by its location, has no sense of arrival at its main entrance. Instead, its grand front portico and pediment is in reality a front to the campus entry. Significant interior work will need to be done to address this issue. Due to the structure's rigid symmetry and site location, there are additional challenges for the demolition of any one area or the construction of a new one. The marginally fair condition of Shelton and its lack of interior character make for a questionable reuse of the structure.

Stratford Hall
Fairfield Hills Park
Washington Avenue
Newtown, Connecticut



Building Summary

Stratford Hall, constructed in 1933 was formally used as a dining hall and library. This structure contains about 9,000 square feet including its basement. The quaint yet stately brick structure opens gracefully to the outdoors with five large round top windows. Inside, an impressive vaulted ceiling defines the main space and is bordered on each side by arcades of a similar vocabulary. Intricate plaster detailing, wood panels, and molding richly articulate this grand interior space.

Although the exterior of this structure is sound, a prolonged steam leak on the interior has damaged much of the interior finishes and will need repair for the ultimate reuse of the building.

Most likely the sloping asbestos shingle roofing sits on a long span steel truss. The floor slabs below is cast-in-place ribbed concrete and bears on concrete encased steel beams, steel columns, and load bearing masonry at interior locations. The perimeter is supported by a load bearing masonry wall.

Much of the exterior remains in good condition with the exception of some miscellaneous re-pointing and concrete restoration. Steel lintels at flat window arches will need replacement and repainting of the existing trim and banding is also required.

Although damaged, a steam heating system is in place and is not served by a boiler plant. The building is not heated, and is not equipped for air-conditioning Further analysis of these systems including plumbing, electrical, telephone, etc. is required to determine the extent of renovation required relative to the re-use of the existing structure.

Insulating values of exterior walls, attic separations, etc. do not conform to current energy codes and need further consideration for any change of use modifications that may take place.

The entry level of Stratford Hall, like many other structures at Fairfield hills sits a few feet above grade and will need new wheelchair ramping for accessibility. New lavatories and other ADA required improvements are necessary to accommodate accessibility.

Stratford's dramatic space clearly lends itself to a fine restaurant. Part of this space could become a bar and lounge area with the remainder dining. To accommodate this change of use a new kitchen and service area would need to be constructed. Site area is also available to develop a south facing outdoor dining area. Another use could be for a single user office space or small convenience retail/service use.

Woodbury Hall
Fairfield Hills Park
Mile Hill Road
Newtown, Connecticut



Building Summary

Woodbury Hall was constructed in 1933 and was primarily used for nursing staff residency. This structure contains about 30,000 square feet on 2 stories and includes a basement and an attic. Similar to the massing and street presence of Newtown, Woodbury is also very symmetrical. Its symmetry is reinforced by a large entrance pediment and balanced by gabled roof ends. The organization of the plan is simple and signature spaces are fitted out with raised panel woodwork and tastefully articulated plasterwork.

The sloping asbestos shingle roofing sits on a 2x12 wood rafter structure, supported by a steel frame. The floor slabs are cast-in-place ribbed concrete bearing on concrete encased steel beams at interior locations, and a load bearing brick wall at the exterior. Steel columns carry much of the interior structural loads from the roof and floors down to the basement. The interior partitions are plaster over terra-cotta clay tile. Although these walls are not load bearing many may be bracing the exterior walls and would need to be assessed if any demolition is required. Current conditions in the basement suggest a significant drainage problem around the perimeter of the building. Heavy flooding and moisture infiltration over time has perpetuated into mildew problems and must be dealt with.

Much of the exterior remains in good condition with the exception of some miscellaneous re-pointing and concrete restoration at the main entrance and other masonry areas. Small built-up roofing sections at the ends of the building show signs of wear and moisture, and are in need of replacement.

Currently a steam heating system is in place, but is not served by a boiler plant. The building is not heated, and is not fitted out for air-conditioning. Further analysis of these systems including plumbing, electrical, telephone, etc. is required to determine the extent of renovation required relative to the re-use of the existing structure.

Insulating values of exterior walls, attic separations, etc. do not conform to current energy codes and need further consideration for any change of use modifications that may take place.

The entry level of Woodbury Hall, like many other structures at Fairfield Hills sits approximately ½ story above grade and is not handicapped accessible. Along with new wheelchair ramping at several locations and numerous ADA required improvements to all the lavatories, stairways, etc., a new replacement elevator may need to be installed depending on the proposed use to accommodate accessibility.

Woodbury Hall although used primarily for staff dorms, also has a layout that lends itself to offices. Many of the existing rooms at this location are of the size and proportion appropriate for administrative spaces. Woodbury has a large entry space with a fireplace off of the entrance vestibule that would serve well as a waiting and reception area. The repair of the moisture and flooding condition of the basement, the need for a replacement elevator, and other required improvements will be mandatory to bring this structure to a leaseable level.

