Mid 20th Century Architecture in NH: 1945-1975

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for

NH Employment Security

December 2012

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I. Introduction

The Mid 20th Century Architecture in New Hampshire Context: 1945-1975 was prepared by Lisa Mausolf, Preservation Consultant, under contract for the New Hampshire Department of Employment Security. The context was prepared as mitigation for the sale of the Employment Security building at 32 South Main Street in Concord. The modern curtain wall structure was designed by Manchester architects Koehler & Isaak in 1958. A colorful landmark on South Main Street, discussion of the architectural significance of the building draws commentary ranging from praise "as an excellent example of mid-century Modern architecture and ideals of space, form, and function"[1] to derision, calling it one of the ugliest buildings in Concord.

NH Department of Employment Security, 32 South Main Street, Concord (1958)

The Mid 20th Century Architecture in New Hampshire Context was prepared in order to begin work on a framework to better understand the state's modern architectural resources. The report focuses primarily on high-style buildings, designed by architects, and excludes residential structures. The goal of the project was to establish historic and architectural contexts for New Hampshire's architecture of the recent past in order to better inform future discussions as buildings of this period are faced with alteration or removal. This document is intended to be a starting point for future study and discussion and should not be considered a conclusive end.

[1] New Hampshire Division of Historical Resources, Determination of Eligibility, November 2011.

II. Methodology

The focus of this project was non-residential architecture in the state of New Hampshire. Due to time and budgetary constraints, it was not possible to begin to study the vast subject of residential architecture which should be added at a future date.

Research conducted for this document utilized a wide range of resources. The most important research source was undoubtedly the *New Hampshire Architect* published by the New Hampshire Chapter of the American Institute of Architects from 1949 to 1962 and its successor, *Granite State Architect* which ran from 1963 to 1972. Both publications showcased the works of the state's architects, especially the twenty or so who were active members of the AIA chapter. The New Hampshire Historical Society, New Hampshire State Library, and the New Hampshire Division of Historical Resources have incomplete runs of the publications in their collections. All of the issues available at each of these locations were reviewed.

Other sources consulted included published local histories, newspaper articles, directories and previous historic resources surveys on file at the New Hampshire Division of Historical Resources (NHDHR). The *Avery Index of Architectural Periodicals* yielded several entries related to New Hampshire architectural commissions which were published in national architectural journals. The archives of the works of two New Hampshire architects of the period – John Carter and George Soule – are located at the New Hampshire Historical Society in Concord.

Press releases regarding the context project were published in both the NHDHR and New Hampshire AIA Newsletters to solicit opinions on favorite resources of the period and biographical information about architects who worked in New Hampshire from 1945 to 1975.

The information presented also draws heavily on work done previously on various architects of the period including Irving Hersey and Daniel Tully. Much of the research for the project was the result of windshield surveys, both planned and uncharted, throughout the state. The examples presented are somewhat skewed toward the southern tier of the state as these are the regions that experienced the most development during the period. On the one hand, the growth that these areas experienced in the Post War II period make this the most likely area to find numerous examples. Yet it must be acknowledged that there are many parts of the state which deserve greater attention in the future.

III. Historic Context, Architecture in New Hampshire, 1945-1975

In New Hampshire, as across the country, the Post World War II period was a time of great economic prosperity which was accompanied by many new challenges and developments. Between 1940 and 1980 the State's population rose from 491,524 to 920,610. The rapid growth of New Hampshire resulted in the construction of new schools, churches, offices, commercial structures, governmental buildings, and other structures throughout the state. Some of the themes and circumstances that formed the setting for New Hampshire's mid 20th century architecture are presented below.

Post World War II – Military/Defense

The end of World War II resulted in not only a vast increase in the veteran population, but also in large number of new benefits enacted by the Congress for veterans of the war.

The expansion of the nation's care of its veterans that took place immediately following World War II translated into an extensive nationwide program of hospital construction beginning in 1944. Constructed in 1948-50 the Manchester Veterans Administration Hospital is one of 56 VA hospitals constructed in the US to accommodate the quadrupling of veterans needing services after the war. It is the only VA hospital built in New Hampshire. Architecturally it is a rare example of Modern Prairie style architecture with unusual Art Nouveau metal grilles. It was designed by James H. Ritchie and Associates of Boston. [2]

[2] Richard Casella. Inventory form for Veterans Administration Hospital, 2010.

Veterans Administration Hospital, Manchester (1948-1950)

The Post World War II period is also notable for a rise in defense spending as the Cold War escalated. In 1951 the former Portsmouth Municipal Airport which had been utilized by the U.S. Navy during World War II was selected for development as a Strategic Air Command (SAC) base. That same year it was announced that five architectural firms had been selected to jointly design the buildings for the new Air Force Jet Bomber Base at Portsmouth: Hersey & Spaulding, Durham; Koehler & Isaak, Manchester; Alfred T. Granger Associates, Hanover; Tracy & Hildreth, Nashua and Maurice E. Witmer, Portsmouth. Land was acquired to expand the base and in 1954 ground breaking ceremonies were held for the new SAC facilities (see below). At the time, with a projected expenditure of 70 million dollars, this was the largest construction project in the state. When completed, the base provided employment for 1,000 officers, 5,800 airmen and 450 civilian employees. The first B-47 Stratojet Bomber arrived in 1956 and the Portsmouth Air Force Base was renamed the Pease Air Force Base in 1957, honoring Plymouth, New Hampshire native Captain Harl Pease, Jr. who posthumously earned the Congressional Medal of Honor for heroism during World War II. Pease Air Force Base formally closed on March 31, 1991 and most of the base, other than that retained by the Air National Guard, was transferred to the Pease Development Authority for reuse as a civilian airport and commercial center. Only a few of the original base buildings survive today, all in a very altered condition. Some of the least changed are still visible at 360 Corporate Drive, 77 Aviation Avenue, 12 Aviation Avenue and a building at the corner of Rye St. and International Drive.[3]

Federal, state and military officials at ground-breaking ceremonies for the Portsmouth-Newington Airbase held July 3, 1954

Source: *New Hampshire Architect*, July 1954

[3] Information from Barbara Cochran, Pease Development Authority, 16 November 2012.

The Gurney Bill of 1945, later known as the Armories Construction Bill, was passed in 1950 although it took two more years for Congress to appropriate the funding. Under this law the Federal Government participated for the first time in the construction of armories for the National Guard according to a 75/25 Federal/State funding split.[4] The states were required to provide the real estate and the costs of grading, landscaping, paving, access roads, utilities, furniture and equipment and maintenance of the buildings and grounds for 25 years. The result was a flurry of new Army Reserve/National Guard (ARNG) armory construction across the country, including in New Hampshire. Here, as in many other states, new facilities were designed using standardized plans. As part of the reorganization and expansion of the ARNG in New Hampshire in the years following World War II, Irving W. Hersey Associates of Durham developed several designs that were replicated in at least thirteen National Guard Armories/Readiness Centers throughout the state between 1949 and 1959.[5]

National Guard Armory, Lebanon (1955)
Irving W. Hersey, architect

Hersey produced standardized plans for a single-unit armory for the New Hampshire ARNG. The basic plan consisted of a high-bay drill hall measuring roughly 100' x 60', lit by bands of clerestory windows on all four sides. At the front of the hall was a lower administrative block. The buildings had flat, steel-framed roofs and concrete block walls clad on the exterior with brick. Slight variations between the buildings consisted of the number of rooms and functions in the administration block and the "flipping" of floorplans. The later (1957) armories had the same overall plan but included a covered carport and

[4] Architectural and Historical Research, LLC. *Final Armory Historic Context: Army National Guard Bureau*, June 2008, p. 4-23.
[5] These include buildings in Milford, Peterborough, Rochester, Lebanon, Littleton, Concord, Berlin, Keene, Woodsville, Lancaster, Plymouth, Portsmouth and Nashua.

rifle range; Berlin was the only one of the series built as a double-unit armory.[6] In 1957 Irving W. Hersey Associates also designed the Portsmouth Armory, a slightly larger version of the Cold War-era, Type B armory intended to house multiple units.[7] The Portsmouth armory is nearly identical to other buildings erected in Nashua and Keene in 1958-9. Over the years the firm also designed six buildings at the State Military Reservation in Concord.[8] Additional armories including Franklin, Claremont, and Dover may also be Hersey's work but have not yet been inventoried.[9]

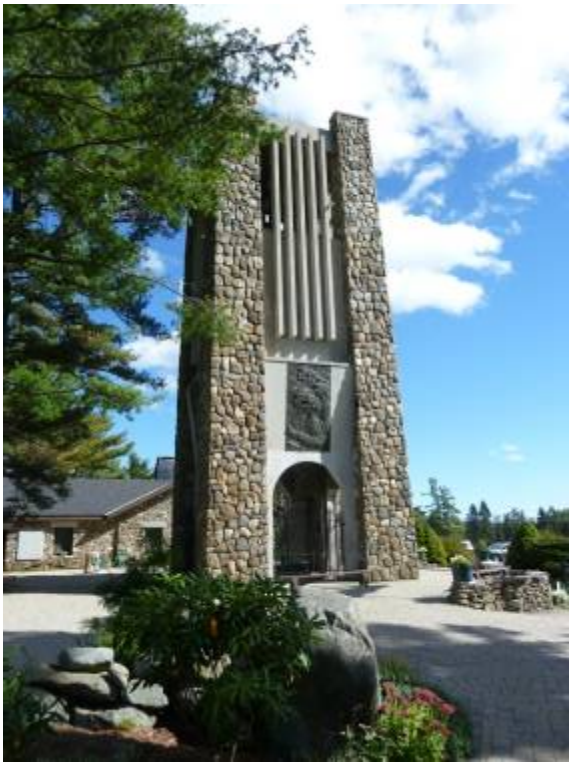
Post World War II – Commemoration

Sixty thousand men and women from New Hampshire were dispersed to every corner of the globe during World War II; 1,600 did not return.[10] Among those was Sandy Sloane who lost his life when his plane was shot down over Germany in 1944. Sibyl and Douglas Sloane III founded the Cathedral of the Pines in Rindge in 1945 as a memorial to those men and women, including their son Sandy, who had sacrificed their lives in World War II. While monuments were erected throughout New Hampshire to honor these brave men and women, few rival Cathedral of the Pines.

Altar of the Nation, Cathedral of the Pines, Rindge (1946)

[6] Louis Berger Group, Inventory form for Plymouth Armory, Plymouth (PLY0017), 2006.
[7] Douglas McVarish, Inventory form for Portsmouth Armory (POR1018), Sept. 2008.
[8] Louis Berger Group, 2006.
[9] Information from Kristen Melendez, Cultural Resources Manager, New Hampshire Army National Guard, Sept. 2010.
[10] Ronald Jager & Grace Jager. *The Granite State New Hampshire: An Illustrated History.* Sun Valley, California: American Historical Press, 2000.

The Altar of the Nation was built in 1946 and was recognized by Congress in 1957 as a national memorial. The open air structure incorporates stones from all over the world including the Parthenon, the Coliseum in Rome and from every U.S. President since Harry Truman. President Dwight D. Eisenhower donated a stone that he took from Omaha Beach in Normandy, site of the D-Day invasion, and the stone donated by President George W. Bush came from the Pentagon following the September 11, 2001 attack on America. The 55 foot high, stone Women's Memorial Bell Tower (1967) is dedicated to American women, both civilian and military. It incorporates four large bronze plaques designed by Norman Rockwell and created by his son Peter.

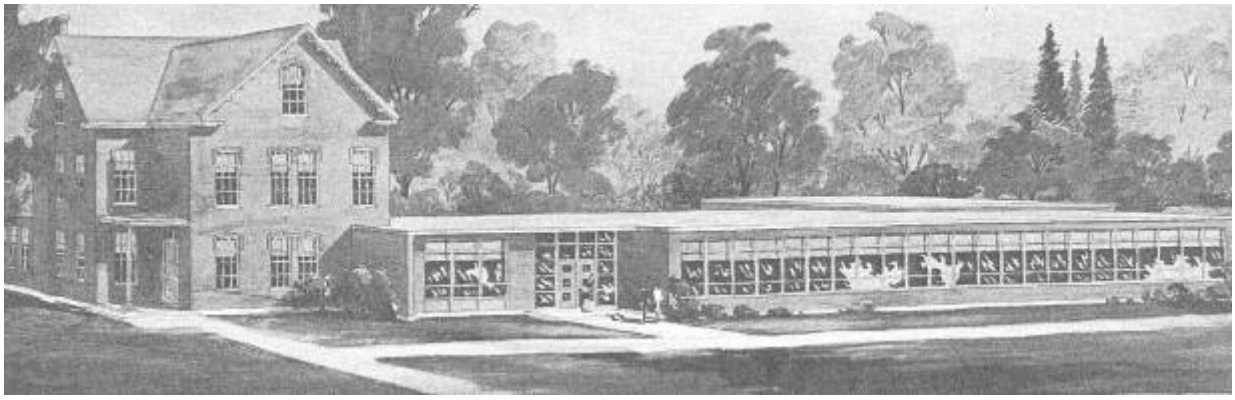


Women's Memorial Bell Tower, Cathedral of the Pines, Rindge (1967)

Baby Boom – Population Growth and School Construction

After the war, returning (mostly male) soldiers re-entered the workforce and many women left wartime work to concentrate on child-bearing and child-rearing. Marriage once again became a cultural and career norm for most women and the result was the infamous "baby boom." As a result, the construction of schools surged in the years after World War II. In New Hampshire's southern tier, the need for more schools was especially acute. For example, in 1945 the Town of Salem had 600 students in the public schools but by 1973 the school population was 5,240, a gain of between 800 and 900 percent (exceeding the growth of the general population which was roughly 600 to 700 percent over the same period). [11]

Throughout the state, schools were renovated, added onto, and new structures were built. The Lanham Act in 1941 and the Impact Aid Laws of 1950 eased the burden on communities affected by the presence of military and other Federal installations by making Federal payments to school districts. After World War II, states began to take more responsibility for funding new schools. Beginning in the late 1950s the State of New Hampshire helped local school districts pay for new construction through School Building Aid. In the late 20th century the program was responsible for underwriting the cost and renovation of hundreds of school buildings. In more rural, sparsely-settled areas of the state, regional school systems became popular.



Addition and Alterations to Symonds High and Elementary School, Warner
Irving W. Hersey Associates, Architects

Source: *New Hampshire Architect*, Nov. 1959

[11] *At the Edge of Megalopolis: A History of Salem, NH 1900-1974*. Canaan, NH: Phoenix Publishing, 1974, p. 281.

In some cases the new school facilities were additions to older structures to increase the number of classrooms or add amenities such as gymnasiums, auditoriums, and activity rooms. Many of the new schools were intentionally designed to receive future additions. School designs of the period incorporated new materials and construction methods. While a few school designs clung to historical detail, the International Style was the dominant stylistic influence on New Hampshire schools in the Post War/Baby Boom period. By and large the school buildings displayed stark rectangularity, simple massing, a frank expression of structural elements and the abundant use of glass, aluminum mullions and Kalwall translucent panels.

The schools also reflected shifting educational practices. The traditional self-contained classroom was joined by new "open classroom" concepts. The Ray Elementary School, constructed in Hanover in 1968 to accommodate grades K-4 included a floor plan with pod areas in all four clusters of classrooms, each one open to the next. The school was built with the concept of team teaching in mind. It was designed by Roy Banwell with Associate Architects Fleck and Lewis and is still in use today.

During this time period, a number of significant construction projects also took place at a number of the state's private preparatory schools. At well-endowed schools such as St. Paul's School in Concord and Phillips Exeter Academy in Exeter these included designs by prominent architects of national acclaim including Edward Larrabee Barnes and Louis I. Kahn. The Cardigan Mountain School in Canaan is just one example of a private boarding school founded in the post World War II era. It was established in 1945 by a number of prominent New England educators, businessmen and civic leaders including Ernest Hopkins, president of Dartmouth College, William Brewster, headmaster of Kimball Union Academy and Vermont Senator Ralph Flanders.

Source: *New Hampshire Architect*, December 1954

Higher Education

New Hampshire's institutions of higher learning also experienced tremendous growth after the War. At the University of New Hampshire (UNH) campus in Durham, the GI Bill brought waves of new students and the lack of space on campus was described as "painful." Whereas college enrollment in the country had experienced an eight-fold growth since 1900, UNH had grown thirty-fold.[12] Both Keene State College and Plymouth State College also expanded during this period. In April 1968 the University of New Hampshire system (including Durham, Keene and Plymouth) had seventeen separate projects under construction with twelve more scheduled to start in the new year.[13] The largest of the projects was a $3.7 million facility for the New England Center for Continuing Education at UNH. Funds came from many sources including legislative appropriations, federal grants, bond issues, foundations and alumni gifts. A system of seven, two-year technical institutes was established in the early 1960s and facilities were constructed in the years that followed at Concord, Nashua, Manchester, Portsmouth, Claremont, Laconia and Berlin.

