

# Noble Preservation

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Historic Preservation • Architectural Conservation  
Building Investigation • History and Research

## FIRM PROFILE

Noble Preservation specializes in the preservation, restoration and rehabilitation of historic properties and the conservation of building materials. We offer a wide range of services to architects, institutions, organizations, contractors and building owners. Our services are not limited to one particular area, but include a breadth of disciplines related to historic preservation: architectural conservation, graphic documentation, historical research, building investigation and investment tax credit consultation.

Our offices and conservation laboratory are in Berks County, Pennsylvania, centrally located between Philadelphia, Harrisburg, New York City and the Baltimore-Washington Metropolitan area.

All staff members are academically trained in architectural history, which forms the basis for our approach to historical research. Our services include assembling National Register Nominations, National Historic Landmark Nominations, building histories, local and regional surveys, as well as research on deeds, wills and inventories.

Noble Preservation offers complete building diagnostics to analyze material problems and design appropriate conservation solutions. Our studies integrate on-site investigations, analysis in our architectural conservation laboratory, and cooperative research with Lehigh University and the University of Pennsylvania. We regularly complete analyses for masonry, paints and coatings, mortar, plaster and stucco, wood and metals.

Our projects synthesize and interpret historical and technical evidence gathered through research, diagnostics and testing to develop useful documents and plans such as Historic Structures Reports, building maintenance plans, Historic Building Preservation Plans, Adaptive Use plans, specifications, analytical reports and conservation studies. Each document is geared toward the goals and budget of each individual client and the needs of each individual property.

We regularly assist clients in securing investment tax credits for historic properties and in completing Section 106 documentation. Our staff is experienced in interpreting the Secretary of the Interior's *Standards for Rehabilitation* and the regulations governing state and federal involvement in historic preservation projects. Some of our services include design consultation for Investment Tax Credit certification applications, pre- and post-construction documentation, Section 106 compliance and negotiation with federal, state and local agencies.

## BACKGROUND

We are a professional firm dedicated to the preservation of historic architecture. Our projects range in scale and scope, from the rehabilitation of urban rowhouses to the restoration of major civic monuments, and from standard mortar and paint analyses to comprehensive conservation programs. Staff members possess years of professional experience and academic training in disciplines critical to understanding all aspects of historic preservation and communicating their importance: historical and archival research, construction, materials conservation, graphic documentation and report generation.

Our staff is technically proficient in the analysis and preservation of all types of building materials, including masonry, paints and finishes, wood, metals and architectural ceramics. We offer comprehensive technical services including sampling, laboratory examination, building investigation and analysis, treatment mock-ups, conservation treatment and treatment monitoring. Though practical experience with building systems is an important component of what we do, we also strive to remain on the cutting edge of preservation technology to offer our clients straightforward analyses without unnecessary subcontracting. We own a battery of diagnostic equipment, including probing and non-destructive moisture meters to evaluate potential problems at and beneath the surface, reflected-light and polarized-light microscopes to complete materials analysis, a borescope to visually assess conditions within a structure, a digital chroma meter to provide precise color assessment, portable pH meters to identify acidic and alkaline conditions, and a full conservation laboratory for wet chemical experimentation, testing and accelerated weathering. Our staff is proficient in the analysis of conservation treatments marketed by quality manufacturers, and is able to design custom treatments as required, such as cleaning poultices and replication mortars, plasters and stuccoes. Cooperative agreements with Lehigh University and the University of Pennsylvania enable us to provide clients with advanced technical analyses presented in understandable manners. By combining our research-based investigations with scientific methods and world-class institutions, Noble Preservation provides reliable and state-of-the-art building preservation services.

Members of our staff have been certified to test and perform cleaning with the Quintek Rotec Vortex<sup>®</sup> system. In many applications, this micro-abrasive vortex cleaning process is superior to chemical cleaners, pressure washing and conventional blasting because it attacks dirt on the surface of a material without introducing health and environmental hazards, compromising the surface or subjecting it to large amounts of water. Our Quintek Rotec Vortex<sup>®</sup> technology is available for cleaning test mock-ups and small applications only; select qualified contractors conduct large-scale operations.

We typically work with architects, institutions, museums, governments and private developers to resolve complex issues involving the restoration, conservation, interpretation and certification of properties for government tax credits. In addition to preparing necessary documentation, we will also compose specifications and assist with project administration. All of our documents are produced on in-house computer systems attached to high-resolution scanners and printers. By managing the presentation of all information from beginning to end, our office tailors all work to the specific needs of the client and produces self-contained, straightforward reports.