Section III Existing Utility Systems

Due to its past use as a hospital, the Fairfield Hills Campus has a fully developed utility infrastructure including public water, sanitary sewers, storm drainage, electric and telephone service. This infrastructure is of varying ages and condition depending on the specific systems. However, in general, the systems date back to the 1930's when the hospital was originally opened with a variety of upgrades over the years. For example, the original sanitary sewer plant serving the Campus was abandoned and the Campus is served by the recently constructed Town sewer plant. Other upgrades have included the covering of what were previously open water reservoirs on the Campus to create concrete water storage facilities. The following describes existing utility infrastructure.

Utility Summary

The following is a description of the existing water, sanitary sewer and stormwater systems at the Fairfield Hills Hospital (FHH) campus, based on review of available mapping, visual observations and discussions with Town and FHH management staff.

A. Water System

Water is supplied to the FHH campus by two stratified drift wells (#7 and #8) located on land owned by the Pootatuck Fish & Game Club (PFGC). (Another well (#3) located on FHH property, has also been used in the past as a partial backup supply.) The PFGC wells are high yield, in the range of 200 to 400 gpm each, and are physically located in concrete buildings, and were installed in approximately 1947. The wells pump water to the pump house on Mile Hill Road. Some minor water treatment is provided at the pump house for chlorination and phosphate addition. This capacity has been determined to be sufficient on a daily basis to meet the needs of re-use of the Campus.

Well #3 and the pump house are on State owned land. The other 2 wells are on land owned by the Pootatuck Fish and Game Club (PFGC). The PFGC has leased the use of the water to the State, which is a 99 year agreement to supply water to the campus.

Water is conveyed from the pump house to two storage tanks on the southeast side of the campus. These two in-ground concrete tanks, or bunkers, are reportedly of 500,000 gallon capacity each. These were originally open storage, but were later covered for water quality purposes.

Most of the water mains were installed in the 1930's, and are reportedly 6" to 12" inch diameter cast iron pipes with leaded joints. Newer mains serve Garner Correctional Institute (8 inch diameter) and the Nunnawauk Meadows Housing Complex (10 inch diameter), and a newer 16 inch main was installed on the campus in the 1950's to improve fire protection capability.

We estimate there are about 30,000 feet of mains in this system that are 6 inch diameter and larger, plus numerous water service lines smaller than 6 inch. Approximately 11,000 feet of this length are the transmission mains between the wells and the tanks and between the tanks and the campus. The 30,000 foot estimate does not include the main to Garner C.I. (approximately 1,900 feet). There is also an interconnection with the United Water Connecticut water system, which is intended primarily for emergency domestic water supply use.

There have been anecdotal reports that the water system has a relatively high amount of leakage, but there is not adequate metering nor data to document this claim.

B. Wastewater Collection System

The sewer system serving the FHH campus is owned by the State, and also serves Garner Correctional Institute and Nunnawauk Meadows. These sewers discharge into the Town's sewer system (installed in 1995) near the FHH's abandoned (but still extant) wastewater treatment plant, adjacent to Deep Brook.

There are approximately 15,000 feet of sewers in the FHH system. The bulk of the sewer lines were installed in the 1930's and are likely 8 inch diameter vitrified clay pipe (VCP). The VCP of this vintage was not as durable or watertight when it was new as are today's materials, and this VCP has been in place for many decades.

The sanitary sewer system conveys wastewater from each building on the campus, and also collects infiltration and inflow (I/I) from the service area. Infiltration is groundwater that enters the sewer pipes and manholes through cracks and non-watertight joints, while inflow comes from storm drains and roof leaders that are improperly connected to the sanitary sewer. Flow monitoring records from the flowmeter where the State's flow enters the Town sewer system indicate the presence of both infiltration and inflow, and the FHH flows peak significantly when there is a heavy precipitation event. A previous I/I study of the FHH sanitary system also documented significant amounts of extraneous water (I/I) in this older system.

The agreement with the State of Connecticut provides for 100,000 gallons per day of sewage treatment at the plant. Based upon past re-use plans for the Campus including the Fairfield Hills Advisory Committee recommended level of development this allocation is more than adequate to accommodate re-use of the Campus.

C. Stormwater System

The FHH stormwater system collects surface water and groundwater from several sources. A watercourse that drains onto the campus from the Nunnawauk Meadows area is collected near the Canaan House. Catch basins capture surface water from parking lots, roadways and some lawn areas. According to older mapping, each building is connected to the drainage system, where stormwater from roof drains and groundwater from foundation drains enter into the system. (This assumption should be checked for buildings that will remain at the campus, as it is possible that some cross connections have been made to sanitary sewers over time, contributing to the observed inflow from the campus.)

Pipe sizes in the system range from 4" diameter to twin 36" diameter pipes. Pipe material is reportedly concrete. We estimate a total of 22,000 l.f. of stormwater pipes are in the campus area.

There are at least 3 stormwater system outlets that drain across Old Farm Road to Deep Brook. The major outlet consists of twin 36" diameter pipes, and is located east of the power plant.