Gilmore Dining Hall, New England College, Henniker (c.1970)
Stephen Tracy, architect

New England College in Henniker was created in 1946 for students attending college on the GI Bill after World War II. One female student and 67 male students enrolled in 1946. Nearly all of the structures on the campus date to the 1960s and 1970s and were designed by Nashua/Cornish architect Stephen Tracy. Saint Anselm College in Manchester played an important wartime role. Thousands of young

[12] http://www.unh.edu/unhedutop/brief-history. Accessed 10 December 2012.
[13] *New Hampshire Architect*, April 1968

men were sent here to receive training and education before entering World War II. [14] In exchange for training the cadets, the U.S. Government gave the college two pre-fabricated government buildings that now serve as a coffee shop and bookstore. Supplementing the original late 19th century campus buildings, approximately eighteen buildings were added as part of a new campus plan in the early 1970s, designed by Nicholas Isaak of Koehler & Isaak. A number of notable building projects occurred on the Dartmouth College campus in Hanover as well as at Colby Junior College (now Colby Sawyer College) in New London. The Sawyer Arts Center was designed by the husband and wife team of E.H. and M.K. Hunter of Hanover.

Sawyer Arts Center, Colby Junior College, New London (1960)
E.H. & M.K. Hunter, architects

Several other short-lived private colleges were established in New Hampshire after World War II. Canaan College operated from 1955 to 1973. Franconia College was a small experimental liberal arts college which operated in Franconia from 1963 to 1978. Nathaniel Hawthorne College was located on the Flint Estate in Antrim from 1962 to 1988.

[14] *New York Times*, 7 Feb. 1943.

Religious Building Boom

During this period the construction of religious structures also set records. "Ever since the end of World War II, religious buildings have tended to occupy a more important place in the construction picture." [15] As a result of the hard economic times caused by the Great Depression and the shortages resulting from World War II, there was a need to renovate and repair the older churches. More importantly, there was a pressing need for new church buildings to accommodate the growing population as well as a return to religion by large segments of the American public after the war.

St. Christopher School, Nashua, 1950

While religious buildings were constructed for every denomination, the Post World II period witnessed a period of huge expansion by the Catholic Church in particular. Between 1945 and 1959 the total Catholic population of New Hampshire rose from 168,210 to 220,050. In New Hampshire, the Most Reverend Matthew F. Brady was installed as bishop of Manchester on January 17, 1945 and oversaw the growth of the Catholic Church and its facilities during this period. Between 1945 and 1956, twenty-seven new parishes were founded in New Hampshire by Bishop Brady; seventeen of these were in communities previously without a Catholic parish. During the same time period, the number of parishes in the state rose from 88 to 115. In addition, during his tenure, Bishop Brady authorized the building of 47 churches, 11 elementary schools, 14 convents, 5 high schools, 29 rectories, 18 parish halls, 3 homes for the aged and the purchase and opening of two summer camps.[16] Similar data for other religions would be interesting for comparison but would require additional research.

[15] *New Hampshire Architect*, Dec. 1954.
[16] Wilfred H. Paradis. *Upon this granite: Catholicism in New Hampshire, 1647-1997*. Portsmouth: Peter E. Randall, 1998: 168, 171, 181.

Hospitals/Health Care

The Post World War II era also saw huge advances in medical care and facilities. A person born in 1950 could expect to live twenty years longer than one born in 1900. After the War there were important advances in the treatment of tuberculosis and polio was virtually eliminated in the 1950s. Nationwide, there was a massive expansion of the nation's hospitals resulting from the Hill-Burton Construction Act of 1946 which provided $375 million in federal aid for non-federally owned hospitals. During this period, hospitals were continually improved and expanded to meet changing needs, requirements and regulations. In the 1960s most hospitals were small, locally oriented institutions. In terms of patient care, beginning in the 1950s there was a shift away from wards of eight or more patients to semi-private rooms. Hospitals also had to accommodate new technical advances. X-ray technology progressed rapidly after the development of the first full body X-ray in 1951. By the 1950s surgery once considered radical had become routine and even the smallest hospitals had a need for operating rooms and surgical care units. Two major federal programs, Medicare for seniors and Medicaid for the poor, were both passed into law in 1965. In addition to having a major impact on the availability of care, the programs also were a new source of funding for hospital facilities. Most of the counties also had hospital facilities as part of their county farm complexes and some also constructed nursing homes. For example, the Rockingham County nursing home was built in 1957.


Reveal Mt. Crotched Hospital Plans

Against the background of the highest peak of Crotched mountain, the Crippled Children's Restoration hospital will be built to overlook Lyndeboro mountain, Pack Monadnock and Mt. Monadnock. The New Hampshire Society for Crippled Children and Handicapped Persons will open a fall drive to raise $1,000,000 for the proposed hospital, which is shown here in a drawing by Architect Walter F. Bogner of Cambridge, Mass.

Source: *New Hampshire Morning Union* (Manchester), Sept. 4, 1947

Collection of Crotched Mountain Rehabilitation Center

More specialized medical facilities were constructed as well. In the late 1940s Harry Gregg of Nashua began fundraising for what would become the Crotched Mountain Rehabilitation Center (CMRC) in Greenfield. In 1953 CRMC opened its 40-bed children's center to serve local children with polio. The Carter Memorial Meeting House was built in 1954 providing space for public education and community activites and a gymnasium and chapel were added a few years later. Soon, disabled children from all over the country and world came to Greenfield for treatments. In time the initial focus on polio shifted to children with cerebral palsy, spina bifida and other physical and neurological disabilities. The School for the Deaf opened in 1955 and continued for nearly 25 years. An adult center for rehabilitation opened in 1961. A center for the rehabilitation of adults with brain injuries was later added.

Many hospitals in the state were updated and added onto during the latter 20th century. In February 1951 *New Hampshire Architect* noted recent hospital construction projects in Rochester, Hanover, Keene, Plymouth, Concord, Wolfeboro and Laconia. The influx of tourists also increased the need for medical services. In 1970, the Lakes Region General Hospital constructed a large addition in order to handle both skiing and summer tourist peaks. The roughly-formed concrete structure was designed by Connecticut architect Bruce Porter Arneill and was published in the national architectural publication, *Architectural Record* in September 1971.

Lakes Region Hospital, Laconia (1970)
Bruce Porter Arneill, architect

Source: *Architectural Record*, September 1971

Industrial Changes

The industrial climate of New Hampshire changed dramatically after World War II. The products which were manufactured in New Hampshire in the later 20th century were quite different than those that had built the state economy. By this time the traditional manufactures of textiles and shoe making were in decline due to obsolete plants and cheaper wages in the South. In Manchester, the once-mighty Amoskeag Manufacturing Company had declared bankruptcy in 1938 and the holdings of the company were sold off. In the years that followed, the textile mills on the banks of the Merrimack River found a number of smaller manufacturing tenants including shoe companies and rayon manufacturers.

Lew A. Cummings Co., Inc., Canal St., Manchester
Carl E. Peterson, architect

Source*: New Hampshire Architect*, May 1959

The story was repeated in Nashua where Textron, successor firm to the Nashua Manufacturing Company, closed its doors in 1949. As a result, a group of business and civic leaders came together and formed the Nashua New Hampshire Foundation, a development corporation that purchased vacant mill space and worked to recruit companies to come to the city. One of the first to sign on was the newly-formed Sanders Associates, a defense electronics contractor, which leased space in the Jackson Mills in Nashua in 1952. The company produced a variety of printed circuits and wiring boards for the military. In 1962, the federal government designated Sanders a formal "defense facility." By this time, Sanders was Nashua's largest employer with 3,000 workers. The company developed some of the first electronic aircraft countermeasures, enabling planes to fight off enemy attacks electronically rather than tactically. Bolstered by defense and NASA operations, Sanders built a new modern building at Spit Brook Road in Nashua in 1967.

Sanders Associates (now BAE Systems), Nashua (1967)

In the early 1970s Digital Equipment Corporation arrived in the Nashua Region further advancing southern New Hampshire's role as a high-tech center. In 1953 TyCom Integrated Cable Systems opened a plant in Newington to produce long lengths of undersea cable. A number of machine tool manufacturers were headquartered here. The Anheuser Busch brewery in Merrimack opened in 1970. The economic picture was not as rosy in all parts of the state. In the North Country, the pulp and papermaking Brown Company of Berlin and Gorham went through bankruptcy in the 1940s and never recovered.

Anheuser-Busch Brewery, Merrimack (1970)

During this period, smaller scale manufacturers were attracted to the state as well. In 1955, the Business Development Corporation and the Industrial Park Authority were established to aid new businesses and attract industry to New Hampshire. In August 1956 Governor Lane Dwinell laid the cornerstone for the first building in New Hampshire's first industrial park in Hooksett. The 53,000 square foot building was constructed for the Raytheon Manufacturing Company.[17] Industrial parks were laid out and built in communities throughout New Hampshire.

Chemtan Company, Exeter
Alexander Majeski, architect

Source: *New Hampshire Architect*, June 1957

[17] *Nashua Telegraph*, 30 August 1956, p. 14

Airports

The economy of the state was boosted by its ability to handle military, private and commercial civil aircraft safely and efficiently. The state's largest airport, Manchester Airport, dates back to the late 1920s. It became an Army Air Corps Base in 1940 and was renamed Grenier Field by the War Department in 1942. In 1955 joint military-civilian use of Grenier Field was approved by the Air Force.

In December 1961 a new $850,000 passenger terminal opened at Grenier Air Field (later Manchester Airport). Designed by Manchester architects Koehler & Isaak, it was named after Roscoe Ammon, a successful businessman and airport booster who provided the City of Manchester with $500,000 to begin construction of a modern terminal. In 1966 the Air Force transferred control of the Field to the municipalities of Manchester and Londonderry. It was officially renamed Manchester Airport in 1978.[18] During this period, smaller airports were located in Concord, Keene, Lebanon and Laconia.

Ammon Terminal, Grenier Air Field, Manchester (1961)
Koehler & Isaak, architects

Granite State Architect, Dec. 1963

[18] History of Manchester Boston Regional Airport http://www.flymanchester.com/history

Growth of State Institutions

Population growth also led to expansion in state institutions in Concord to serve and manage those residents. A competition was held in 1950 to design a large structure that would have housed the State Police, Motor Vehicles, Employment Security, and Public Works and Highways. Twenty-nine architects submitted entries and Nichols and Butterfield won the competition. But for some reason the building was never constructed. Instead, a number of individual buildings were constructed over the next two decades. E.H. and M.K. Hunter designed a building for New Hampshire Fish and Game in 1954. A new building was constructed for Department of Employment Security on South Main Street in 1958-59. According to an article in *NH Architect* in 1960, "the exterior window wall was selected to express the modular space disposition; the polished granite base provides a relation to the other governmental and institutional buildings in the city of Concord." A new Public Works and Highways/Department of Safety building was constructed on Hazen Drive in 1963. Prior to this the 400 people working in the building were scattered in offices all over Concord.

Public Works and Highways Building, Concord (1963)
Koehler & Isaak, architects

Source: *Granite State Architect*, April 1964

The former Post Office/Federal Building west of the State House was given to the State of New Hampshire in 1967 and converted to legislative offices. A modern but evocative addition was constructed at the rear a few years later.

Legislative Office Building Addition, Concord (1974)
Richard Dudley of Dudley, Walsh & Moyer, architect

A neo-Traditional Supreme Court Building was constructed on Concord Heights in 1969.

Supreme Court Building, Concord (1969)
Royal Barry Wills Associates, architects

State Lottery and Liquor Stores

New Hampshire had the first state-run lottery in the United States.[19] The first ticket for the NH Sweepstakes was sold by Lou Smith of the Rockingham Park racetrack to Governor John King on March 12, 1964. Tickets were sold only at the 49 state liquor stores and three licensed racetracks.[20] By the year 2000 there were lotteries in 37 states.

Sale of the first NH Sweepstakes ticket in 1964

Source: North American Association of State and Provincial Lotteries

[19] *Granite State Architect*, March 1971, p. 17.
[20] http://www.global-lottery-results.com/USA/New-Hampshire/News/Nh_lottery_celebrates_its_45th_anniversary.php

The State's first self-service liquor stores opened in Nashua and Concord in 1963-4. The State Liquor Commission Warehouse at 50 Storrs Street in Concord (1966) was reportedly the first building of its type in the nation as the complete self-service sales display featured all the 475 liquor and wine items regularly stocked in the 49 state stores along with scores of specialty liquors. [21] It was designed by architects Koehler & Isaak of Manchester. Among the other architect-designed liquor stores of the period was the new store at the Portsmouth Traffic Circle completed in 1971 according to designs by Donald T. Dennis of Dennis and Tampling, Portsmouth.[22]

Design for NH Liquor Store, Portsmouth (1971)
Donald Dennis (Dennis & Tambling), architect

Source: *Granite State Architect,* March 1971

[21] *Concord Monitor*, 29 June 1965.
[22] *Granite State Architect*, March 1971, p. 17.

Federal Construction

At the same time that state government was expanding, so too was the federal government. In 1960 there were 2.4 million civilian Federal employees nationwide and by 1980 the number had increased 29 percent to 3.1 million. Between 1960 and 1976, the General Services Administration (GSA) undertook more than 700 projects in communities across the nation. Design of the federal buildings was to follow the "Guiding Principles for Federal Architecture", developed by President Kennedy's Ad Hoc Committee on Federal Office Space in 1962. As stated in this document:

> The policy shall be to provide…facilities in an architectural style and form which is distinguished and which will reflect the dignity, enterprise, vigor and stability of the American National Government. Major emphasis should be placed on the choice of designs that embody the finest contemporary American architectural thought.[23]

In New Hampshire, the GSA was involved in the construction of federal buildings in Concord (1966), Portsmouth (1967), Keene (1971) and Manchester (1976). Architects Koehler & Isaak of Manchester served as architects and agents for the GSA.

James Cleveland Federal Building, Concord (1966)
Koehler & Isaak, architects

[23] *Architecture of the Great Society: Assessing the GSA Portfolio of Buildings Constructed during the 1960s and 1970s.* Summary of Comments and Issues from a Forum Convened at Yale University's Center for British Art, December 5, 2000.

Thomas McIntyre Federal Building, Portsmouth (1967)
Koehler & Isaak, architects

Additional facilities constructed by the federal government during this period include post offices, many of which were also constructed in a modern style. A Federal Air Traffic Control Center was completed at Nashua in 1963 at a cost of $5 million. It employed a staff of 300. The facility went through a $4.5 million expansion/modernization in 1973 at a cost of $4.5 million; at that time it employed more than 700 persons.

Post Office, Danbury (1962)

Age of the Automobile

Between 1946 and 1955 the number of automobiles produced annually nationwide quadrupled. In 1954 the F.E. Everett Turnpike, a divided highway, was completed carrying high speed traffic from Nashua to Concord. In 1956 President Dwight D. Eisenhower signed the Federal-Aid Highway Act of 1956 (also known as the National Interstate and Defense Highways Act of 1956), establishing an interstate highway system in the United States. The construction of Interstates 89 and 93 occurred in the early 1960s and quickly displaced earlier "highways" such as Rt. 3 (Daniel Webster Highway).

Toll Houses on Everett Turnpike at Merrimack
E.H. and M.K. Hunter, architects

Source: *New Hampshire Architect*, Sept. 1957

In 1963 the stretch of Interstate 93 between Windham and Londonderry was recognized with a first "Special Citation" among America's Most Beautiful Highways as judged by *Parade Magazine*. It was one of four sections of turnpike in New Hampshire cited for excellence.[24] In the fall of 1964 another ten miles of Interstate 93 was opened to traffic from New Hampton to Plymouth. At the time a total of about 85 miles was complete beginning at the Massachusetts state line in Salem.[25]

[24] *Granite State Architect*, April 1967, p. 35.
[25] *Concord Monitor*, 15 Sept. 1964

During this period motels, drive-ins, and neon signs became common place features in the New Hampshire landscape. There were once approximately thirty drive-in theaters in New Hampshire. Today, it is estimated that four survive (Hinsdale, Laconia, Lancaster, Milford). The Milford Drive-In opened in 1958. The iconic Weirs Beach neon sign was erected in July 1956.[26]

The 1950s and 1960s marked a high point in the popularity of the motel. During World War II, motor court design was impacted by the difficulty in getting building materials. Individual cabins gave way to more economical lines of rooms sharing one foundation along with plumbing and electrical systems. It has been estimated that the number of motels in America tripled between 1940 and 1960, from approximately 20,000 to over 60,000.[27] Small motels were built throughout the state during this period.