## STAFF

*Timothy M. Noble, President*

Tim has been involved in restoration in private practice for more than two decades, having completed projects involving conservation, historic research, graphic documentation, design, rehabilitation, financing and management. He holds an M.S. in Historic Preservation from the University of Pennsylvania (1983) and a B.A. from Penn State (1974), and was recently recognized as a Professional Associate in the American Institute of Conservation. Tim founded Noble Preservation in 1992 after serving as owner, principal, and president of Clio Group, Inc. (1983-1992). His professional experience also includes design consultation for Knoll International, the development and restoration of historic properties and the conservation of antique furniture and musical instruments. Tim's work has received citations from the PA Bureau for Historic Preservation, Preservation Pennsylvania, and the Art Commission of New York City.

*Philip E. Pendleton, Senior Associate*

Phil possesses an extensive professional and academic background in history, architectural history and historic preservation, having completed projects ranging from National Register nominations, to HABS-HAER documentation, to rural historic landscape studies. With an MA in History from the University of North Carolina and a BA in History from Washington & Lee University, Phil's expertise focuses on architectural history and history. His work with A.D. Marble & Company, Inc., Louis Berger Group, Inc., Oley Valley Heritage Association and various preservation organizations has resulted in an extensive background in many types of preservation work.

*Douglas Scott, Associate*

Doug possesses a diverse background in historic preservation, having completed projects in Cultural Resource Management ranging from Section 106 Documentation to historic interpretive exhibits. With an M.F.A. in Historic Preservation from Savannah College of Art and Design (2000) and a B.A. in Archaeology from The Ohio State University (1996), Doug's expertise focuses on architectural history and documentation. His work with Hunter Research, Inc, Trenton, NJ, Thomasville Landmarks, Thomasville, GA and numerous preservation organizations has resulted in a well-balanced background in many types of preservation activities.

## SERVICES

Noble Preservation is a specialized consulting firm that provides a range of professional services relating to the preservation of historic properties.

As experienced architectural conservators, we offer project-specific technical consultation to architects, institutions and building owners who require long-term solutions to material problems. We feature an in-house architectural conservation laboratory to assist with material analyses and treatment assessments. Our staff possesses years of experience with the conservation of historic masonry, wood, metals and finishes.

Using historical research and our knowledge of historic building technology, we provide clients both insight into the evolution of their properties and guidance for restoring and maintaining them.

We have established a solid track record in investment tax credit consulting which spans nearly two decades, and our rehabilitations have received numerous city, state and federal awards. Noble Preservation provides comprehensive assistance from start to finish, including design consultation, photographic documentation and negotiation with local, state and federal agencies.

*Client references for all specializations available upon request.*

## HISTORIC PRESERVATION

Preserving, conserving or restoring an historic resource is often complicated and challenging. Preparing different types of documents to meet the criteria of a given project requires a combination of skills from a variety of professional backgrounds. These include professional disciplines in history and building technology, knowledge of the various resources available to owners of historic buildings, an ability to balance theory and practice, experience with solving complex problems and the ability to communicate issues effectively.

Each member of our staff has a Masters' Degree in Historic Preservation and a significant amount of professional experience with projects ranging from documentary research and historical assessment to materials analyses and construction supervision. Therefore, we are equipped to address many different questions and issues in-house.

Noble Preservation designs each project to satisfy the needs and budget of each property and client. Historic Structures Reports (HSRs) are the most widely used and practical of our preservation documents. Typically, HSRs involve historical research, an assessment of significance, on-site and laboratory investigations and consultation with a project architect/owner to formulate a guide to preserve, conserve or restore a given property.

National Register Nominations may be used both to distinguish historic properties *and* to help secure federal tax credits or other funding. The nomination process generally consists of surveying and documenting the property, conducting archival research, investigating materials conditions and evaluating the property's significance and integrity within a comprehensive report.

National Historic Landmark Nominations are reserved for properties with national cultural, political, social or architectural significance. Like National Register Nominations, they are also used to secure project funding, and can open the door to even more distinction and opportunity. Our Historic Building Preservation Plans (HBPP) have been used to address specific project components, such as the restoration of decorative schemes or ornamental elements. Typically, they integrate a fundamental understanding of a scheme or element as relates to the significance of a particular property.

Our experience in preparing these and other preservation planning documents have helped us develop a sound and efficient methodology for undertaking such projects using in-house staff and equipment.

### *Documentary Services*

Historic Structures Reports and Updates  
National Register Nominations  
National Historic Landmark Nominations  
Historic Building Preservation Plans  
Archival Research  
Photographic Documentation  
HABS Photographic Documentation

### *Building Investigation*

Materials Analyses  
Conditions Surveys  
Borescopic Investigation  
Hygrothermographic Evaluation  
Sampling

## INVESTMENT TAX CREDIT CONSULTING

Noble Preservation offers design consultation for the adaptive reuse of historic properties. We typically act as a liaison between developers, housing officials, architects and government agencies (such as State Historic Preservation Offices and the National Park Service) to ensure that proposed designs meet provisions set forth in the Secretary of the Interior's *Standards for Rehabilitation* while also meeting the financial constraints of the project.