Section IV Description of Existing and Future Traffic Conditions

An issue which will be an important part of the planning process is vehicular traffic using the road network surrounding the Campus presently and in the future. This issue is important for several reasons due to the location of the Fairfield Hills Campus in the geographic center of Town. With the construction of Wasserman Way (State Route 800), the Campus has been provided direct access to Route 84 at Exit 11. At the same time, Wasserman Way has become an important route for others to access Route 84. This situation is highlighted by the signs on Route 84 which direct eastbound traffic to use Exit 11 as a connection to Route 25 southbound. As various activities begin to occur at the Fairfield Hills Campus with the 5/6 School to be the first to open, the importance of safe and efficient traffic movement will grow. The following report presents a discussion of existing conditions and projects traffic volume increases due to background growth to the year 2007. Background growth is traffic volume increases which will occur as a result of known traffic generation such as the 5/6 School and overall growth due to general development in the Town and region. The report includes an assessment of several intersections in terms of level of service based upon this background growth. As alternate plans are prepared for the Campus, the traffic to be generated will be added to background growth to assess future levels of service. This process will provide guidance as to uses on the Campus as well as impacts on the surrounding road network.

Existing Conditions - Transportation

The Fairfield Hills project area is generally bounded by State Route (SR) 860 (Wasserman Way) to the north, residential property to the south, Mile Hill South Road to the West and SR 490 (Nunnawauk Road) to the east. Access to and from Interstate 84 is generally from the east via Interchange 11. Other primary roadways in the area include Route 25 (South Main Street), SR 490 (Wasserman Way) and SR 860 (Mile Hill Road). Figure 1 identifies the project site in relation to the existing roadway network.

SR 860 is an east-west roadway that runs between Route 25 and SR 490. The corridor is identified as two separate roadways: Mile Hill Road and Wasserman Way.

Mile Hill Road is the segment of roadway west of Mile Hill South Road. It is classified as a collector roadway. The posted speed limit is 25 miles per hour (mph) and a traffic signal is present at its intersection with Route 25. The roadway provides two travel lanes, except at the Route 25 / Mile Hill Road intersection where multi-lane sections for turn lanes are provided. Queen Street and Tinkerfield Road, which are located roughly 580 feet east of Route 25, operate under stop sign control.



The segment of SR 860 referred to as Wasserman Way runs between Mile Hill South Road and Nunnawauk Road. This entire section of roadway was not open to traffic until 1998. The roadway is classified as a collector route and the posted speed limit is 30 mph. A traffic signal controls movements at the Trades Lane / Fairfield Hills driveway intersection. Stop signs control traffic at the Mile Hill South Road and Nunnawauk Road intersections. The roadway varies between two and three lanes of travel. Just west of Nunnawauk Road, two westbound lanes allow for a climbing lane. Multi-lane sections are present at the signalized intersection to accommodate exclusive turning movements.



The following tables identify Average Daily Traffic Volumes and speed data along SR 860. The 85th percentile speed is the speed at which 85% of the traffic travels at or below.

Average Daily Traffic Volumes

Location	EB	WB	Total
SR 860			
W of Queen Street	-	-	13,300
W of Mile Hill South Rd	-	-	12,200
E of Mile Hill South Rd	5,800	4,900	10,700
W of SR 490	5,800	5,000	10,800

Source: ConnDOT, 2001.

Speed Data

Location	Average Travel Speed (mph)	85 th Percentile Speed (mph)
SR 860		
Vicinity of Queen Street		
EB	38.5	43.1
WB	38.3	41.3
Vicinity of Mile Hill South		
EB	32.7	35.8
WB	33.6	36.3
0.15mi W of Trades Lane		
EB	38.8	42.7
WB	40.2	44.3

Source: ConnDOT, January 1999 and August 2001.

SR 490 runs between the Ward A. Garner Correctional Institute and Route 34. The corridor is identified as two separate roadways: Nunnawauk Road and Wasserman Way. The roadway is primarily a collector roadway however, the section between the Interstate 84 ramps and Route 34 is classified as a principal arterial.

The section of SR 490 referred to as Nunnawauk Road is a two-lane roadway approximately 32 feet in width. The posted speed limit is 30 mph. Traffic entering Wasserman Way from Nunnawauk Road is controlled by a stop sign.



Description of Existing Conditions

EXISTING TRANSPORTATION CONDITIONS – Milone & MacBroom, Inc.
Fairfield Hills Campus

The section of SR 490 referred to as Wasserman Way provides multi-lane sections at the Interstate 84 ramps and Route 34. Traffic signals are present at these locations.

The following tables identify Average Daily Traffic Volumes and speed data along SR 490.

Average Daily Traffic Volumes

Location	EB/NB	WB/SB	Total
SR 490			
S of SR 860	550	500	1,050
E of Nunnawauk Rd	6,100	5,400	11,500
W of Rt 34	-	-	16,900

Source: ConnDOT, 2001.

Speed Data

Location	Average Travel Speed (mph)	85 th Percentile Speed (mph)
SR 490		
0.3 mi S of SR 860		
NB	40.5	45.9
SB	39.2	44.9
0.4 mi W of Route 34		
NB	42.2	46.1
SB	43.1	46.5

Source: ConnDOT, May 2001.

Interstate 84, Interchange 11 is currently being studied by the Connecticut Department of Transportation (ConnDOT). A reconfiguration of the entire interchange to provide a diamond type interchange with an access road leading to the Route 34 corridor is being evaluated.

As highlighted in the ‘Interstate 84 Corridor Deficiencies / Needs Study’ (June 2000) the following was identified.