Hotels and motels figured prominently in the history of New Hampshire's first-in-the-nation primary. Although the state has held a presidential primary since 1916, it was not until 1952 that the primary began to assume its current importance. Since that time New Hampshire has been a major testing ground for candidates. Constructed in 1951, the New Hampshire Highway Hotel hosted some of the most important political figures in the country until its demolition in 1988. The Wayfarer Hotel and Convention Center in Bedford was also especially popular in primary years.

[26] Lake Winnepesaukee Historical Society.
[27] http://vintageroadside.com/motorcourts.aspx [Retrieved 17 Dec. 2012]

New Hampshire Highway Hotel, Concord

With the coming of the interstates, corporate chains began appearing along the new travel routes. The first Howard Johnsons motel and restaurant combination opened in Concord in 1959. [28] It was conveniently located off and visible from the highway (later Interstate 93). At Portsmouth there was an early Howard Johnsons restaurant which later saw the addition of a motel about 1960. Another Howard Johnson motel with restaurant was built in Nashua in 1967 while Manchester got its own five-story, high rise motor lodge in 1972.[29]

Wayfarer Hotel, Bedford

[28] *Concord Monitor*, 25 Oct. 1959.
[29] http://www.highwayhost.org/Stategateways/newhampshire.html

Recreational Offerings

The increased availability of automobiles had a huge impact on how families spent their leisure time. Improved roads brought tourists and sports enthusiasts to the state at an increasing rate and tourism became a major part of the New Hampshire economy. Recreational visits became shorter and more frequent, leading to different kinds of recreational services and resource types including motels, visitor's centers, etc.

The Hampton Sea Shell Complex, erected in 1962-3, was a unique, multi-function recreational center combining a life-saving station, Chamber of Commerce visitor center, restrooms, a stage, a state park office and a distinctive slender three-story light tower. Funded by a combination of federal and state funds, it is believed to have been influenced by the National Park Service's Mission 66 program which sought to improve deteriorated and inadequate conditions in the national parks as part of a celebration of the Park Service's 50th anniversary.[30] Designed by W. Brooke Fleck of Hanover, the Sea Shell Complex was an interesting example of the Modern Movement, constructed of functional, low cost materials. It was demolished in 2010. The New Hampshire Division of Parks and Playgrounds also commissioned park structures at two other southern New Hampshire parks during the same period. Both Pawtuckaway State Park in Nottingham and Greenfield State Park in Greenfield saw the addition of several small buildings displaying elements of the Modern Movement.[31]

Sea Shell Complex, Hampton (1962-3)
W. Brooke Fleck, architect

[30] Rita Walsh, Inventory form for Sea Shell Complex, August 2009.
[31] Ibid.

In the post World War II period and especially in the post 1960 period, the combination of rising incomes and better highways greatly encouraged the growth of skiing in the northeast as a leisure activity. There are sixteen ski areas in the state which are currently operational and first opened between 1945 and 1975. Another ten first opened during the same period but have since closed.[32]

The Mt. Sunapee ski area opened on December 26, 1948 with a single chairlift to the North Peak Area. In 1959 the State remodeled and added to the Peabody Slopes Shelter at Cannon Mountain in Franconia. In 1961 the New Hampshire legislature authorized an expansion of state ski facilities resulting in the construction of a number of structures including the Summit Lodge at Mount Sunapee, designed by Carter & Woodruff of Nashua for the New Hampshire Division of Parks.[33] The Brundage Lodge at the Skiway in Lyme Center was designed by W. Brooke Fleck about 1957. Roy Banwell designed the Loon Lodge in Lincoln in 1968.

Mt. Sunapee Ski Area, Newbury

[32] See http://www.newenglandskihistory.com/NewHampshire/watervillevalley.php [Retrieved 17 Dec. 2012]
[33] *Granite State Architect*, March 1965.

Commercial Activity

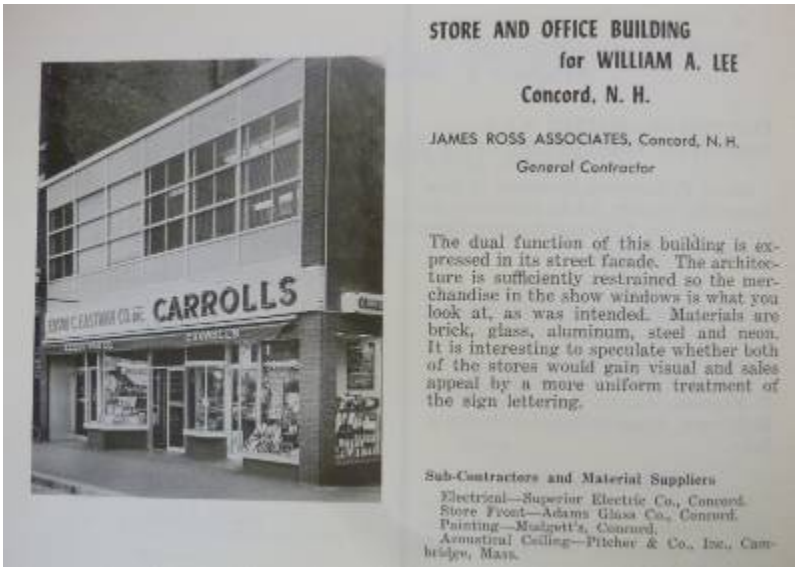
The growing mass consumer culture of the period manifested itself in new businesses and building types. New banks, stores, restaurants, and shopping centers were built throughout the state, vying to be modern and customer-friendly. Yoken's Restaurant was built on Rt. 1 in Portsmouth in 1947. Its iconic neon sign is typical of the advertising used to beckon customers in the automobile age. The restaurant was razed in 2005 although the sign is still in place today.

Yoken's Restaurant, Portsmouth

Main Street and downtown centers were vibrant, healthy centers of activity in the 1940s and 1950s. Typically there was a wide variety of stores and the downtown was a center of activity for shoppers and families. Main Streets were not just the center of commercial life but were also a key part of a community's social life.

c.1960 Postcard of Main Street, Concord

In traditional downtown commercial districts, the Post World War II era brought various changes. In some cases there was new infill commercial construction. In other cases older buildings received significant Modernist changes, especially at the storefront level to engage the attention of the passerby.



Infill, 1-5 North Main Street, Concord
Source: *New Hampshire Architect*, Dec. 1957

New storefront on older building, Puritan, Manchester
Koehler & Isaak, architects

Source: *New Hampshire Architect*, Oct. 1950

In the 1960s businesses began to close and fewer people were shopping in downtown areas, siphoned away by the promise of the offerings in new commercial strips outside the traditional commercial center. As automobiles began to clog central business districts, small strip commercial centers and shopping centers with on-site parking grew increasingly popular. For example in Lebanon, Bridgman's Furniture moved from downtown Lebanon to a new store on the "Miracle Mile" (Rt. 4) in the early 1950s.

Bridgman's Furniture, Lebanon

Built in 1954, the Exeter Shopping Center was reportedly the first on the seacoast. The Capitol Shopping Center in Concord opened in 1959 on site of former Railroad Station which was demolished that year. Nashua's first strip mall, Simoneau Plaza, was built in 1962.

Exeter Shopping Center
Edward Benton Miles, architect
Source*: New Hampshire Architect*, Feb. 1955

In Lebanon a downtown pedestrian mall was completed in 1970 as part of a controversial Urban Renewal project after a fire destroyed a commercial district on Hanover Street in 1964. Laconia also reinvented its downtown with the assistance of Urban Renewal funds.

The Nashua Mall, with its dumbbell plan, was reportedly the first enclosed shopping mall built in New Hampshire and opened in 1969. The Bedford Mall opened along the Daniel Webster Highway (Rt. 3) in the 1970s. The Mall of New Hampshire on South Willow Street in Manchester was the first large-scale enclosed shopping mall and was completed in 1977.

Fitchburg Gazette, October 11, 1969

Auto Dealerships

Among the building types which best symbolize the promise and optimism of the Post World War II period is the auto dealership and car showroom.

Nash Dealership, 75 E. Hollis St., Nashua (1954)
Tracy & Hildreth, architects
Source: *New Hampshire Architect*, January 1955

In New Hampshire, as across the country, designers combined creative and enthusiastic aesthetics with the latest in building technology. After World War II, car dealerships and garages were often found in the central business district, alongside other businesses and services.

Car Dealership, 45 S. Main Street, Concord
Lyford & Magenau, architects
New Hampshire Architect, Nov. 1951

But just as other businesses departed the downtown for larger lots, more parking and easy access off the highways, so did the auto dealership. Commercial strips like Amherst Street, the Daniel Webster Highway and South Willow Street became lined by thoroughly modern structures showcasing the latest vehicles. Manchester architect George Soule designed a futuristic canopy and structure for Dobles Chevrolet on South Willow Street in Manchester. His drawing for the project is in the collection of the New Hampshire Historical Society.

Dobles Chevrolet, South Willow Street, Manchester
George Soule, architect

Source: *New Hampshire Architect*, March 1965

Source: New Hampshire Historical Society website

Specialty Businesses

In 1949 a New York chemist named Henry Martin revolutionized the dry cleaning industry by offering 'on-site' cleaning at retail locations. He did this by using a less flammable solvent to clean clothes. Formerly dry cleaning plants had to be located in remote production facilities. With the advent of Martinizing Dry Cleaning, same day dry cleaning establishments became a common feature in the landscape. In 1950 architects Lyford and Magenau were commissioned for alterations and additions to the Concord Cleaners facility. The same year Tracy & Hildreth designed a new dry cleaning plant for Coronis Cleansers in Nashua.[34] The distinctive moderne signage remains a local landmark today.

Coronis Cleansers, Main Street, Nashua (1950)

Source: *New Hampshire Architect*, January 1951

[34] *New Hampshire Architect*, January 1951.

Telephone Buildings

New technology also brought other new modern building types to communities across the state. The conversion from manual to rotary dial telephones resulted in the construction of new exchange buildings throughout the state by New England Telephone & Telegraph Company in the 1940s and 1950s. These included buildings in Claremont, Concord, Dover, Keene, Laconia, Littleton, Nashua, Peterborough, Plaistow and Portsmouth. Architect Carl Peterson started to design and alter buildings for the New England Telephone and Telegraph Company in 1946. The contracts for designing the new buildings were shared primarily by three architectural firms, Peterson, Alfred Granger Associates, and Maurice Witmer and are well chronicled in the *New Hampshire Architect*.[35]

Dial Central Office Building, Keene (1958)
Alfred T. Granger Associates, architect

[35] *New Hampshire Architect*, September 1958

Dial Exchange Building, 12 South Street, Concord (1952)
Carl E. Peterson, architect

Source: *New Hampshire Architect*, September 1958

Insurance Companies

After World War II, the increase in car and home ownership depended on and supported demand for consumer financial products such as auto and home insurance. Until the 1950s, most insurance companies in the United States were restricted to providing only one type of insurance, but then legislation was passed to permit fire and casualty companies to underwrite several classes of insurance. Two of the largest buildings constructed in the state about 1950 were owned by insurance companies. Many of the state's largest and most impressive architectural commissions during the study period were constructed for insurance companies.

Undated postcard, New Hampshire Fire Insurance Co., Manchester

The New Hampshire Fire Insurance Company built a large granite and marble home office on Elm Street in Manchester in 1950, designed by the prominent Boston architectural firm of Cram and Ferguson who designed such noted building as the John Hancock and New England Mutual Insurance buildings in Boston.[36] The same firm designed a less grandiose building in Keene for the National Grange Mutual Insurance Co. in 1950.

National Grange Mutual Insurance Co., Keene (1950)

The tradition of architecturally-noteworthy insurance buildings was continued in 1973 with the construction of the Liberty Mutual Building in Portsmouth according to designs by Boston architects Perry, Dean and Stewart.

[36] *Manchester Union Leader*, 16 July 1951.

Urban Renewal/Adaptive Reuse/Historic Preservation/Environmental Concerns

The Federal-Aid Highway Act signed by President Eisenhower in 1956 did more than build highways. It also left an indelible mark on urban neighborhoods throughout the country through a mix of renovation, demolition and commercial development. In 1959, New Hampshire passed legislation allowing any housing authority to function as an urban renewal agency. Manchester was the first municipality in New Hampshire to establish a renewal agency. Renewal projects in the Queen City included downtown parking lots, a strip mall on Elm Street, the Amoskeag Millyard and the Mall of New Hampshire.[37] Other communities which opted in include Concord, Somersworth, Portsmouth, Lebanon, Dover, Laconia, Claremont and Tilton.

In the 1950s and 1960s urban renewal was a tool for dealing with city neighborhoods that had fallen into disrepair. In Portsmouth, a group recognized the significance of the neighborhood at historic Puddle Dock that was threatened by Urban Renewal. As a result the Strawbery Banke Museum was formed and saved 32 buildings on their original foundations as well as four other historic buildings that were moved from their original locations to save them from destruction. In Laconia, the City adopted an Urban Renewal Plan in 1965 to improve conditions downtown and attract shoppers and businesses. The City replaced many buildings, including several mill structures with the Laconia Mall, Sunrise Towers, City Hall, and parking lots. Belknap Mill along with the neighboring Busiel Mill were saved and adapted for other uses by the Save the Mill Society in 1970 (later the Belknap Mill Society). Historic Harrisville was established in 1971 to preserve that unique textile mill village.

State level historic preservation efforts got their start in 1972 with a grant from the New Hampshire Charitable Foundation to explore creating a state historic preservation office. National preservation legislation in the 1960s had sparked the creation of state offices. Reflecting the public's growing concern about the loss of historic resources in the state, New Hampshire's "State Historic Preservation Office" was established in 1974 as the Division of Historical Resources. As stated in the authorizing legislation "The legislature of New Hampshire has determined that the historical, archeological, architectural, engineering, and cultural heritage of New Hampshire is among the most important environmental assets of the state and that the rapid social and economic development of contemporary society threatens the remaining vestiges of this heritage." (RSA 227-C)

Paralleling historic preservation efforts was an environmental movement which was becoming increasingly concerned with an overall loss of New Hampshire character. By the 1970s, Environmental Design sought architecture that was one with its site. As a result of the energy crisis, architects and designers started to consider sustainability and energy efficiency as important criteria for designing new buildings. In 1974, the Society for the Protection of New Hampshire Forests published *Guiding Growth: A Handbook for New Hampshire Townspeople* which sought to make New Hampshire residents appreciate the high costs of growth and how best to control growth.

[37] Elizabeth Durfee Hengen, *A History of Development*.

IV. Design Trends in New Hampshire, 1945-1975

This section focuses on some of the trends that affected and shaped architectural resources of the recent past. There is a discussion of changes in the building industry including new materials and innovations which emerged during the period.

The built environment of the Post World War II era was shaped both by architects who were trained in the state, regional influences, particularly that of the Harvard Graduate School of Design, and those who came from other locales.

Although there are many buildings dating to this period which defy stylistic classification, national architectural trends are still evident in structures throughout New Hampshire. Key representative examples are presented for the major styles and trends of this period.

Further representative examples by resource type are located in Appendix A. It should be stressed that due to the limitations of this project, this is not an all-inclusive list but a beginning that can and should be expanded with future research.

The American Institute of Architects (AIA) listings of architects practicing in New Hampshire in 1956, 1962, and 1972 are provided in Appendix B .

Appendix C provides brief descriptions of architects working in the state during the period including educational background, partnerships and representative examples of their work in New Hampshire.

Source: *New Hampshire Architect*, July 1955

Changes in the Post-World War II Building Industry

Wartime shortages of building supplies such as wood, rubber, steel, iron and aluminum led to adjustments to typical building practices and innovations. Plastics, aluminum and concrete were all advanced during the war years. These technological developments also had influences on modern styles after the war. The Late Moderne style featured smooth, streamlined stone and aluminum. The Miesian style utilized standardized components of glass, aluminum and steel. Brutalism and New Formalism modes emphasized the expression of concrete including pre-cast and cast-in-place units. Within New Hampshire, a number of businesses developed and marketed new technologies and new manufacturing companies also were founded. Among these were the Duracrete Concrete Company of Manchester and Kalwall of Manchester.

Laminated Wood

Shortages of wood during the war led to the development of new and improved materials including glued laminated timber and plywood that could be used rather than solid wood. Laminated arches found new uses in churches and skating rinks.

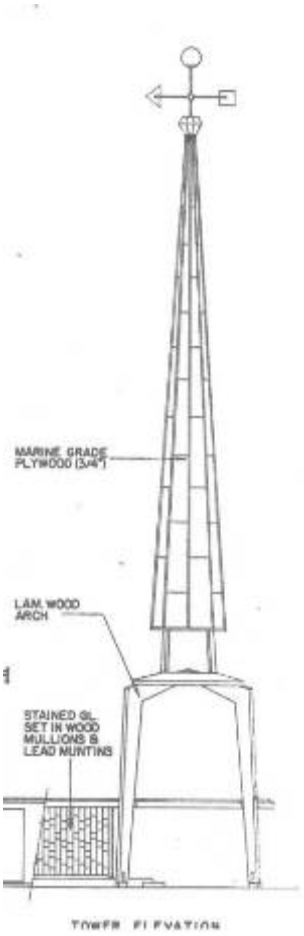
Church of the Holy Redeemer, West Lebanon (1961)

Edward C. Lewis, architect

The Douglas Everett Arena in Concord was constructed in 1965 of sixteen timber arcs.

Douglas Everett Arena, Concord (1965)
Richard Dudley, Koehler & Isaak, architect

At the Unitarian Church in Concord, Hugh Stubbins & Associates sheathed the church spire in marine grade ¾" plywood and set it on laminated wood arch supports. The steeple was removed in the 1970s due to structural failure.



A 1960s supermarket in Nashua utilized laminated plywood to form curved canopies over the front display windows.

20th century Market, Nashua
Tracy & Hildreth, architects

Source: *New Hampshire Architect*, Oct. 1964

Aluminum

Production of aluminum, used in aircraft construction, increased greatly during the war and resulted in a postwar surplus. Aluminum-framed curtain wall systems developed rapidly after the war when the supply of aluminum became available for non-military use. Aluminum manufacturers also found other new markets in the construction industry where the material was used for doors, windows, and ornament.

National Grange Mutual Insurance Co., Keene (1950)
Cram & Ferguson, architects

James Cleveland Federal Building, Concord (1966)
Koehler & Isaak, architects

NH Savings Bank, Concord (1958-9)

Colby Sawyer College, New London
(1961)

Cast Aluminum sculpture “Motherhood” by Adio di Biccari

Carter Memorial Hall, Crotched Mountain Rehab. Center, Greenfield (1954)

Thin Shell Concrete

Advancements in structural and mechanical systems gave rise to new unlimited possibilities in architectural design. The thin-shell concrete structure, with a shell as thin as three inches thick, proved to be an economical way to achieve large spans for industrial, commercial, and public structures but was also embraced as a unique means of architectural expression.

Hyperbolic paraboloid concrete shells were utilized in a number of church structures in New Hampshire in the 1960s; most, if not all, were designed by architect Daniel Tully.

First United Methodist Church, Gilford (1968)
Daniel Tully, architect

The Smart Gymnasium at the Spaulding Youth Center in Northfield-Tilton was also designed by architect Daniel Tully and is notable as his first building with a prefabricated long span roof. The building committee learned of Tully's work from one of its members who also served on the Building Committee of the Laconia First United Methodist Church in Gilford. The foundations were begun in September 1969. Tully recalls flying the steel abutment caps in his Piper Cherokee 300 and landing in the field adjacent to the construction site. The abutments were poured the next day and the building was left to sit during the winter during which time the roof and sidewall panels were fabricated. It was completed during the summer of 1970.[38]

[38] Communication from Daniel Tully to Lisa Mausolf, April 2011

Smart Gymnasium under construction, Spaulding Youth Center, Tilton (1970)

Source: Spaulding Youth Center

Thin shell concrete could be used for both barrel and folded forms. In addition to churches, there are examples of its use for entertainment centers, gymnasiums and sports centers.

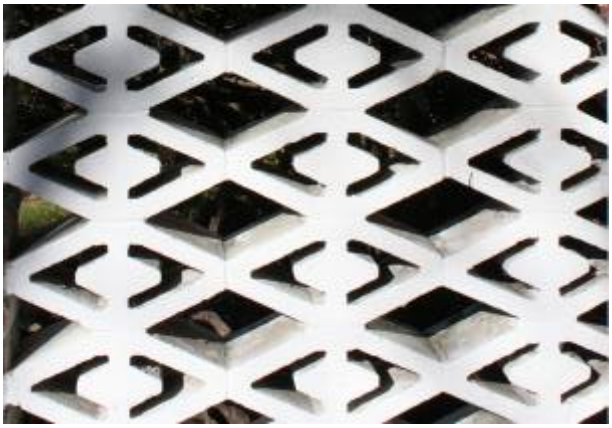
Hopkins Center, Dartmouth College, Hanover (1962)

Harrison & Abramovitz, architects

Decorative Concrete Block

Concrete block was developed during the early 20th century. It became popular because it was inexpensive and easy to manufacture and install. During the 1960s it was transformed from a basic building material to a decorative feature.

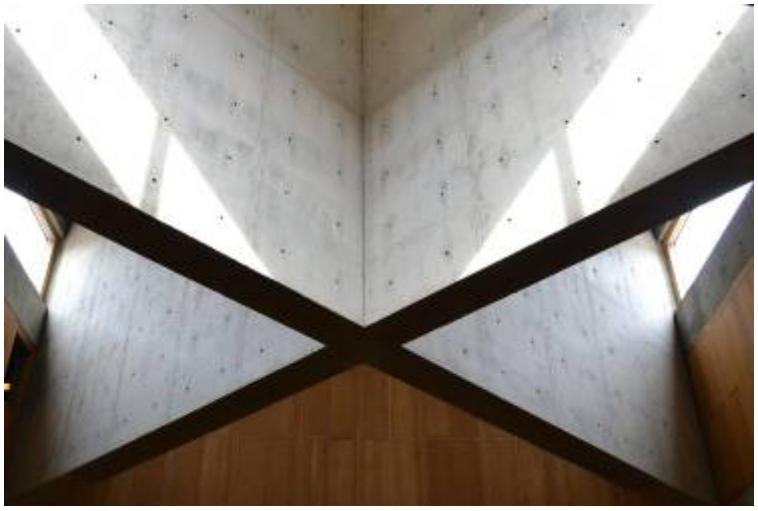
The Duracrete Block Company of Manchester was founded in 1946 and was the largest single cement block plant in the East during this period. In 1966 it produced 350 kinds of blocks at the rate of about 50,000 per day.



Duracrete Block Co. also produced 'Glazon' glazed masonry units which were used extensively in school corridors, kitchens, cafeterias, stair wells, shower and locker rooms and gymnasiums. The blocks had an 8 x 16 inch face size with a thickness of two, four, or six inches.

Reinforced Concrete

Reinforced concrete was durable and readily available but was also popular from a design standpoint. The textural effects which were influenced by the formwork and its sheer bulk made reinforced concrete an ideal material for emphasizing certain Modern styles, particularly Brutalism designs.



Library, Phillips Exeter Academy, Exeter (1967-1972)
Louis I. Kahn, architect

Thompson Arena, Dartmouth College, Hanover (1974); Pier Luigi Nervi, architect

Love Gym., Phillips Exeter Academy, Exeter (1970-1); Kallman & McKinnell, architects

Architectural Pre-cast Concrete

Architectural pre-cast concrete was developed during the World War II era. Standardization in manufacturing offered quality control, ease of assembly and a variety of finish options. It can be seen throughout the state in structural elements, curtain wall cladding and as decorative elements.

NH Public Works & Hwys., Concord (1963)
Koehler & Isaak, architects

Diocesan Chancery Building, Manchester (1966); Koehler & Isaak, architects

Federal Building, Keene (1971)
Koehler & Isaak, architects

Temple Adath Yeshuran, Manchester (1954)
Percival Goodman with Koehler & Isaak

Exposed Aggregate Finish

In some cases the concrete is given an exposed aggregate finish by mixing aggregate into the concrete or applying as an overlay. This finish is used most often in walls, spandrel panels, foundations, and accents. In some cases, the panels were used as infill when fenestration was altered for energy efficiency in the 1970s.

University of New Hampshire, Durham

Laconia

Spaulding Rehab. Center, Northfield

L

Pre-cast Concrete Panels

Concrete construction also includes the use of large pre-cast concrete panels. This technique was especially appropriate for the boxy, weight forms of the Brutalism style.

McConnell Hall, University of New Hampshire, Durham (1968)
Skidmore, Owings and Merrill, architects

Norris Cotton Federal Building, Manchester
(1974); Isaak & Isaak, architects

Kalwall

The Kalwall Corporation of Manchester manufactured translucent panels of fiberglass over an aluminum framework. Kalwall was touted as being lightweight, structurally strong, durable, weatherproof, inexpensive, beautiful, and more energy conscious than glass. From a factory at 41 Union Street and later on Pine Street in Manchester production took off in the late 1950s and found worldwide distribution. Among the most notable structures utilizing Kalwall was the American Pavilion Building at the Brussels World Fair in 1959, designed by prominent architect Edward Durrell Stone. [39] Kalwall was used most often in schools and factory buildings, but also for churches.

Advertisement from *New Hampshire Architect*

[39] *New Hampshire Architect*, August 1957, p. 8. See also Ronald and Grace Jager, *The Granite State New Hampshire: An Illustrated History.* Sun Valley, California: American Historical Press, 2000, p. 198.

St. Lawrence Church, Goffstown (1965)

Original Kalwall Corporation building at

41 Union Street, Manchester

Miscellaneous Materials

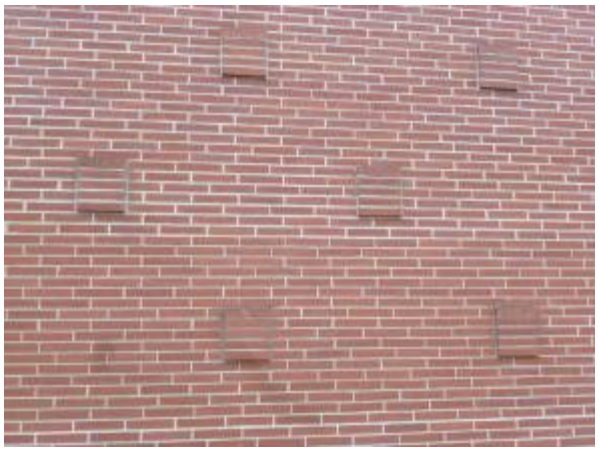
Panels of porcelain enameled steel were important components in the Modern, stream-lined aesthetic of the 1950s and 1960s. The multi-colored panels were commonly used as accents or spandrel panels within aluminum-framed wall construction systems in combination with glass or Kalwall.

NH Department of Employment Security, Concord (1958)

St. Paul's School, Franklin

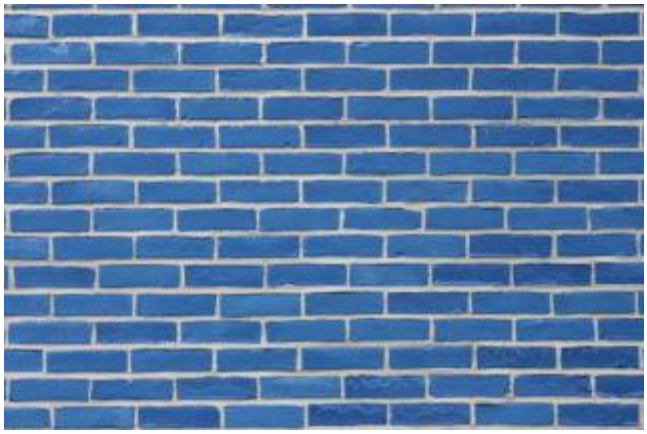
Federal Savings Bank, Rochester (1959)

Bricks and tiles took on new forms and colorations as well to enliven mid 20th century designs.



Arts Center, Colby Sawyer College, New London (1960)

St. Hedwig's Church, Manchester (1965)



NH State Liquor Commission, Concord (1966)

New England Center, UNH, Durham (1968)

Innovations in the cutting and manufacturing process led to the utilization of thin stone veneer. Fieldstone was also used in new ways.

Federal Building, Concord (1967)

Weston Associates, Manchester (1961)

George Soule, architect

NH Public Works & Hwys., Concord (1963)

Dover Federal Savings & Loan, Dover (1974)

Kenneth Parry, architect

Architectural Trends, 1945-1975

Architectural Training

Eric T. Huddleston (1888-1977) founded the Department of Architecture at the University of New Hampshire (UNH) in 1918 and served as the head of the department until 1944 when it was discontinued during World War II due to the loss of male students to the military. After the war it was not revived. Huddleston also served as supervising architect at UNH for all buildings constructed on campus between 1916 and 1950. Between 1933 and 1939 he also supervised the Historic American Buildings Survey of New Hampshire. He founded the NH Society of Architects in 1928, secured the charter to give NH its chapter of the AIA and became the state's first Fellow of the American Institute of Architects in 1953.

Many of New Hampshire's leading architects of the mid 20th century studied under Professor Huddleston. Between 1918 and 1944 130 men and women earned architectural degrees from UNH. Of these eighteen became owners of architectural firms in the state. Of the remainder, five owned architectural offices in other states; 15 worked in architectural offices throughout NH and 26 were employed by architectural offices outside the state.[40] Among the Huddleston/UNH alums who practiced in New Hampshire were John Betley, Mitchell Dirsa, Russell Harmon, Irving Hersey, Malcolm Hildreth, Nicholas Isaak, Richard Koehler, Joseph Lampron, Edward Miles and Norman Randlett. The year 1952 was one of the last classes to graduate with a B.S. in Architecture. Among the graduates was James A. Brodie who went to work with Anderson-Nichols in Concord. Several other class members worked as architects at the Portsmouth Navy Yard, most of the others left the state.

The closing of the UNH architecture department left a void in terms of future architectural designers. The *New Hampshire Architect* of September 1955 notes the pressing need for draftsmen in the state. The possibility of reestablishing a school of architecture for the three northern New England states at UNH was discussed in 1967 but never moved forward.[41]

A few architects found their way to New Hampshire from Harvard, MIT and other Boston institutions. Especially important was the Harvard connection. Walter Gropius, founder of the German design school known as the Bauhaus and one of the most influential architects of the 20th century, arrived in Cambridge in 1937 and taught architecture at the Harvard Graduate School of Design until his retirement in 1952. Hanover architects Edgar Hunter and his wife Margaret met at Harvard and received training at Harvard under Walter Gropius. E.H. Hunter received his M.Arch from Harvard in 1941. Margaret Hunter received a B.A. from the Harvard School of Design in 1945 and was a member of the first class of female architects at the school in 1942. After the war, another, smaller group of architects who would later practice in New Hampshire studied at the Harvard Graduate School of

[40] Christopher D. MacLeod, "Portrait of Eric T. Huddleston, FAIA", *Granite State Architect*, Nov.-Dec. 1966.
[41] *New Hampshire Architect*, October 1967.

Design, thanks to the G.I. Bill. These included Peter Garland, Art Eldredge, Sandy James, Dick Dudley and others. [42]

New Hampshire Architect/Granite State Architect

In 1949 the New Hampshire Chapter of the American Institute of Architects, first published its monthly magazine, originally known as *New Hampshire Architect*. Architects Maurice Witmer of Portsmouth (president of the chapter in 1949) and Eugene Magenau of Concord were the catalysts behind the original publication. With an initial mailing list of 500, more than 2,600 copies were distributed each month by 1959. A special School Costs Issue was first published in 1954. Building firms identified with the construction industry provided the funding for the magazine. *New Hampshire Architect* was published from 1949 to 1962 and was followed by *Granite State Architect* which ran from 1963 to 1972. (*Granite State Architect* was published bi-monthly by the New Hampshire Profiles Corporation of Portsmouth). The publications showcased the works of the state's architects, especially the twenty or so who were active members of the AIA chapter. Architect editors included Alexander Majeski of Bedford (from 1953 to 1959+) and John A. Carter of Nashua *(Granite State Architect*). The journal included coverage of governmental, collegiate, commercial, religious and residential commissions. Editorial commentaries provide additional insight into the state of architecture in New Hampshire during this time period. In a 1952 issue, the magazine bemoaned the fact that the "best and biggest jobs are given to architects outside the state". In the March 1953 issue the husband and wife architectural team of E.H. and M.K. Hunter offers their opinion of the still relevant modern vs. traditional controversy. An editorial in the October 1968 issue of *Granite State Architect* is openly critical of the selection of Royal Barry Wills Associates and their Georgian Colonial design for the State Supreme Court Building.

[42] Communication from Linda Ray Wilson, October 18, 2012.

Styles

National architectural trends are evident in structures throughout the state of New Hampshire although it would be difficult to assign a specific stylistic label to most buildings. As was the case nationwide, the Post World War II period is characterized by a general push for modern design with an emphasis on functionalism, rationalism, and up-to-date methods of construction. However, there are still cases where traditional period revivals prevailed. The following provides a general definition of each style which was prominent during this period along with several key, representative New Hampshire examples for each.