- The transition between the interstate and local street systems is problematic
- There are high accident rates at the interchange ramps due to the transition from high speed ramps to local roads.
- The intersection of Wasserman Way and the Interstate 84 ramps is deficient, experiencing poor Levels of Service.

As a short-term improvement rumble strips and / or variable speed warning signs are proposed on the eastbound and westbound off-ramps prior to the merge point. In combination with these improvements, signal timing revisions are expected at the intersection of Wasserman Way and the Interchange 11 ramps. Improvements at the

intersection of Route 34 and Wasserman Way will also be made. Short term improvements are expected to occur up to the year 2005.

Medium term improvements include the creation of a direct connection from Toddy Hill Road / Route 34 to the Interstate 84 on-ramp. The exiting on-ramp to I-84 from Wasserman Way is expected to remain during the medium term improvements. Medium term improvements are expected to occur between the years 2005 and 2010.

In the long term, the proposed interchange will be reconfigured as a low-speed, diamond-type interchange with direct access to the Route 34 corridor. Interstate traffic is expected to be supported by a 4-lane roadway terminating at Route 34, opposite Wasserman Way. Long term improvements are expected to occur during or after the year 2010.

Route 25 provides opportunities for motorists to travel north and south throughout the Town. Multiple curb cuts are provided and traffic signals are present at select locations.

Mile Hill South Road is a two lane local roadway approximately 23 feet in width. The roadway provides a connection between Turkey Hill Road in the south and SR 860 in the north. Currently, there is one access point on Mile Hill South Road to the proposed site. This intersection is controlled by a stop sign for exiting traffic.

Queen Street is primarily a two-lane, north-south roadway that connects Route 6 (Church Hill Road) with SR 860 (Mile Hill Road). The posted speed limit, in the vicinity of Lovells Lane, is 25 mph and the roadway is classified as a collector roadway.

The section of Queen Street between Route 6 and Glover Avenue will be studied by others, through the Housatonic Valley Council of Elected Officials (HVCEO), and alternatives to create a pedestrian-safe corridor will be evaluated.

EXISTING AND BACKGROUND TRAFFIC

To determine the traffic impact of the proposed development on adjacent street traffic, representatives of Milone & MacBroom, Inc. (MMI) conducted A.M. and P.M. peak hour manual turning movement counts during the month of April 2002. This information was supplemented by data presented in the Traffic Impact Study prepared by the Newtown Fifth and Sixth Grade School on Trades Lane and available information from the Connecticut Department of Transportation (ConnDOT).

For planning purposes, it is anticipated that the proposed development will open in the year 2007. Town related facilities may open prior to this year however, overall impacts will likely be realized during the year 2007. The existing 2002 traffic counts were projected by 2% per year to the year 2007 to account for normal traffic growth.

Inquiries were made to the State traffic Commission (STC) and the Town of Newtown concerning approved or pending developments (not yet operational) which may impact

traffic conditions in the vicinity of the site. As a result of these inquiries, traffic for the proposed Newtown Fifth and Sixth Grade School on Trades Lane was included in the hourly traffic volumes.

Figures 2 and 3 illustrate 2007 background traffic, which is defined as design year traffic and does not have the site as its origin or destination.

EVALUATION METHODOLOGY/ANALYSES

In discussing intersection capacity analyses, two terms are used to describe the operating condition of the road or intersection. These two terms are volume to capacity ratio (v/c) and Level of Service (LOS).

The v/c ratio is a ratio of the volume of traffic using an intersection to the total capacity of the intersection (the maximum number of vehicles that can utilize the intersection during an hour). The v/c ratio can be used to describe the percentage of capacity utilized by a single intersection movement, a combination of movements, an entire intersection approach, or the intersection as a whole. As the v/c ratio approaches 1, the intersection nears capacity and it may become impossible to accommodate all the vehicles attempting to travel through the intersection.

Level of Service for signalized intersections is defined in terms of delay, which is a measure of driver discomfort, frustration, fuel consumption and lost travel time. Specifically, the Level of Service criteria is stated in terms of the average control delay per vehicle. Control delay includes initial acceleration delay, queue move-up time, stopped delay and final acceleration delay. Level of Service is rated on a scale from A to F and is summarized in the following table.

**Level of Service Criteria
Signalized Intersections**

Level of Service	Control Delay Per Vehicle (seconds)
A	≤10.0
B	>10.0 and ≤20.0
C	>20.0 and ≤35.0
D	>35.0 and ≤55.0
E	>55.0 and ≤80.0
F	>80.0

Level of Service for unsignalized intersections is defined in terms of average control delay. For two-way stop sign controlled intersections, Level of Service is defined for each minor street movement and not the intersection as a whole. For all-way stop controlled intersections, Level of Service is defined for each approach as well as the intersection as a whole. The following table represents Level of Service criteria for unsignalized intersections.

**Level of Service Criteria
Unsignalized Intersections**

Level of Service	Delay Range (seconds/vehicle)
A	≤10
B	>10 and ≤15
C	>15 and ≤25
D	>25 and ≤35
E	>35 and ≤50
F	>50

Level of Service is generally used to describe the operation (based on average control delay time) of both signalized and unsignalized intersections, while v/c ratio is applied to signalized capacity analyses only.

These definitions for v/c ratio and Level of Service, as well as the methodology for conducting signalized and unsignalized intersection capacity analyses, are taken from the "Highway Capacity Manual" (Special Report No. 209), published by the Transportation Research Board.

The capacity analyses included in this study are based on a maximized v/c ratio for both the "background" and "combined" conditions. This method of evaluating the intersection's operating characteristics provides the most equitable determination of the impact of the site-generated traffic on an intersection by intersection basis. Actual operations may be marginally different for those intersections included in a signal system where side street movements are inhibited to provide maximum green time on the arterial.

Using the above-referenced methodologies, A.M. and P.M. peak hour capacity analyses were conducted at the following intersections:

- SR 860 at Route 25
- SR 860 at Queen Street and Tinkerfield Road
- SR 860 at Mile Hill South Road
- SR 860 at Trades Lane and Fairfield Hills Drive
- SR 860 at SR 490
- SR 490 at Interstate 84, Interchange 11 Ramps

The following table summarizes the Level of Service and delays calculated for the intersections analyzed in this study.

**Level of Service Summary
2007 Background Conditions**

Location	AM Peak Hour	PM Peak Hour
Signalized Intersections*		
SR 860 at Route 25	C/22.1	B/19.8
SR 860 at Trades Lane and Fairfield Hills Drive	B/11.4	A/5.2
SR 490 at Interstate 84, Interchange 11 Ramps	E/60.9	E/55.1
Unsignalized Intersections**		
SR 860 at Queen Street and Tinkerfield Road		
Southbound	E/45.8	F/229.6
Eastbound Left	A/9.6	A/9.0
SR 860 at Mile Hill South Road		
Northbound	C/15.5	C/15.5
SR 860 at SR 490		
Northbound	B/13.2	C/16.5

* Level of Service / Intersection Delay (seconds)

**Level of Service / Approach Delay (seconds)

The LOS for the intersection of SR 860 at Trades Lane and the Fairfield Hills Drive represents phasing and timing recommendations from the Newtown Fifth and Sixth Grade School traffic impact study.

The 1998 LOS for the SR 860 and the Interstate 84, Interchange 11 ramps was determined to be LOS F during the AM and PM peak hours (I-84 Deficiencies / Needs Study). Our analyses indicate the intersection will operate at LOS E during the 2007 background AM and PM peak hours. This slight improvement in LOS may be the result of the opening of Wasserman Way. Operational problems do however present themselves during both time periods due to the high volumes of turning traffic and the wider intersection which is a result of the island separating the Interstate 84 ramps. As discussed in an earlier section, improvements to this intersection will be made.

Queen Street at its intersection with SR 860 is expected to operate at LOS E and F during the 2007 background AM and PM peak hours, respectively. Due to the close proximity of the Route 25 intersection in combination with westbound vehicle queues and the volume of through traffic on SR 860, the southbound approach to the intersection experiences long delays entering SR 860.

FUTURE TRANSPORTATION ISSUES

The following items identify transportation issues that the Fairfield Hills Project Team should be cognizant of as development scenarios are developed. These items will be addressed in more detail as conceptual site plans are developed.

- The Queen Street southbound left turn volume experiences excessive delays during the PM peak hour primarily due to the volume of through traffic on Mile Hill Road. It is not expected that a large percentage of traffic to the site will be coming from Queen Street, however, improvements to mitigate additional negative impacts may need to be explored.
- Although the overall intersection operates at Level of Service C or better intersection, the westbound left turn lane at the Mile Hill Road / South Main Street intersection operates at Level of Service D during the AM and PM peak hours. The addition of site traffic to the westbound left turn lane may require roadway improvements to provide additional capacity and storage capabilities.
- For planning purposes it has been assumed that overall impacts as a result of the proposed site will likely be realized during the year 2007. Medium term improvements associated with Interstate 84, Interchange 11 are expected to be designed and / or constructed between the years 2005 and 2010. There is a possibility that motorists at the Interstate 84, Interchange 11 Ramps and SR 490 will experience excessive delays during peak periods. Depending on the scheduling of Interstate 84 improvements, the Connecticut Department of Transportation may require short-term improvements to be implemented prior to the opening of any new development. Although these improvements may be short lived, improvements to enhance the overall intersection capacity and Level of Service may be required.
- Modifications to the existing Fairfield Hills driveway at Wasserman Way and Trades Lane are expected. Such improvements could include the provision of an exclusive northbound left turn, the extension of the existing northbound right turn lane or modifications to the traffic signal timings.
- Options to provide an additional access point on Wasserman Way will be evaluated as conceptual site plans are developed. Items such as signalization, prohibiting turning movements and connections between the existing developed site and the undeveloped areas should be explored.

As the planning for the Fairfield Hills site advances traffic generation rates for individual land uses should be taken into consideration. Estimates of the amount of traffic expected to be generated by a proposed land use are typically based on published information from the Institute of Transportation Engineers (ITE) publication 'Trip Generation'. The following table identifies average rates for select land uses. Specific traffic generation values will be estimated in more detail as conceptual site plans are developed. At that time, more accurate logarithmic equations in combination with the average rates will be reviewed.