Late Moderne

Although the Moderne style was most popular prior to World War II, it was still being utilized in New Hampshire after the war. The style is notable for a lack of applied historic ornamentation, streamlined forms, and flat roofs. It typically displays rounded edges, corner windows, glass block and ribbons or bands of windows with metal frames.

- **Coronis Cleansers, Nashua (1950). Tracy & Hildreth, architects.**

- **Lemay Jewelers, Manchester (1946). Architect Unknown**

- **National Grange Mutual Insurance, Keene (1950). Cram and Ferguson, architects.**

The National Grange Mutual Insurance Building in Keene bears the imprint of both the Moderne Style and the more angular Art Deco. The building's horizontal orientation, bands of windows with metal

frames, and the use of aluminum and stainless steel at the entrance were all favored by the Art Moderne.

Stripped Classical/Late Art Deco

- **New Hampshire Fire Insurance, Manchester (1950 with later 1969 add). Cram & Ferguson, architects.**

As originally constructed in 1950 (before 1969 tower)

Designed by the same architects that designed the National Grange Mutual Insurance Building in Keene, the New Hampshire Fire Insurance building in Manchester exhibits many features which were popular in the Late Art Deco style. Like the Moderne style, the Late Art Deco is a stripped down style with geometric-based ornament. The NH Fire Insurance building façade exhibits characteristic setbacks

which emphasize the geometric form and there is stylized low relief ornament in a foliate design visible above the front entrance. The front entrance is capped by a curved canopy. Side doors have rounded door jambs and glass block. In this case the bands of windows have a more vertical orientation.

Details, NH Fire Insurance Building, Manchester

- **St. Joseph's Church, Dover (1946). James O'Shaughnessy, architect**

St. Joseph's Church in Dover is an excellent example of the Stripped Classical mode which found some popularity in the mid 20th century. The proportions of the front portico and the use of square piers are modern interpretations of classical forms. The setbacks of the steeple are Art Deco in inspiration as are the stylized foliate designs on the spandrels, the zigzag cornice and the fluted ornaments on the corners of the tower.

- **St. Paul's Church, Franklin (1951). James O'Shaughnessy, architect**

A few years after his design for St. Joseph's in Dover, James O'Shaugnessy is credited with this Late Art Deco-Stripped Classical church. The smooth, unadorned wall surfaces are Functionalist in nature and hearken the International Style. Aesthetics are limited to the cross on the façade and the Futuristic metal steeple.

International Style

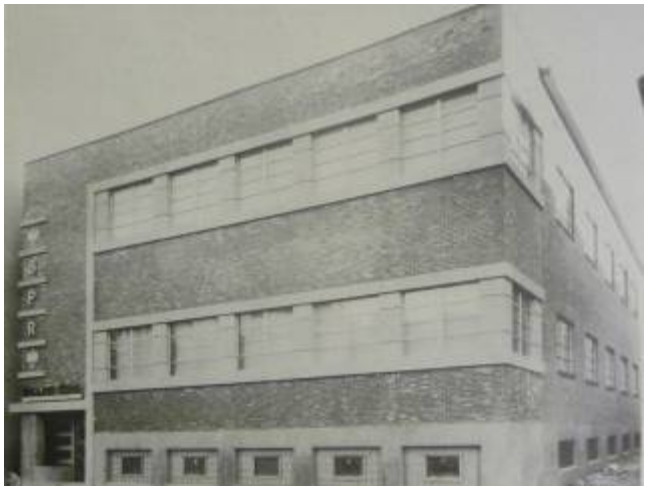
The International Style was inspired by European design, including the work of French/Swiss architect Le Corbusier and the German Bauhaus. The Bauhaus was a school of design in Germany which lasted from 1919 until 1933, at which time the faculty fled to escape the Nazis. Among those who came to this country were Walter Gropius and Marcel Breuer who taught at the Harvard Graduate School of Design where they extended their influence and promoted architectural modernism. The term "International Style" came from the 1932 exhibition at the Museum of Modern Art in New York City which was organized by Philip Johnson.

Buildings in the International Style feature simple, rectilinear geometric forms with unadorned, smooth wall surfaces of glass or steel. The style is characterized by a complete absence of ornament and decoration and cantilevered upper floors are common.

International Style commercial structures are typically symmetrical with repetitive elements and horizontal bands of metal windows set flush with exterior walls. The following two buildings are both standing in downtown Manchester, though altered from their original appearance.

- **Davison Building, Manchester (1954). Koehler & Isaak, architects**

- **BPR/Pulaski Club, Manchester (1951). John Betley, architect**



- **Farm Bureau Mutual Insurance Co., Concord (1958). Designed by Pittsburg Plate Glass Co.**

- **Office, West Wheelock Street, Hanover, (1971 with 1984 addition). Roy Banwell, architect**

- **Choate Dormitories, Dartmouth College, Hanover (1956-8). Campbell, Aldrich & Nulty, architects**

- **Murdough Center, Dartmouth College, Hanover (1972-3). Campbell, Aldrich & Nulty, architects**

In terms of tall commercial buildings, International Style buildings typically follow the tradition of the work of German-American architect Mies van der Rohe (1886-1969). Van der Rohe's Seagram Building in New York City (1956) is a simple, rectangular building designed with amber colored windows and a bronze-colored structure. It is considered one of the finest examples of the functional aesthetic and a masterpiece of corporate modernism.

- **Hampshire Plaza, Manchester, Elm Street (1971). Welton Becket, architect**

Hampshire Plaza, at 20 stories/258 feet, was the tallest tower north of Boston when it was completed in 1971. The $20 million building was designed by Welton Becket & Associates of New York. Exterior sheathing was glass and porcelain-finished insulated steel panels. The Tower featured 1,800 floor-to-ceiling solar bronze tone double glazed windows. Like the Seagram Building, Hampshire Plaza was intended to display the "classic dignity of bronze created in porcelain-enameled steel".


classic dignity of bronze
created in
porcelain-enameled steel
BETHLEHEM STEEL

New Formalism

New Formalism is a mid-century effort to update classical architecture forms with new technologies and design elements. The buildings are typically on a grand scale and thus the style is most often used for banks, universities and corporate architecture. Smooth wall surfaces, repetition of arches or rounded openings and full height column supports are common character defining features. The roofs are often designed as large, heavy slabs that project from the building. In terms of site design, New Formalist designs tend to stand out from their surroundings and may incorporate plazas

- **Hopkins Center for the Arts, Dartmouth College, Hanover (1960-2). Harrison and Abramovitz, Architects; Campbell and Aldrich of Boston, Consulting Architects**

The Hopkins Center was the first academic arts center of its kind when it opened in 1962. It was designed by New York architect Walter K. Harrison and the arched and glassed-in façade were repeated in his later (1966) Metropolitan Opera House at Lincoln Center in New York City.

The arched motif common in New Formalism is central to the design, and in this case is emphasized by umbrella shell hoods and an extending roof that express the plasticity of the concrete. Concrete columns support the overhang.

- **New Hampshire Liquor Commission, Concord (1966). Koehler & Isaak, architects**

The NH Liquor Commission incorporates many tenets of the New Formalism style including full height columns, repeating arches, evident construction techniques and a heavy projecting roof slab. Contrasting with the typical concrete and glass is a glazed blue brick, unusual for the style if not for the period.

- **Federal Building and Post Office, Keene (1971). Koehler & Isaak, architects**

The Federal building in Keene is one of several buildings Koehler and Isaak designed for the General Services Administration. Here, as in the earlier James C. Cleveland Federal building in Concord and the Thomas J. McIntyre Federal building in Portsmouth, the architects utilized the New Formalism style to give the building a monumental quality. The arcade is more segmental and is defined by concrete columns. The heavy roof slab projects and is emphasized by large modern brackets.

Neo Expressionism

Neo Expressionist architecture represents a rejection of the rectilinear modernism favored by the Bauhaus School, Mies van der Rohe and others. The forms are varied and instead of relying on precedent, the designs are based on architects expressing their own interpretation of form, design, and meaning. Dramatic, irregular shapes are the norm, facilitated by modern innovations in laminates, plastics and concrete work. The Neo Expressionist style is most commonly utilized for religious and public buildings.

- **Our Lady of the Lakes Roman Catholic Church, Lakeport (1965). Daniel Tully, architect**

A rhombus in plan, this contemporary church is topped by a hyperbolic paraboloid or “saddle” concrete thin shell roof. Its architect, Daniel Tully, was educated as a structural engineer and later obtained his architecture license. This is one of four churches he designed in New Hampshire. In addition to churches, he also designed a number of sports complexes across the nation that utilize the hyperbolic paraboloid roof design.

- **New England Center for Continuing Education, University of New Hampshire, Durham (1968). William Pereira and Associates, architects**

The New England Center is a unique complex of structures designed to blend into a natural, brook-side landscape of evergreens and granite outcroppings on the UNH campus. The two hexagonal towers are sheathed in green brick with exposed steel frames and vertical strips of windows.

The complex was developed as a learning center by the six New England state universities and financed by a combination of public, private and foundation funds. Most recently it was used as a hotel. It was designed by William Pereira and Associates of Los Angeles. Pereira is best known as the architect of the Transamerica Pyramid in San Francisco.

- **St. George Greek Orthodox Church, Manchester (1964-1970). Christopher Kantiaris, architect**

The Greek Orthodox Church in Manchester is an excellent example of the concept of architecture as a piece of sculpture. It was designed by Christopher Kantiaris of Springfield, Massachusetts who was a native of Greece and designed a number of Greek Orthodox churches in New England.

- **Abbey Church, St. Anselm College, Manchester (1965). Nicholas Isaak of Koehler & Isaak, architect**

The Abbey Church is a cylindrical, brick structure crowned by a low conical roof with modern spire. Extending from the circle of the church in organic fashion are the sacristy, cloister and monastery buildings. The magnificent interior features massive brick arches set on squat brick columns with vertical wood roof bents.

Other circular brick structures of note in the state include the Concord Unitarian Church (1960) by Hugh Stubbins and the Sawyer Arts Center, Colby Sawyer College, New London (1960) by E.H. & M.K. Hunter, architects.

Brutalism

The term Brutalism comes from the French word “beton brut” meaning raw concrete. Brutalist structures are heavy, blocky, fortress-like and usually monumental in scale and massing. Brutalist architecture typically capitalizes on the natural roughness and heaviness of concrete as a material although in New Hampshire brick is used more often. The style is seen most often in institutional buildings including campuses, government structures and hospitals.

- **Library, Phillips Exeter Academy, Exeter (1965-1973). Louis I. Kahn, architect**

The Phillips Exeter Library is a solid square building which exhibits an overall heaviness which is ubiquitous to Brutalist architecture. Although the exterior of the building is brick to blend with the surrounding Neo-Georgian campus, on the interior the grain of the concrete formwork which characterizes Brutalist architecture is readily apparent.

- **Lakes Region General Hospital, Laconia (1971). Bruce Porter Arneill , architect**

When constructed in 1971, the Lakes Region Hospital was a classic example of Brutalism, although again, conceived in brick. Later additions have diminished the heaviness of the structure although sections are still visible.

- **Williamson & Christensen Halls, Philbrook, UNH, Durham (1969-73). Ulrich Franzen, architect**

The Nashua firm of Carter & Woodruff are responsible for most of the quasi-Brutalist designs in New Hampshire that were not designed by out-of-state architects. The Bank of New Hampshire was awarded an award by the NH AIA.

- **Bank of New Hampshire (now TD Bank), Manchester (1971-2). Carter & Woodruff, architects**

- **Nashua Public Library, Nashua (1970-1). Carter & Woodruff, architects**

Neo-Traditional

Despite the prevalence of Modern designs during this time period, traditional styles continued to be seen as well. Period revival styles could still be found on commercial, governmental and institutional buildings throughout the state.

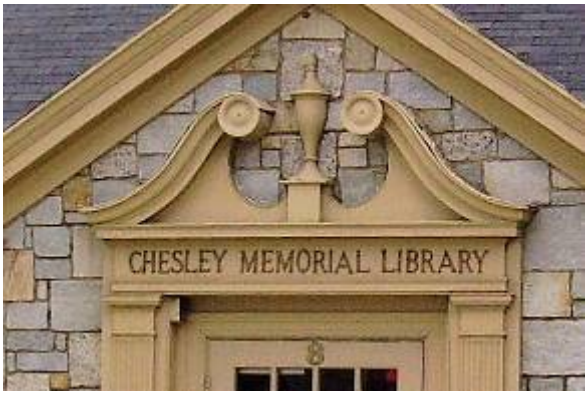
- **New Hampshire Supreme Court Building, Concord (1969). Royal Barry Wills Associates, architects**

The choice of a Colonial Revival design for the Supreme Court is hardly surprising and speaks to the traditions of the institution. An editorial in the NHAIA publication, *NH Architect*, when the design was chosen indicates that local architects found both the choice of a Massachusetts architectural firm and a traditional style very disappointing to the state's modernist practitioners.

Among the few New Hampshire architects to consistently design in traditional period revival or conservative styles during the Post War period was Maurice Witmer of Portsmouth. In addition to the designs below he also served as architect for the restoration/re-creation of Fort No. 4 in Charlestown.

- **Middle Street Baptist Church, Portsmouth (1955). Maurice Witmer, architect**

- **Chesley Library, Northwood (1957). Maurice Witmer, architect**



In some cases, Neo-Traditional forms were used for commercial purposes. This English Tudor restaurant was apparently later modified in a Polynesian mode. It may border on the whimsical but its attention to detail is impressive.

- **Restaurant, Salem (c.1970). Architect unknown**

V. Recommendations for Future Study

This document is intended as an annotated framework, first step in preparing a comprehensive context for Mid 20th Century Architecture in New Hampshire.

Recommended further survey includes, but would not be limited to:

- Defining integrity considerations for the resources of the mid-20th century
- Preparing a similar framework and/or full context for residential architecture of the period 1945-1975
- Preparing an engineering context for the period 1945-1975, with full relation to architecture of the time
- Further research into architectural practice of the period 1945-1975, expanding this document's discussion of professional training and certification programs, as well as materials and engineering influence on design
- Further research into specific firms and architects, including monographs. It is likely that the residential study would add more candidates to this list.
- In particular, a monograph on the firm of Koehler & Isaak would be useful. As the pre-eminent architectural firm in New Hampshire from 1946 to 1970, they completed more important projects than any other firm. An AIA questionnaire from 1953 indicates that the firm then had a nucleus of five personnel. Additional information on these persons and the growth of the firm over time would be of interest.
- Oral history interviews with the remaining practitioners of the period would capture a valuable and quickly disappearing resource base.

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"Hugh Stubbins", *Architectural Record*, October 1959.

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"Lakes Region General Hospital", *Architectural Record*, September 1971.

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Isaak, Carolyn. Information on Nicholas Isaak of Koehler & Isaak.

Keller, Bruce. Information on Kalwall.

Terrian, Michael. Information on Crotched Mountain Rehabilitation Center.

Tully, Daniel. Information on various commissions.

Wilson, Linda Ray. Information on 1970s architects.