Anticipated Site-Generated Traffic Rates

Land Use	A.M. Peak Hour	P.M. Peak Hour	Daily
Residential Condominium / Townhouse ⁽¹⁾	0.44	0.54	5.86
Luxury Condominium / Townhouse ⁽¹⁾	0.56	0.55	-
Regional Park ⁽²⁾	-	0.20	4.57
Athletic Fields ⁽³⁾	-	26	-
General Office Building ⁽⁴⁾	1.56	1.49	11.01
Corporate Headquarters Building ⁽⁴⁾	1.47	1.39	7.72
Government Office Building ⁽⁵⁾	5.88	11.03	68.93
Specialty Retail Center ⁽⁴⁾	-	2.59	40.67
Shopping Center ⁽⁴⁾	1.03	3.74	42.92

(1) Rates per dwelling unit

(2) Rates per acre

(3) Rates per active field. Data is based on studies conducted by Milone & MacBroom, Inc.

(4) Rates per 1,000 square feet of gross floor area

(5) Rates are per 1,000 square feet of gross floor area and are based on one observation. Actual rates may be lower than observed.

Retail uses, depending on the type of tenant, and athletic fields will result in negligible AM peak hour values. A majority of the AM peak hour traffic will be the result of residential and office uses. PM peak hour rates will be a combination of all uses.

Section V Summary of Space Needs Requests

During March, April and May, the Ad Hoc Fairfield Hills Master Plan Committee held 6 meetings to provide an opportunity for organizations in Town to express their needs and thoughts as to space needs on the Fairfield Hills Campus. The series of meetings was organized on a topical basis with invitations sent to organizations based upon their topic of interest. The topics were municipal needs, recreation needs, open space needs, service group needs, recreation/arts needs, education needs and economic development needs.

As a result of this process, some specific space needs as well as requests for the re-use of certain buildings emerged. In other instances, there were requests or recommendations related to specific programs with no quantified space needs. It is anticipated that as the planning process proceeds, the relationship between programmatic needs and space allocations will become more specific. In addition, an analysis of capital funding resources as well as operational funding will be completed.

The following presents a summary of requests received to date.

Municipal Offices

- Edmond Town Hall Study (KBA) - 19,500 sq. ft. Town Offices.
- Police Department - 18,850 sq. ft. stay at Town Hall South.
- Hook and Ladder Fire - 11,250 sq. ft. stay at site.

Recreation

- Babe Ruth Baseball
 - Need 2 fields now
 - Need 5 added by 2010
 - 987 youths enrolled 2001 / 1300 by 2010
- Lacrosse
 - 2 more fields; program grown from 45 to 230 kids.
- Pop Warner Football
 - No field need but would like lacrosse to move to Fairfield Hills.
- Basketball
 - 4 courts in Bridgeport.
- Soccer
 - Did not attend.
- Skateboard
 - Want park at 7,500 sq. ft. / \$40,000-\$50,000.
- Parks and Recreation
 - Responsible for all fields. Presented need for 40 acres with 600-800 parking spaces and 7 fields. Also, want indoor space as well as storage for equipment.

Open Space

- Open Space Committee
 - Should be substantial amount of passive open Space with trails, nature walks, etc. Open Space Committee has prepared a map for Fairfield Hills to Upper Paugussett State Forest Greenway. Shows Fairfield Hills with 100 acres open space.
- Newtown Bridle Lanes
 - Currently use trail to H2O tanks and around back of campus near Nunnawauk Meadows for trail rides. Would like to retain for this purpose.
- Governor's Horse Guard
 - Will be at Fairfield Hills for long term. Currently use trails same as Newtown Bridle.

- Golf Course - Interest in this use but no organized support.
- Newtown Forest Association - Supports open space.

Service Groups

- Daytar - Provides services for people with disabilities. Not looking for particular space but supports cultural and athletic uses that clients could participate in.
- VNA - Use Edmond Town Hall once a month for a meeting and have a thrift shop. Current space is 900 square feet, could use more.
- Rotary - No particular space needs but need balance in plan to generate some tax revenue.
- Youth Services - Currently occupies second floor of building previously owned by Congregational Church now bank owned. Outgrown space. Requested 20,000 square feet but could share recreation space.
- Womans Club - Supports bike/walking trail, community garden. Restore beauty of Fairfield Hills with flower beds, etc.
- Lions Club - Supports Town needs, athletic fields and walking trails. Should have some economic development but also consider land banking for future.
- Historical Society - Need space to display materials. Create Newtown Heritage Center. Possibly antique shows in Bridgeport Hall.
- Friends of Library - Annual Labor Day Weekend Book Sale is big fundraiser. Need 7/15-9/10 to set up and clean up. Need storage area year round. Bridgeport Hall is current and preferred location.
- St. Johns Food Pantry - Located in St. Johns Church basement in 300 square feet. Do 2,000 – 3,000 meals a month.

- Senior Center - Currently have 800 sq. ft. in multi-purpose building in Sandy Hook. Share space with Children's Adventure Center (daycare). Need at least 2,500 sq. ft. Have no adult daycare nor activities for men (woodworking, pool, etc.).
- Salvation Army Food Kitchen - In Town hall South as part of Social Service Office in 400 sq. ft. area. Need larger area as well as storage.
- K-9 Advocates - Newtown Pound is located at Town Transfer Station. Not good environment and hours not good (closed on Sunday). Should be moved to Fairfield Hills. Not sure on size requirements.

Recreation/Arts/Education

- Center For Classical Ballet - Wants Plymouth Hall for performing and visual arts. General cultural center. Could be revenue producer.
- Siochain Theatre Company - Need theatre for 50-100 people. Suggest subsidy for artisans for 1 year for crafts, etc. Two YMCA's are interested in developing facility (Plymouth Hall is possible site)...once established could be self-funding.
- Children's Adventure Center - Supports Senior Center/VNA move to Campus and they stay where they are with full use of center. Could use small space at Campus for outdoor activities.
- Newtown Public Schools/Bd. Of Ed. - Fully support shared town office concept; need 9,500 sq. ft. of space; need space of 28,000 sq. ft. for alt. Ed. Program...up to 200 students, can get 30 to 35% reimbursement; would like parking for events as well as school buses (2 acres); space for adult ed day classes; long term set aside 70 acres for another school.

Town Players/Little Theatre - Town Players do not want to move but suggest space for combined arts council...music, SCAN, artisans, etc.

Joe Borst - Suggest medical care facility (Cochran House)

Economic Development

Economic Development Commission - Limited sites in Newtown zoned for commercial/industrial use and available for development. Fairfield Hills Campus is important tax base resource.

VI Market Setting and Economic Development Potential

As we move forward with the planning process for the Fairfield Hills Master Plan, the potential impact of economic development on the Fairfield Hills Campus becomes a subject of considerable interest for a number of reasons. Over the past two months, the Committee has received extensive input from the community as to potential uses for the buildings and land on the Campus. While the uses all meet a perceived community need, concern has been voiced by both Committee members and members of the general public as to the ability of the Campus to physically accommodate all the uses and to accommodate income producing uses. While the Campus Master Plan may not result in a fully fiscally self sufficient development, a goal of a significant level of fiscal self sufficiency is emerging from the discussions to date.

The Newtown Economic Development Commission and the Chamber of Commerce in a presentation to the Ad Hoc Fairfield Hills Master Plan Committee on May 21st provided information concerning the need for economic development and business activity in Newtown in general and the importance of the Campus in meeting this need. This narrative is intended to supplement their presentations with a discussion of the market in Newtown in general, the compatibility of the Campus with various market trends and some indications of the extent of economic development necessary to achieve certain tax income streams to the Town.

First, let us discuss overall market trends impacting Newtown and the Campus. In 1997, our firm completed a market analysis of the Newtown Market, inclusive of an area generally defined as the I-84 Corridor from the New York State line to Southbury. At that time we assessed market demand for a variety of uses with specific conclusions related to the Exit 9-Hawleyville area. We have updated this assessment to reflect changing market conditions and have made specific conclusions relating to Fairfield Hills. Attached Table 1 summarizes the results of this assessment. It is important to note that the Fairfield Hills compatibility conclusions relate to the physical characteristics of the site, proposed uses which have emerged during this planning process and the availability of other sites in Newtown to meet

market demands. In terms of residential use, the conclusions related to the Campus reflect community sentiment about residential growth in general as well as the response to previous proposals generated by the State RFP process for Fairfield Hills.

In terms of revenue producing activities for the Campus, there are four general categories:

- Capital funds from other sources,
- Lease of land and buildings
- Tax revenues from real estate and personal property
- User fees

More specifically, these sources may include:

- Provide site(s) for the construction of new tax producing development through a land lease. Could receive both lease payments and taxes.
- Provide existing buildings to developers or end users for renovation for tax generating uses. Could receive both sales/lease payments and taxes. (Most logical Campus buildings include: Newtown, Woodbury, Shelton, Stratford and Cochran).
- Sell existing residential properties with a land lease at \$1. Receive funds for sale similar to Queen Street houses.
- Enter into partnerships with other organizations to provide income and/or capital investment for public/quasi public uses. A partnership with the YMCA for recreation facilities is an example. Could possibly partner with a cultural collaborative for a cultural center.
- Charge user fees to Town residents and others rather than place the burden on all taxpayers. A good example would be a recreation/fitness facility. Possible partnership with a hospital for cardio/physical therapy aspects.
- Pursue federal and state funds for capital expenditures including school aid for alternative high school.
- Pursue foundations/private donors for support of particular buildings. Example is \$500,000 promise for recreation facility.

These various sources of revenues have different impacts based on the specifics. For example, up-front capital from “others” is preferable since it is in-hand when the project starts and is not reliant on future income. The example given by the YMCA of the need to raise funds through a capital campaign to reduce debt service costs as part of an annual budget points to the importance of this approach. The use of existing buildings with extensive improvements made by others is another example. The use of currently vacant land on the Campus for new economic development raises the issues of allocation of land for other requested uses, including recreation and open space.