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Vermont Modern http://www.vermontmodern.com/

Styles of Architecture in Buffalo http://www.buffaloah.com/a/archsty/index.html

New Hampshire Historical Society http://www.nhhistory.org/fromthecollection.html (George C. Soule collection, online exhibition)

Architectural Archives

New Hampshire Historical Society, Concord, NH [Collections of architects John Carter and George Soule]

Appendix A

Examples of Resource Types

Educational

Public Schools

Woodman Park School, Dover (1950). James O'Shaughnessy, architect

Exeter Area Junior High School (1967)

West High School, Manchester (1958 alt. and add). Koehler & Isaak, architects

Salem High School, Salem (1968). Irving W. Hersey Associates

Bernice Ray Elementary School, Hanover (1968). Roy Banwell, architect

Parochial Schools

St. Patrick School, Jaffrey (c.1960)

St. Thomas Aquinas High School, Dover (1960)

Private Schools

Dormitories, St. Paul's School, Concord (1961). Edward Larrabee Barnes, architect

Library, Phillips Exeter Academy, Exeter (1965-72) . Louis I. Kahn, architect

Dining Hall, Phillips Exeter Academy, Exeter (1967). Louis I. Kahn, architect

George H. Love Athletic Facility, Phillips Exeter Academy, Exeter (1970-1). Kallmann & McKinnell, architects

Higher Education

Leverone Field House, Dartmouth College, Hanover (1961-3) Pier Luigi Nervi, architect

Murdough Center, Dartmouth College, Hanover (1972-3). Campbell, Aldrich & Nulty, architects

Choate Dormitories, Dartmouth College, Hanover (1956-58). Campbell, Aldrich & Nulty, architects

Hopkins Center for the Arts, Dartmouth College, Hanover (1960-2). Harrison and Abramovitz, Architects; Campbell and Aldrich of Boston, Consulting Architects

New England Center for Continuing Education, University of New Hampshire, Durham (1968). William Pereira and Associates, Architects

Williamson & Christensen Halls, Philbrook, UNH, Durham (1969-1973). Ulrich Franzen, architect

Sawyer Arts Center, Colby College, New London (1960). E.H. & M.K. Hunter, architects

Dining Commons, Keene State College, Keene (1960). Carter & Woodruff, architects

Religious

St. Paul Catholic Church, Franklin (1951). James O'Shaughnessy, architect

Unitarian Church, Concord (1959). Hugh Stubbins, architect

Abbey Church, St. Anselm College, Manchester (1965). Koehler & Isaak, architects

St. George's Episcopal Church, Durham (1955). John Carter, architect

First United Methodist Church, Gilford (1968). Daniel Tully, architect

Diocesan Building, Manchester (1963-4). Koehler & Isaak, architects

St. George's Church, Manchester (1953). Leo Provost, architect

Holy Redeemer Church, West Lebanon (1961). Edward Lewis, architect

Our Lady of the Lakes Roman Catholic Church, Lakeport (1965). Daniel Tully, architect

St. Joseph Church, Dover (1946). James J. O'Shaugnessy, architect

St. Margaret Mary Church, Keene (1956)

St. Andrew's Church, New London (1966). Carter & Woodruff, architects

Libraries

Concord Public Library Addition (1966). Guy K.C. Wilson, architect

Kelley Library, Salem (1967). Carter & Woodruff, architects

Nashua Public Library, Nashua (1970). Carter & Woodruff, architects

Governmental

James Cleveland Federal Building, Concord (1966). Koehler & Isaak, architects

Norris Cotton Federal Building, Manchester (1976). Isaak & Isaak, architects

Federal Building, Keene (1971). Koehler & Isaak, architects

Legislative Office Building, Concord (1973-5). Richard Dudley, architect

NH Public Highways, Concord (1963). Koehler & Isaak, architects

NH Employment Security, Concord (1958). Koehler & Isaak, architects

Insurance Companies

NH Fire Insurance Company, Manchester (1950). Cram & Ferguson, architects

National Grange Mutual Insurance Company, Keene (1950). Cram & Ferguson, architects

Farm Bureau Mutual Insurance Co., Concord (1958). Designed by Pittsburg Plate Glass Co.

Insurance Company, Keene (c.1970)

Grange Mutual Insurance Co., Rochester (1959). Bradt, Littlefield & Williams, architects

Also (not illustrated): Liberty Mutual Insurance Co., Portsmouth (1974). Perry, Dean & Stewart, architects

Banks

Peterborough Savings Bank (now People's), Peterborough, 1965

NH Savings Bank, Concord (1958-9). W.H. Jones and Son, architects

Bank, Laconia (c.1960)

Bank, Rochester (c.1960)

Dover Federal Savings Bank, Dover (1974). Kenneth Parry, architect

Milford Coop Bank (now TD Bank), Milford (1974). Martin Michaelis, architect

Offices

Office Building, 77 Pearl Street, Manchester (c.1970).

Commercial

Lemay Jewelers, Manchester (1946)

Lee Building, 1-5 N. Main Street, Concord (1957)

Prescription Center, N. Main Street, Concord (1971). Guy K.C. Wilson, architect

League of New Hampshire Craftsmen, Hanover (c.1960). David Campbell, architect

Nugget Building and Hanover Improvement Assoc., Hanover (1951 & 1970)

Coronis Cleansers, Nashua (1950). Tracy & Hildreth, architects

Appendix B

List of Architects Working in NH 1956/1962/1970

Source: AIA Historical Directories

1956 List of Architects in New Hampshire

CENTER HARBOR

Barney, W. Pope. R.D.

CONCORD

Forrest, Harry G. 9 Cypress.
Lyford, Stewart A. 10 Fayette St.
Magenau, Eugene F. 10 Fayette St.
Perreton, Arnold. N. H. Savings Bank Bldg.

DOVER

Littlefield, Willis E. 339 Central Ave.

DURHAM

Harmon, Russell S. 25 Park Court.
Hersey, Irving William. Town Hall Bldg.
Huddleston, E. T. Kingsbury Hall, Univ. of N.H.
Thomas, George R. Univ. of New Hampshire.

EXETER

Bradt, Horace G. Linden St.
Miles, Edward Benton. Orchard Circle.
White, William Levi. P.O. Box 16, via S. Postal Annex Boston.

HANOVER

Barrett, Frank J.
Fleck, W. Brooke. Granger Assocs.
Granger, Alfred T. Brook Rd. & Granger Circle.
Hudson, Archer E. Hudson & Ingram, 15 S. Main St.
Hunter, E. H. Musgrove Bldg.
Hunter, Margaret King. Musgrove Bldg.
Orcutt, Stanley. Musgrove Bldg.

KEENE

Holbrook, John R. 37 Main St.

LACONIA

Erickson, Henry William. 653 Main St.
Prescott, Douglas G. 653 Main St.
Randlett, Norman Prescott. 614 Main St.
Wallace, Todd Bryce. Rt. 4.

MANCHESTER

Betley, John D. 944 Elm St.
Corey, Norris W. 1015 Elm St.
Dirsa, Mitchell P. 922 Elm St.

Isaak, Nicholas. 922 Elm St.
Koehler, Richard. 922 Elm St.
Lampron, Joseph F. 922 Elm St.
Majeski, Alexander John. 23 Palomino Lane, Bedford P O.
Peterson, Carl E. 1008 Elm St.
Provost, Leo P. 61 Amherst.
Simonds, Roland S. 727 Maple St.

MOULTON BORO NECK

Fahr, Arthur.

NASHUA

Carter, John A. 17½ Manchester St.
Hildreth, Malcolm D. 4 Davis Court.
Snodgrass, Robert Leslie. 15 Webster St.
Tracy, Stephen Powell. 4 Davis Court.

PORTSMOUTH

Witmer, Maurice E. 3 Hillside Dr.

RYE BEACH

Allen, Samuel H.

WHITEFIELD

Vogelgesang, Shepard. Up On the Mountain.

1962 List of Architects in New Hampshire

CENTER HARBOR

Barney, W. Pope. R.D.

CONCORD

Forrest, Harry G. 9 Cypress.
Arnold Perreton & Assocs. 12 Centre St.
Perreton, Arnold. 12 Centre St.

CONTOOCOOK

Sullivan, John D. Main St.

DOVER

Littlefield & Williams. 2 Pierce St.
Littlefield, Willis E. 2 Pierce St.
Williams, Walter T. 2 Pierce St.

DURHAM

Brodie, James Alexander. 45 Edgewood.
Harmon, Russell S. 25 Park Court.
Hersey, Irving W. 26 Ballard St.
Huddleston, E. T. University of N.H.
Thomas, George R. University of New Hampshire.

EXETER

Bradt, Horace G. P.O. Box 349, Linden.
Bradt, Littlefield, Williams. Linden, P.O. Box 349.
Miles, Edward Benton. Orchard Circle.
White, Wm. Levi. P.O. Box 16, Via S. Postal Annex, Boston.

ETNA

Gray, Charles Hildreth.

FRANCONIA

Phillips, John Griffith.

HANOVER

Barrett, Frank J. 1 Mitchell Lane.
Fleck, W. Brooke. 310 Bridgman Bldg.
Granger, Alfred T. Brook Rd. & Granger Circle.
Hudson, Archer E. Box 185.
E. H. & M. K. Hunter. Musgrove Bldg.
Hunter, Edgar H. Musgrove Bldg.
Hunter, Margaret King. Musgrove Bldg.
Mausolff, Alfred J. M. P.O. Box 711.

KEENE

Doyle, Arthur Mark. 40 Mechanic St.
Holbrook, John R. 36 Carpenter St.
James, Alexander Robertson. 40 Mechanic St.

LACONIA

Erickson, Henry Wm. R.F.D.#1.
Prescott, Douglass G. 648 Main St.
Randlett, Norman Prescott. 480 Main St.

MANCHESTER

Bailey, John D. 944 Elm St.
Dirsa & Lampron. 814 Elm St.

Dirsa, Mitchell P. 814 Elm St.
Isaak, Andrew C. 530 Chestnut St.
Isaak, Nicholas. 1880 Elm St.
Koehler & Isaak. 1880 Elm St.
Koehler, Richard. 1880 Elm St.
Lampron, Joseph F. 814 Elm St.
Majeski, Alexander J. 23 Palomino Lane.
Postma, Theodore. 913 Elm St, Room 511.
Provost, Leo P. 61 Amherst.
Simonds, Roland S. 727 Maple St.
Soule, George. 1008 Elm St.

NASHUA

Carter, John A. 1 Main St.
Carter & Woodruff. 1 Main St.
Hildreth, Malcolm D. 35 Swart Terrace.
Tracy & Hildreth. 4 Davis Court.
Tracy, Stephen P. 4 Davis Court.
Snodgrass, R. L. 4 Davis Ct.
Woodruff, Bliss. 1 Main St.

N. CONWAY

Kennett, Frank Edison, Jr. R.F.D.

NEW LONDON

Sanger, Prentice. New London Inn.

PORTSMOUTH

Geoffrion, Lucien O. 1240 Maplewood Ave.
Witmer, Maurice E. 3 Hillside Drive.

RYE BEACH

Allen, Samuel H.

WHITEFIELD

Vogelgesang, Shepard. Up on the Mountain, RD 2.

1970 List of Architects in New Hampshire

Bedford
Majeski, Alexander John
Concord
Perreton, Arnold
Stiles, Florence Ward
Wilson, G. K.
Contoocook
Sullivan, John David
Dover
Euler & Littlefield
Littlefield, Willis Edwin
Durham
Brayton, Richard Mark
Harmon, Russell Sanborn
Hersey, I. W.
Thomas, George R.
Exeter
Miles, E. B.
Hampton Falls
Jasinki, D. A.
Hancock
Garland, P.
Hanover
Banwell, Roy Wendell, Jr.
Barrett, Frank Joseph
Fleck, Warren Brooke
Fleck & Lewis
Granger, A. T.
Lewis, Edward C.
Keene
Doyle, A. M.
Holbrook, John Richards
Palhof, Roy Martin
Laconia
Erickson, H. W.
Lemire, Robert Rolland
Prescott, Douglass Gordan
Lancaster
Huddleston, E. T.
Littleton
Phillips, J. G.
Lyme
Hart, Clifford Francis
Lyme Center
Martz, Lawrence Stannard
Manchester
Benson, John Harvey
Dirsa, Mitchell Paul
Dirsa & Lampron
Dudley, Richard Hamilton
Isaak, Andrew Charles

Isaak, Nicholas
Koehler, Richard
Koehler & Isaak
Lampron, Joseph Felix
Mooney, Edward Lawrence
Alonzo B. Reed Inc.
Soule, George C.
Soule Assocs.

Mt. Sunapee
Goubert, Delnoce Whitney

Nashua
Carter, John Avery
Carter & Woodruff
Cheever, David Ward
Corzilius, Alvin B, Jr.
Hildreth, M. D.
Fenton G. Keyes Assocs.
Lyons, Mather & Lechner
Mitchell, James Leo
Page, David Nelson
Snodgrass, R. L.
Woodruff, Bliss

New Castle
Roberts, C. F.

North Conway
Kennett, F, Jr.

North Hampton
Harris, Ralph Everett

Peterborough
Eldredge, Arthur Stuart
James, A. R.
Monadnock Architectural Assocs.

Portsmouth
Dennis, Donald Thomas
Dennis & Tambling
Geoffrion, L. O.
Koehler & Isaak

Rye Beach
Tambling, P. S.

South Tamworth
Faro, R. V.

Winchester
Orcutt, Philip Dana

Appendix C

Brief Biographies of Architects

NEW HAMPSHIRE ARCHITECTS

Arnold, Charles Treat (1928-2012)

Born in Ft. Levenworth, Kansas. A.B. Williams 1950. Served in Korea and earned MArch Univ. of Penn 1957. Practiced in Philadelphia prior to 1971 when moved to Hanover . Partner in Banwell, White & Arnold until retirement in 2005.

Representative NH works: see Banwell, Roy

Banwell, Roy Wendell, Jr. (1929-)

Born in Philadelphia. B.A. Yale 1951; MArch from University of Pennsylvania in 1957 with future partner, C.Treat Arnold. Joined Hanover architectural firm of E.H. and M.K. Hunter in 1959; in 1966 Hunters relocated to North Carolina, selling their practice to Banwell. Became Banwell Architects. Established Banwell, White & Arnold in 1971 with Stuart White and UPenn classmate C. Treat Arnold. Taught at Dartmouth. Retired from active practice in 2005; firm continues as Banwell Architects in Lebanon. Lives in Hanover.

Representative NH works: Bernice Ray School, Hanover (1968) with Fleck and Lewis; Lodge at Loon (1968); Own office, Hanover (1971)

Barney, W. Pope (1891-1970)

Graduated from Schools of Architecture at Georgia Institute of Technology and University of Pennsylvania. Trained in offices of Paul Cret and Charles Z. Klauder. Designer of many structures in the Philadelphia area. At time of retirement in 1960 was a partner in firm of Barney, Banwell, Armentrout and Divvens, successors to W. Pope Barney and Roy W. Banwell, Architects, organized in 1929. Retired near Center Harbor in 1960.

Barrett, Frank (1912-1999)

Born in Framingham, MA. Received BArch from MIT in 1937; MArch in 1940. Draftsman/designer for Edward T. P. Graham, Ralph Harrington Doanne and Diamond Match Co., Federal Public Housing Authirty. Practiced in Hanover from 1946 through 1985, initially with Alfred T. Granger Associates. Son Frank J. Barrett Jr. is also an architect and a principal in the firm of Church & Barrett Architects located in White River Junction, Vermont.

Representative NH works: Edgerton House, Hanover (1964); St. James Episc. Church, Laconia (1965); West Lebanon Bank (1966); Married Student Housing, Plymouth State (1969).

Benson, John Harvey (1939-)

Born in Milwaukee, WI. Received BArch from Miami University in 1962. Opened own office in Manchester in 1967. With Alvin Corzilius Jr., partner in the firm of Benson & Corzilius which became Benson, Corzilius & Matuszewski Architects in 1978.

Representative NH works: Insurance building, Manchester; Special Infirmary at State Industrial School, Manchester

Berry, George

Worked in Exeter in partnership with Horace Bradt.

Betley, John D. (1913-1963)

Born in Manchester, graduated from Manchester Central High School and UNH, BS 1936. Attended the Architecural Association School of Architecture in London. Opened private practice in 1936. Active duty in Army 1940-1946. Killed 14 Dec. 1963.

Representative NH works: BPR Society and Pulaski Club, Manchester (1950); Our Lady of Grace Chapel, Bristol (1957); St. Hedwig Church, Manchester (1965); St. Stanislaus Church, Winchester; JFK Memorial Coliseum, Manchester.

Bradt, Horace Greeley (1916-2001)

Born in Cuba. Studied at UNH and Boston Architectural Center. Worked for M.F. Witmer, 1937-1941; Huddleston & Hersey, 1941-2. Organized own firm in 1947. Later firm: Bradt, Littlefield & Williams opened offices in Dover in 1958. Bradt opened own office in Exeter in 1960. In 1970 relocated to Mount Vernon, WA – joined Larry Neil Erickson and Associates.

Representative NH works: Exeter News Letter Building (1954); Grange Mutual Insurance Co., Rochester (1959); Hampton Library wing (1959); Public Service of NH, Somersworth (1960); Library and Science Building, Proctor Academy, Andover (1960).

Campbell, David (1908-1963)

Trained in design at Harvard. Became the director of the League of New Hampshire Craftsmen in 1938, six years after it was founded. Remained director through 1962. Also served as director of the American Crafts Council in New York, for which he designed the first craft museum in the country.

Representative NH works: Houses in Henniker and Hopkinton, League of New Hampshire Craftsmen, Hanover

Carter, John Avery (1924-)

Born in Nashua, studied architecture at Yale where he was influenced by Louis Kahn and Eero Saarinen. Began architectural practice in 1950s and continued into the 1990s. Principal architect in the Nashua firms of John A. Carter Architect; Carter and Woodruff (organized 1956); Carter, Woodruff and Cheever, and John A. Carter Architect P.A. Architectural records at NH Historical Society, Concord, NH.