To provide the Committee with some framework for the range of economic development activities needed to raise funds through local tax proceeds, we have prepared a preliminary income estimate scenario. This scenario assumes a mixture of re-use of existing buildings and some new office-medical development. This estimate does not include land or building lease income or user fees as well as some other existing buildings which may be rehabilitated. This income stream would generate tax revenue equal to approximately one mil. The revenue target of one mil is being used since it would cover the level of impact on the mil rate projected as part of the material provided at the Town Meeting vote to purchase the Campus. The extent of operating costs for the Campus cannot be determined until more definitive alternative reuse plans emerge. This will enable a calculation of costs for which the Town will be responsible. It should be made clear that this scenario does not represent a plan for the Campus in terms of specific buildings. It is intended to provide some illustrative parameters for discussion. We will be preparing much more detailed fiscal impact analyses as alternative plans emerge through the planning process. However, we believe that this material will help the Committee and the community to have a feel for the scale of potential revenue and potential impacts. See attached Table 2- Fairfield Hills Campus, Preliminary Income Estimate Scenario.

To translate these building square footage projections into an estimate of land needed on the Campus, we have used a Floor Area Ratio (FAR) of 0.3. An FAR is the square footage of the building area divided by the square footage of the building’s lot. Therefore an FAR of .3 accommodates 13,000 square feet of building area per acre. This is a typical corporate park

development with 2-3 story buildings and surface parking. Based on this FAR, the building area range of 100,000 square feet to 350,000 square feet would require between 8 and 28 acres of usable land.

While some of this acreage for new development can be created through the demolition of existing buildings, it should be assumed that most of this development would require use of portions of the campus not presently developed with structures.

In conclusion, as stated earlier the purpose of this report is to provide the Committee with some understanding of the parameters of potential tax revenues and the implications in terms of space needs on the Campus. As we proceed, this analysis will be refined through dialogue with the community, decisions by the Committee and professional analysis by our consultant team.

TABLE 1
Fairfield Hills Campus
Market Demand Assessment

Use	Current ¹ Demand Level	Current ² Supply Level	Newtown ³ Market Position	Fairfield ⁴ Hills Compatible
<i>Office</i>				
Corporate	Weak*	Oversupply*	Contender	Yes
Professional	Slow	Balance	Contender	Yes
Medical	Active	Shortage	Contender	Yes
<i>Industrial</i>				
Manufacturing	Slow	Oversupply	Contender	No
Small “Flex” Space	Active	Shortage	Contender	No
Warehouse/Dist.	Active	Balance	Contender	No
Service/Utility	Active	Balance	Contender	No
<i>Retail</i>				
Grocery/Conv.	Strong	Shortage	Contender	No
Big Box	Active	Shortage	Trailer	No
Highway Service	Active	Balance	Contender	No
Dining	Strong	Shortage	Contender	Yes
<i>Residential</i>				
Single Family	Strong	Shortage	Leader	Limited
Condominium	Strong	Shortage	Leader	Limited
Hotel/Conference	Active	Balance	Contender	Yes
Assisted Living	Active	Balance	Contender	Limited

¹ Represents the market demand for various market segments in the market area.

² Represents the supply of available space as compared to demand in the market area.

³ Represents Newtown’s market position as a location for various market segments.

⁴ Represents the compatibility in terms of site characteristics and public input to date for various market segments.

* Market segment which relies primarily on single or major user interest.

TABLE 2

Fairfield Hills Campus Preliminary Income Estimate Scenario For Illustrative Purposes

1. Potential Office/Medical Space in Existing Buildings

<u>Campus Building</u>	<u>Space Footage (sq.ft.)</u>
Newtown	16,000
Woodbury	30,000
Shelton	30,000 *
Cochran	<u>40,000 *</u>
	116,000 sq.ft.

* Assumes partial demolition to reduce to marketable scale.

2. Potential Income From Private Use of Existing Buildings

Assume above buildings are sold for \$1 and land lease negotiated based upon land value as percentage of development cost. Tax revenue computed @ \$4 to \$8 per square foot for total real property and personal property tax revenue. Tax revenue potential:

- 116,000sq.ft. X \$4/sq.ft. tax revenue = \$464,000
- 116,000sq.ft. X \$8/sq.ft. tax revenue = \$928,000

3. Potential Income From New Office Development

Assume \$4 to \$8 per square foot town tax revenue derived from both real property and personal property taxes. The \$4/sq.ft. tax revenue estimate assumes the market value of new office buildings to be in the range of \$150 to \$175 per sq.ft. The \$8/sq.ft. tax revenue estimate assumes the value of personal property contained in the new office buildings are equal to real property or a higher value on the real property.

Assume the development of new office space would range from 100,000sq.ft. to 350,000sq.ft. Tax revenue potential:

- 350,000 sq.ft. X \$4/sq.ft. tax revenue = \$1,400,000
- 100,000 sq.ft. X \$8/sq.ft. tax revenue= \$ 800,000

When combined with tax revenues generated by existing building space as described above in # 1, total tax revenues generated could equal approximately \$1,800,000, the equivalent of the tax revenue currently raised by one mil.