Representative NH works: St. George's Episcopal Church, Durham (1954); Nashua Corp. Off. Bldg. Add. (1959); Temple Beth Abraham, Nashua (1960); Summit Building, Mt. Sunapee (1964); Keene State Commons (1966); Kelley Library, Salem (1967); Residence Hall, Plymouth State (1968); Babcock Hall, UNH (1969); Nashua Public Library (1970); Bank of New Hampshire, Manchester (1973)

Corzilius, Alvin, Jr. (1933-2012)

Born in Erie, PA. Graduated from Penn. State with a BArch. Joined Carter & Woodruff in 1962. Became a partner in the firm of Benson & Corzilius which later became Benson, Corzilius & Matuszewski. In 1984 became a founding partner of CMK Architects in Manchester.

Dennis, Donald Thomas (1928-)

Born in Marinette, WI. BSArch Univ. of Ill. in 1951. Principal of Donald T. Dennis from 1965-1970. Partner in Dennis & Tambling, formed in Portsmouth in 1970.

Representative NH works: State Liquor Store, Portsmouth (1969); Credit Union Portsmouth (1969); Dial Exchange, Durham (1969); Dyer Nursing Home, Laconia (1969); Housing for Elderly, Laconia (1970); Public Service, Portsmouth (1970)

Dirsa, Mitchell Paul (1913-2008)

Born in Beverly, Mass., attended Exeter High School and UNH. Employed by Hussey Mfg. Co., North Berwick, Maine; Corps of Engineers in Washington DC and Gibbs and Hills in New York City before forming partnership with Joseph Lampron in 1946. Died in Haverhill MA Aug. 22, 2008

Representative NH works: Manchester Water Works (1950); Annunciation Greek Orthodox Church, Dover (1957); JFK Apartments, Concord (1964); many schools

Dudley, Richard H. (1931-2012)

Born in Boston and graduated from Phillips Andover Academy in Andover, Massachusetts. Graduated from Dartmouth College with a Bachelor's Degree in Architecture in 1953 and went on to receive his MArch from Harvard University in 1957. Isaak, Moyer, Walsh, and Dudley (with Nicholas Isaak, March

Moyer PE, and William Walsh) from 1970-1973. Founder of Richard H. Dudley, Architect, in Concord. Designed over 200 buildings in NH, Maine and Massachusetts.

Representative NH works: Visitor's Center on top of Mount Washington; NH State Legislative Office Building (1973-5).

Dunham, Edward Melvin, Jr.

Graduated from University of Idaho with a BS in architecture. Worked in offices of J. Goodrich, Burlington, Vermont; Stuart Frost in Greenwich, CT and F.L.S. Mayer at Stamford, CT before coming to Keene to work in office of John R. Holbrook about 1955. Opened own office following year. Relocated to Arizona by 1962.

Eldredge, Arthur Stuart

Worked in Peterborough starting in 1970s

Erickson, Henry William (1911-1998?)

Listed as having an office in Laconia 1956-1970.

Representative NH works: Elderly Housing, Laconia (1968); Admin. Building, Laconia State School (1969)

Fleck, Warren Brooke (1909-2007?)

Grew up on the Main Line outside Philadelphia, graduated from the Haverford School in Haverford, PA. Matriculated at Bowdoin about 1929 – spend three years at Bowdoin and two years at University of Pennsylvania School of Architecture. 1934-7 – worked in US Treasury Dept; 1937-8 – Philadelphia offices of Karcher & Smith; J. Edwin Brumbaugh; and J. Linden Heacock; Office of the Quartermaster General, Washington DC. During WWII active in military intelligence in Pacific Theater – wounded and lost partial sight in one eye.

Worked at Alfred T. Granger Associates in Hanover before opening his own office in 1956. Entered into partnership with Edward C. Lewis in 1967; remained with Fleck and Lewis until 1974. Lived in Lyme, NH before retiring to Winchester, Virginia.

Representative NH works: Dartmouth Skiway Lodge, Lyme (1956); Headmaster's House, Cardigan Mountain School, Canaan (1956); Laura Smith Barnes School, Lyme (1956); Hanover Motor Inn (1961); Hanover Coop Store (1963): Hampton Sea Shell (1964); Hanover Jr. Sr. High Add (1966)

Forrest, Harry G. (1879-1965)

Born in Pembroke. Draftsman for George S. Forrest 1920-1924. Opened own firm 1933. Still practicing in 1956. Lived in Concord.

Representative NH works: F.O.E. Building, Concord (1954)

Garland, Peter (1922-1983)

An assistant professor in the Department of Art at Smith College. Firm of James and Garland of Peterborough.

Goubert, Delnoce Whitney (1929-2012)

Graduate of Columbia University School of Architecture. Had an office in New York City for 20 years before moving to NH to start the Oakledge residential community in Sunapee in 1969. Won several AIA awards for design in harmony with nature.

Granger, Alfred Thompson (1901–1970)

Born in Washington DC. Studied at Northeastern and Boston Architectural Club, and earned graduate degree in Design and Architecture at Harvard. Beginning in 1920 employed by R.B. Whitten in Cambridge, followed by Stone and Webster, Boston; Taylor and Wakeling, St. Petersburg, FL; Jens Larsen in Hanover and Wells and Hudson in Hanover. From 1932 to 1942 served as senior member for Wells, Hudson and Granger of Hanover – works included State House Annex 1940. In 1942 formed Alfred T. Granger Associates, Hanover. Summer residence at Boars' Head, NH.

Representative NH works: Rockingham County Nursing Home Add. (1957); Dial Exchange Buildings in Keene, Nashua, Portsmouth, Littleton (1958) and Claremont (1960); schools throughout New England.

Gray, Charles H.

Graduate of School of Architecture at MIT. Early experience on hospital projects. Moved to NH in 1954, worked in offices of Alfred T. Granger Associates in Hanover and Tracy and Hildreth in Nashua. Formed firm with Gordon R. Ingram in 1958.

Harmon, Russell S.

Graduated from UNH in 1922 with first class in architecture. Field engineer for Queen City Bridge, architect for Amoskeag Mfg. Co. Also worked for T. Stuart & Son Co., J. McCormick Co. of Providence, State of NH highway department. Served in WWII and Korea. Operated own firm in Durham between wars and worked for M.A. Dyer Co. in Boston after Korean War.

Harris, Ralph

Offices in North Hampton and Boston in early 1970s

Hersey, Irving W. (1902-1982)

Born in Wolfeboro. Graduated from UNH in 1925 and received Masters in 1927. Instructor at UNH from 1926-8. From 1928 to 1933 he lived in Chicago where he was the head of the Department of Architecture at Chicago Technical College. From early 1930s until 1942 partnered with Eric T. Huddleston (1888-1977) in a Durham architectural firm known as Huddleston & Hersey. The firm designed over a hundred school buildings in NH. Served in the 923 Aviation Engineers in the South Pacific during World War II. Upon his return to the US, he completed twenty years in the New Hampshire National Guard. As part of the reorganization and expansion of the Army National Guard in New Hampshire in the years following World War II, Irving W. Hersey Associates designed a number of National Guard armories/Readiness Centers throughout the state. Retired in 1975.

Representative NH works: Countless schools and armories throughout the state

Hildreth, Malcolm Dee (1904-1999)

Born in West Campton. Received a B.S. from UNH in 1928. Trained in offices of Chase R. Whitcher, Carl E. Peterson, Stone & Webster, Lyford & Magenau. Partnership with Stephen Tracy from 1946 to 1965.

Representative NH works: see Tracy, Stephen

Holbrook, John Richards (1908- ?)

Born in Keene; B.A. University of Pennsylvania 1933. Draftsman C.O. Matcham 1937-1940; Architect Bureau of Yards and Docks, 1940-6; opened own firm in 1946.

Representative NH works: Lebanon High School (1958); Keene YMCA (1959); Keene City Hall (1960); Res. Hall, Keene State (1968)

Huddleston, Eric T. (1888-1977)

Graduate of Cornell School of Architecture in 1910. Supervising architect at UNH from 1918 until 1949. Head of Architecture Department at UNH from 1918 until 1944. Associated with Irving W. Hersey from 1935 until mid 1950s (Huddleston & Hersey, Durham). Hersey was originally one of his students.

Hudson, Archer E. (1891-1979)

Born in Harris, RI. Attended Warwick High School and Rhode Island School of Design. Studied under Lalou and Haffner at AEF Art Training Center at Bellevue, France in 1919. Worked for Stone, Carpenter & Sheldon, Architects in Providence. Served two years in Army in WWI. Worked in offices of Hutchins & French; Ritchie, Parsons & Taylor, Mowl & Rand in Boston, and Larson and Wells in Hanover. Member of following firms: Larson & Wells; Wells & Hudson; Wells, Hudson, & Granger. Firm of Hudson and Ingram founded in 1942. Retired Jan. 1958.

Representative NH works: Lebanon Fire Station (1955); Add. to Hanover High School

Hunter, Edgar Hayes (1914-1995)

Attended Hanover High School and Deerfield Academy. Received his AB and Masters degrees from Dartmouth in 1938 and 1950 and BA and Master of Architecture degrees from Harvard in 1941 and 1970. Received training at the Harvard Graduate School of Design under Walter Gropius. Met his future wife, Margaret, at Harvard. She was a member of the first class of female architects at the Harvard School of Design in 1942. They practiced in Hanover from 1945 to 1966, both also taught at Dartmouth. They won national design competitions (one non residential and one residential) sponsored by *Progressive Architecture* magazine in 1946 and 1947 and had designs featured in *Architectural Record* in 1950, 1953 and 1956. Moved to North Carolina in 1966, in practice until 1991. Firm papers at North Carolina State University.

Representative NH works: Laconia State School (1955); F.E. Everett Turnpike, Merrimack (1956); Lutheran Church and Parsonage, Hanover (1958); Sawyer Art Center, Colby College, New London (1960); many residences.

Hunter, Margaret King (1919-1997)

Attended College High School in Montclair, NJ and Wheaton College. A member of the first class of female architects at the Harvard School of Design in 1942 where she also met her future husband, Edgar. Worked for Antonin Raymond and for Raymond Loewy, both NY architects. E.H. and M.K. Hunter practiced in Hanover from 1945 to 1966 and then moved to North Carolina, in practice until 1991. Firm papers at North Carolina State University.

Representative NH works: Laconia State School (1955); Tollhouse, F.E. Everett Turnpike, Merrimack (1956); Lutheran Church and Parsonage, Hanover (1958); Sawyer Art Center, Colby College, New London (1960); many residences.

Ingram, Michael B.

Office in Manchester, dissolved 1993. Moved to Key West, FL?

Representative NH works: Hollis Middle School, Hollis (1974)

Ingram, Gordon R. (1911-1972)

Born in Hanover. Educated at Hanover High School, Dartmouth College and Harvard University School of Architecture. Employed by Wells & Hudson and Wells, Hudson & Granger in Hanover before forming partnership with Archer Hudson (Hudson & Ingram) in 1942. Hudson retired in 1958 and Ingram joined Charles Gray in new firm.

Representative NH works: Lebanon Fire Station; Various schools, Woodsville Hospital; Lebanon Pedestrian Mall (1970)

Isaak, Andrew Charles (1923-1985)

Born in Manchester, younger brother of Nicholas Isaak. Attended UNH, Boston Architectural Center. Worked as job captain and draftsman for Koehler & Isaak. Opened own firm in 1956. Isaak and Isaak Architects (with Nicholas Isaak) from 1973 to 1975.

Representative NH works: St. Joseph's School, Salem (1959); Convent Infant Jesus Parish, Nashua (1960); Detention Building, State Industrial School, Manchester (1961); Dorms at Plymouth State (1967-8); Vocational Institute at Laconia (1968); High Rise for Elderly, Manchester (1969); St. Paul's Church, 335 Smyth Road, Manchester (1969); Manchester Central High Add. (1969)

Isaak, Nicholas (1913-1975)

Born in Dardha, Albania. Attended St. Anselm College, graduated from UNH with a B.Arch in 1936. Worked as a draftsman for Eric T. Huddleston from 1936-1939; with Huddleston & Hersey from 1939-40; Lockwood-Greene Engineers 1942-1943 and in US Navy from 1943-6. Established practice with Richard Koehler in 1946, dissolved in July 1970. Isaak, Moyer, Walsh, and Dudley (with Marshall Moyer PE, William Walsh and Richard Dudley) from 1970-1973. Isaak and Isaak Architects (with Andrew C. Isaak) from 1973 to 1975.

Representative NH works: Campus plan and 10 bldgs. at St. Anselm College, Manchester including church and Dana Center (1962-1969); Federal Buildings in Portsmouth, Concord, Manchester and Keene; State of NH Dept. of Employment Security (1959), Public Highways (1965), Liquor Commission (1965); Roman Catholic Chancery Building, Manchester (1966); Mary Mother of the Church, Newton

Kennett, Frank, Jr. (1923-2002)

Graduated from Phillips Exeter Academy in 1941. Graduated from School of Architecture at MIT in 1949; left during his second year to serve in Europe during WWII with the 194th Glider Infantry Regiment before resuming his studies. Worked in the offices of Edgar T.P. Walker, Samuel Glaser and William Hoskins Brown in Boston. Completed internship in office of Norman Randlett of Laconia and worked briefly in office of Henry W. Erickson before opening his own office in North Conway prior to 1959.

Representative NH works: Fire Station, North Conway (1963); Plymouth State Dining Commons (1968); schools

Kiley, Daniel Urban (1912-2004)

Born in Boston, apprenticed with New England landscape architect Warren Manning for four years before entering the landscape architecture program at Harvard in 1936. After graduation he worked at the United States Housing Authority and served in the Army Corps of Engineers during World War II. After the war returned briefly to his practice in Franconia and later moved to Vermont. In the years that followed, involved in the landscape design for a number of notable national projects including the Gateway Arch in St. Louis with Eero Saarinen, Lincoln Center in New York City, the National Gallery of Art in Washington, the John F. Kennedy Library in Boston and the Air Force Academy in Colorado.

Representative NH works: Memorial Union, UNH (with Ronald Gourley)

Koehler, Richard (1912-1974)

Born in Riverside, RI, moved to Manchester soon after. Attended Varney School and Manchester West High School. Received BS Architecture from UNH in 1934; worked as a draftsman for the Historic American Buildings Survey from 1934-5 and briefly in office of Wilfred Provost. Own practice 1936-1942. Koehler & (Nicholas) Isaak formed in 1946; dissolved in 1970.

Representative NH works: See Isaak, Nicholas

Lampron, Joseph Filix (1912-2002)

Born in Nashua, attended Nashua High and UNH. Employed by U.S. Navy at Portsmouth and Brooklyn before forming partnership with Mitchell Dirsa in 1946. Died in South Burlington, VT April 28, 2002.

Representative NH works: see Dirsa, Mitchell

Lewis, Edward C. (1926-)

Born in Claremont, served in the U.S. Navy from 1944-46. Graduated from Franklin Technical Institute in Boston in 1949. Worked in the office of W. Brooke Fleck, eventually forming a partnership (Fleck & Lewis) in 1967. Lives in Lebanon.

Representative NH works: Holy Redeemer Church, West Lebanon (1961); Sullivan County Nursing Home, Unity (1966).

Littlefield, Willis Edwin (1903-1975)

Born in Wells, Maine. BS Architecture from UNH in 1926. Solo practice 1945-1958; Bradt, Littlefield and Parsons, 1958-60; Littlefield & Williams, 1960-5; Partner, Euler & Littlefield formed in 1967.

Representative NH works: Dover Housing Project (1952); Public Service Co., Somersworth (1959); UNH TV Studio (1961); Wentworth Home for the Aged (1968); Dover Shoe Mfg., Somersworth (1969).

Lyford, Stewart A. (1903-1957)

Born in Concord. Attended UNH and Yale Graduate School of Architecture, BFA 1931. Worked as a draftsman with the NH State Highway Department, 1931-1933; with Charles T. Main, 1942-5. In partnership with Eugene Magenau (Lyford & Magenau) from 1935 until 1951. Firm became Concord office of Anderson-Nichols Company from 1951 to 1954.

Representative NH works: Concord Cleaners, Concord; Suncook Bank; Add. to Dame School, Concord; Rolfe and Rumford Home, Concord; Siwooganock Guaranty Savings Bank, Lancaster

Magenau, Eugene French (1908-2002)

Born in Gomez Palacio, Diego, Mexico. Attended Concord High School and graduated from Dartmouth College in 1930. Attended MIT School of Architecture from 1930 to 1933. Employed by various NH state agencies as draftsman and engineer; Charles T. Main from 1942-3; Hermsdorf Fixture Mfg. 1943-4. Formed partnership with Steward Lyford in 1935. In 1958 left Concord to become associated with the American Institute of Architects in Washington DC. Firm became Concord office of Anderson-Nichols Company in 1951; agreement terminated in 1954.

Representative NH works: see Lyford, Stewart

Majeski, Alexander J. (1920-1974)

Born in Waterbury, Conn. B.Arch from Pratt Institute, 1943. Formed own firm in 1954.

Representative NH works: Goffstown High School (1963); Blessed Elizabeth Seton Church, Bedford (1965); Henschel Shoe, Littleton (1968), many residential structures

Mausolff, Alfred J.M. (1893-1989)

As of August 1960, worked in office of W. Brooke Fleck in Hanover. Worked previously in New Canaan, CT and Burlington, VT

Miles, Edward Benton (1917-2002)

Born in Westerly, RI. Bachelors degree in architecture from UNH in 1939 and Masters from Cornell in 1949. Worked with Maurice Witmer in Portsmouth and later on his own out of his Exeter home.

Representative NH works: primarily residences and schools

Parry, Kenneth F.

Educated at Boston Architectural Center, Northeastern and Wentworth Institute of Technology. Kenneth F. Parry & Associates, Concord. Later headquartered in Quincy/Hingham, MA

Representative NH works: Manchester Federal Savings & Loan Association Branch, Manchester (1973); Dover Federal Savings & Loan, Dover (1974);

Perreton, Arnold (1900-1987)

Born in Gstaad, Switzerland. B. Arch from Carnegie Institute of Technology in 1928. Served as assistant professor of architecture at UNH from 1929 to 1942. Under Professor E.T. Huddleston designed Scott Hall, Hood Infirmary and Elizabeth DeMeritt Home at UNH. Later worked as city planner and earned M.Arch from Harvard in 1940. Served as assistant planning engineer of NH State Planning and Development Commission in 1944-5. Joined Concord firm of Goodspeed, Perreton and Hollings in 1945, later Arnold Perreton & Associates. Holder of various patents for insulated building blocks, etc.

Representative NH works: Women's Dorm, UNH (1954); Oyster River Coop School, Durham (1955); YMCA, Concord (1968); many schools statewide.

Peterson, Carl E. (1893-1959)

Born in Roxbury, MA, graduate of the Harvard College Architectural School. In practice since 1926, employed by Cram and Ferguson; Parker, Thomas and Rice and James Ritchie before coming to Manchester in 1929. Worked for Chase Whitcher for three years before opening own office. From 1934-6 and in 1942-5 served as chief architect and State Director of the Federal Housing Authority. At the time of his death he was senior partner in the architectural firm of Peterson, Hamlen and Soule of Manchester.

Representative NH works: Assoc. Arch. For Merchants Bank, Manchester (1952); Alt. to NH Fire Insurance Building, Manchester (1956); Dial stations, Phone company

Prescott, Douglass Gordan (1912-1989)

Born in Franklin, NH. BS UNH in 1935. Partner in Prescott & Erickson from 1947 to 1958. Opened own firm in 1958.

Representative NH works: buildings at Spaulding Youth Center (1965), Powell Building, Laconia State School (1965); Laconia City Hall

Provost, Leo P. (1912-1967)

Born in Manchester, son of architect Wilfred Provost . Graduated from UNH in 1936. Initially worked with his father. Served as a Captain in the Army during WWII. Upon his return opened his own office in Manchester.

Representative NH works: St. Georges Church, Pine St., Manchester (1952); Motherhouse of Sisters of Mercy, Windham (1961); Bishop Guertin High School, Nashua; St. Peter's Church, Auburn (1962-3); Stoke Hall, UNH (1965)

Randlett, Norman Prescott (1900-1964)

Born in Laconia. Studied at UNH and MIT. Worked in Boston from 1922 to 1934 before opening his own office in Laconia in 1934.

Representative NH works: banks, industrial plants, office buildings, homes, stores and motels. Religious buildings include St. Helena Church at the Weirs, Sons of Israel Synagogue. Designed more than 50 educational buildings in NH including New Hampton School, Tilton School, many public schools.

Soule, George C. (1914-2008)

Born in Manchester. Educated at Manchester West High School and studied art at the Massachusetts School of Art and the Manchester Institute of Arts & Sciences for two years. Won a scholarship to study at Yale, graduating with a BFA in 1941. Returned to Manchester and studied architecture, founding the firm of Soule & Associates. Worked as an architect from 1945 through 1994. Partner in Peterson, Hamlen & Soule from 1957-60; Soule Associates organized 1960. NH Historical Society has more than 300 drawings and architectural renderings by Soule.

Representative NH works: Dobles Chevrolet, Manchester (1968); Hooksett Village School (1969); Hillsborough County Courthouse, Manchester (1969); Monadnock Bank, Jaffrey; Keene Coop Bank ; Berlin Federal Building

Sullivan, John David (1911-?)

Born in Boston. Educated at Boston Architectural Center from 1936-1939. Organized own firm in Contoocook in 1959.

Representative NH works: St. Lawrence Church, Goffstown (1967); Weare Elementary (1967); Story Book Motor Inn, Glen (1968); Garon's Market, Manchester (1969)

Tambling, Philip Schuyler (

Attended Boston Architectural Center. Partner in Dennis and Tambling, Portsmouth, formed 1970

Representative NH works: see Dennis, Donald T.

Tracy, Stephen Powell (1905-1987)

Born in Meriden (Plainfield). Attended Kimball Union Academy, received an A.B. from Dartmouth College and a Master in Architecture from Harvard University. Trained in office of Edward T.P. Graham and in office of William H. MacLean, both in Boston. Firm of Tracy and Hildreth, Nashua, founded in 1946. Other members of firm: Snodgrass and Charles Gray. Opened own firm in 1965.

Representative NH works: Sawyer Hall, UNH (1948); Anderson Hall, UNH (1951); buildings at Pease Air Force Base; Buildings at New England College, Henniker (1964-72); Coronis Cleaners, Nashua; Libraries at UNH (1961), Keene State College and Plymouth State College (1965).

Vogelgesang, Shepard (1901-1969)

Born in San Francisco. Educated at Phillips Academy, Andover and MIT. Came to NH in 1941 and opened an office in Whitefield. Served as a Naval Officer during World War II and returned to Whitefield in 1946.

Representative NH works: mainly residential

White, C. Stuart, Jr.

Received degree in architecture from Columbia University. Founding partner in Banwell, White & Arnold of Hanover in 1971 and president of Banwell Architects from 1995-2003. Adjunct Assistant Professor in the Environmental Studies program at Dartmouth College.

Representative NH works: see Banwell, Roy

White, William Levi (1885-1975)

Born in Manchester; educated at Manchester High School and Harvard School of Architecture. Worked in offices of Olmsted Brothers, Landscape Architects of Brookline, MA.; Cram and Ferguson and Mowll and Rand, architects of Boston; Portsmouth Navy Yard during World War II. Opened private practice in Exeter in 1937; later home/office in Hampton Falls.

Representative NH works: residences, Brookside Congregational Church, Manchester (1959)

Wilson, Guy Kenneth Campbell (1925-1982)

Born in Claremont. Attended Syracuse University School of Architecture. Worked for a time in the office of Concord engineer Clifford Broker. Founding member Wilson & Wilson.

Representative NH works: Concord Library addition (1967); Palazzi Building, Hooksett (1965); Merrimack County Home addition (1969); Prescription Center, Concord (1971)

Witmer, Maurice Emlyn (1898-1967)

Born in Lancaster, PA. Studied at the Boston Poly. Institute of Architecture, New England College of Engineering; Beaux Arts Institute of Design; Boston Architectural Club. Worked in office of Louis Kamper in Detroit, 1924-7 and Monks & Johnson in Boston from 1927-1931. Opened own office in Portsmouth in 1930.

Representative NH works: various buildings for New England Telephone Co. including Manchester, Kidder Press in Dover, Jessie Doe Hall at UNH, churches including Middle Street Baptist in Portsmouth; Restoration of Fort Number 4 in Charlestown; chapel in Wilmot Flat; Mitchell Hospital at Rockingham County complex Brentwood; Vocational Institute in Portsmouth

Woodruff, Bliss (1922-2009)

Born in New Haven, CT. Received a Masters degree from the Yale University School of Architecture in 1949. Practiced in partnership with John Carter (Carter & Woodruff) in Nashua beginning in 1956.

Representative NH works: NH Department of Safety Headquarters, Bank of New Hampshire headquarters and additions to St. Paul School in Concord.

ARCHITECTS FROM OUTSIDE OF NEW HAMPSHIRE

Aldrich, Nelson (1911-1986)

Graduated from Harvard School of Design in 1938. In practice with Walter E. Campbell (b. 1901, M. Arch, MIT in 1926) from 1946 until 1974 when firm became NWA & Associates. Collaborated with Kallman & McKinnell on Boston City Hall.

Representative NH works: Wetherell Dining Center, Phillips Exeter Academy, Exeter (1967); Murdough Center, Dartmouth College, Hanover (1972-3); consulting architects on Hopkins Center, Dartmouth (1960-2) and Leverone Field House (1961-3); designed Choate Dormitories at Dartmouth (1956-8).

Arneill, Bruce Porter (1934-)

Born in New York City. Graduated from the Hotchkiss School. Received BA (1957), BArch (1959) and MArch (1961) from Yale University. FAIA in 1992.

Representative NH works: Lakes Region General Hospital, Laconia (1970)

Barnes, Edward Larabee (1915-2004)

Born in Chicago. Graduated from Harvard in 1938, later returned for further studies under Gropius and Breuer. Graduated from Harvard Graduate School of Design in 1942. In 1949 founded Edward Larrabee Barnes Associates in Manhattan. Taught at Harvard, Pratt Institute and University of Virginia.

Representative NH works: Dormitories, St. Paul's

Becket, Welton & Associates

Representative NH works: Hampshire Plaza, Manchester (1971)

Bogner, Walter F. (1899-1993)

Born in Providence. Educated in Austria before practicing architecture in U.S. Instructor/Professor at Harvard School of Design from 1929 to 1966.

Representative NH works: Crotched Mountain, Greenfield

Cram and Ferguson

Noted Boston architectural firm. Original partnership founded in 1889 by Ralph Adams Cram (d. 1942) and Charles Francis Wentworth; joined by Bertram Goodhue in 1890. In 1913 name changed to Cram & Ferguson. Later Hoyle Doran & Berry.

Representative NH works: National Grange Mutual Insurance Co., Keene (1950); New Hampshire Fire Insurance Co., Manchester (1950).

Franzen, Ulrich (1921-2012)

Born i*n* Dusseldorf, Germany, in 1921 and immigrated to the United States in 1936. He graduated from Williams College in 1942 and received a Master of Architecture degree from the Harvard University Graduate School of Design in 1948. After graduation, Franzen went to work for I.M. Pei (1917-) and then left to open his own firm Ulrich Franzen and Associates, in New York City in 1955. Considered one of the most creative American architects in the second half of the 20th century. Recipient of numerous honors including the Louis Sullivan Award of the AIA and the Gold Medal of the New York Chapter of the AIA. He was also a Fellow of the American Institute of Architects.

Representative NH works: Williamson & Christensen Halls, Philbrook, UNH, Durham (1969-1973)

Goodman, Percival (1904-1989)

Born in New York City. In practice between 1936 and 1979 designed more than fifty synagogues and religious buildings nationwide. Taught at Columbia University in New Yor from 1946 to 1971.

Representative NH works: Temple Adath Yeshuran, Manchester (1954)

Gourley, Ronald (1919-1999)

Received a MArch from the Harvard Graduate School of Design in 1948. Started teaching at MIT in 1948. Worked in various architects' offices in California, Minnesota, and Massachusetts from 1936 to 1953. Taught at Harvard until 1970, after which was dean of College of Architecture at the University of Arizona for ten years.

Representative NH works: Memorial Union, UNH, Durham (1955-7) later expanded

Harrison, Wallace K. (1895-1981)

Noted New York architect; partnered with Max Abramovitz (1908-2004) from 1941 to 1976 (Harrison & Abramovitz). The firm was known for modernist corporate towers and the Lincoln Center in New York City (1966).

Representative NH works: Hopkins Center, Dartmouth College, Hanover (1962)

Jones, William Herbert/ W.H. Jones & Son (-1958)

Based in Melrose, MA.

Representative NH works: NH Savings Bank, 27 North State St., Concord (1958-9); Merchants National Bank, Manchester (1952).

Kahn, Louis I. (1901-1974)

Born in Estonia. Educated at University of Pennsylvania, BArch 1924. Worked in the offices of Paul Philippe Cret and in the offices of Zantzinger, Borie and Medary in Philadephia. Founded Architectural Research Group with Dominique Verninger in 1932. Taught at Yale, MIT, UPenn and Princeton. Elected a Fellow in the AIA in 1953.

Representative NH works: Library, Phillips Exeter Academy, Exeter (1965-1972); Elm Street Dining Center, Phillips Exeter Academy, Exeter (1971-3)

Kallmann & McKinnell

Gerhard Kallmann (1915-2012) and Michael McKinnell (1935-)

Firm first gained recognition for its design of Boston City Hall (1968). At the time Kallmann was a Columbia University professor and McKinnell was a Columbia graduate student.

Representative NH works: Love Gymnasium, Phillips Exeter Academy, Exeter (1970-1)

Kantianis, Christopher P. (1912-1995)

Graduated with BArch and Masters in Architecture from Syracuse University in 1937 and 1938. Opened own office in 1946 in Springfield, Mass.

Representative NH works: St. George Greek Orthodox Cathedral, Manchester (1965)

Nervi, Pier Luigi (1891-1979)

Italian engineer and building contractor; considered one of the greatest structural architects of the 20th Century. Leverone Field House was second US project of the Italian designer. (Bus Station at George Washington Bridge was constructed the same time).

Representative NH works: Leverone Field House, Dartmouth College (1961-3); Thompson Ice Arena and Auditorium (1974-5)

O'Shaughnessy, James Joseph (1902-?)

Received his architectural training at Harvard University and began practicing in Boston in 1927 in Boston. He opened an office in New York in 1934 but had an office in Boston from 1948 to 1956. Designed school, church and residential structures in New England and New York including the schoolhouse of glass at Albany, NY. Designed the $30 million Hingham shipyard at Hingham, Mass. during World War II. Summer resident of Tamworth.

Representative NH works: St. Joseph's Church, Dover (1946); Woodman Park School, Dover (1950); St. Paul's Church, Franklin (1951).

Pereira, William L. (1909-1985)

Born in Chicago and of Portuguese descent. Graduated from the School of Architecture, University of Illinois. Moved to Los Angeles in the 1930s. Designs often utilize unusual geometric forms and futuristic designs. Works on west coast include Transamerica Pyramid, San Francisco (1972). Students at USC included Frank Gehry.

Representative NH works: New England Center for Continuing Education, UNH, Durham (1968-70)

Perry, Dean and Stewart/Perry, Dean, Hepburn & Stewart

Noted Boston architectural firm originally formed in 1923 (Perry, Shaw, and Hepburn)

Representative NH works: Physical Education Bldg, Keene State & Plymouth State (1968); Liberty Mutual, Portsmouth (1974)

Skidmore, Owings and Merrill

Noted Chicago architectural and engineering firm formed in 1936

Representative NH works: McConnell Hall/Whittemore School of Business, UNH Durham (1968); Horton Science Center (1968)

Stubbins, Hugh Asher, Jr. (1912-2006)

Internationally known Boston architect. Born in Birmingham, AL and attended Georgia Institute of Technology, graduating in 1931. Received a MArch from Harvard Graduate School of Design in 1935. Began teaching at Harvard at invitation of Gropius in 1940. Hugh Stubbins and Associates was founded in 1949 and in 1954 Stubbins left teaching to devote himself to architectural firm. During the fifty years of its existence, Hugh Stubbins and Associates designed more than 800 buildings and projects in American and around the world.

Representative NH works: Unitarian Church, Concord (1959); Perry House, Campton (1959); Manchester Bank, 1100 Elm Street, Manchester (1973)

Tully, Daniel F. (1932-)

Educated at the US Coast Guard Academy in New London, CT and in 1951 attended MIT. He later studied at Auburn and returned to MIT in 1965. He was first licensed to practice as a structural engineer in 1959 and in 1963 received his license to practice architecture. Specializing in the design and construction of complex structures including industrial buildings, churches and sports and recreation facilities. Practiced from an office in Melrose, Massachusetts; currently lives in Santa Fe, New Mexico.

Representative NH works: Holy Angels Church, Plaistow; St. Stanislaus Parish Hall, Nashua; Our Lady of the Lakes Church, Lakeport; Holy Trinity Church, Somersworth; Spaulding Rehab. Center bldgs., Tilton-Northfield; First United Methodist Church, Gilford (1968)