Our experience with the *Standards* provides substantial dividends for our clients, a fact which makes the rehabilitation of many properties feasible in the first place. Participation in hundreds of certified rehabilitations throughout the United States qualifies us to address virtually any historic issue regardless of property type, scale or proposed re-use.

Our office provides basic services such as complete pre-eligibility and post-construction photographic documentation, property certification through National Register Nominations and the completion of Certified Rehabilitation applications. One of the most valuable services we can offer ITC clients is assistance in the design process, to identify significant historic features and spaces - and to work with the architect/ owner to integrate them into the rehabilitation design. By consulting on proposed designs before they are submitted, we save our client's time and money, significantly decreasing the amount of time required to negotiate with state and federal agencies.

Noble Preservation's certified rehabilitation projects have received acclaim from government agencies and private preservation groups alike. We have successfully guided rehabilitation projects in New Jersey, New York, Rhode Island, Maryland, Florida, Illinois, Minnesota and our home state of Pennsylvania.

## CONSERVATION STAFF

Preservation technology is nothing without a sound understanding of why buildings and materials are significant historically and architecturally. Architectural conservation therefore requires a sound knowledge of history, architecture, materials and building systems as well as an understanding of analytical technology and treatment options. Members of our staff have degrees in history and historic preservation, experience in carpentry and contracting, and practice in accordance with the Code of Ethics as defined by the American Institute for the Conservation of Historic and Artistic Works. Accordingly, each conservation project is thoroughly researched and documented at every stage of our involvement.

## NPS ARCHITECTURAL CONSERVATION LABORATORY

Our architectural conservation laboratory is a comprehensive testing facility, which enables us to complete a full range of building materials analyses and treatment programs. Simply stated, we become heavily involved at every stage of analysis rather than subcontract analysis to outside firms. Our conservation projects typically employ a full range of *in house* equipment to diagnose problems and develop cost-effective, long-term solutions for historic building materials:

- Carl Zeiss® universal polarized light microscope capable of 1000x magnification with photographic attachments for documentation of thin sections
- Olympus® Stereo Zoom reflected light microscope capable of 105x magnification with Nikon® photographic attachments for building materials documentation
- Minolta® Chroma Meter for precise digital color designations
- Lignomet® Lignomaster for calibrated moisture content readings of in situ building materials
- Olympus® Borescope with video capability for non-destructive investigation within concealed areas
- Portable pH meters for assessments of acidity
- Jedrzejewska calcimeter for sophisticated mortar and plaster analyses
- Wet chemistry laboratory equipment for micro-chemical characterization, analysis and treatment evaluation including a fume hood, an industrial grade oven, digital scales, desiccation and observation chambers, ultraviolet radiation lamps, probing tools and wet chemical surfaces.

Relationships with Lehigh and Penn provide us access to advanced analytical techniques such as SEM, EDS, XRD, X-Ray mapping, FTIR, DTA and GC/MS. Because our conservation staff works directly with analytical technicians, we ensure that practical and reliable information is obtained for each project.

## ANALYTICAL AND TESTING SERVICES

NPS offers a broad range of analytical and testing services to characterize building materials and diagnose causes of deterioration. Using a combination of laboratory and fieldwork, we regularly investigate masonry, mortars, plasters and stucco, surface finishes, wood, metals and architectural ceramics. Available services include:

### *Masonry*

- Conditions Assessments
- Petrographic Characterization
- Colorimetry
- Deterioration Analysis
- Porosity and Permeability
- Water Absorption Capacity
- Water Vapor Transmission
- Soluble Salt Analysis
- Pollutant Analysis

### *Wood*

- Conditions Assessments
- Species Identification
- Deterioration Analysis
- Moisture Mapping

### *Metals*

- Conditions Assessments
- Characterization
- Corrosion Analysis
- Compatibility Analysis

### *Surface Finishes*

- Conditions Assessments
- Stratigraphic Paint Analysis
- Pigment/Binder Characterization
- Colorimetry
- Deterioration Analysis
- Adhesion Testing
- pH Mapping

### *Mortar, Plaster and Stucco*

- Conditions Assessments
- Characterization of Constituents
- Colorimetry
- Deterioration Analysis
- Moisture Mapping
- pH Mapping
- Porosity and Permeability
- Water Absorption Capacity
- Water Vapor Transmission
- Soluble Salt Analysis
- Pollutant Analysis

Frequently, we will perform the above services as a prelude to conservation treatment. Many techniques are also available to assess the effects of treatments.

## TREATMENT TECHNOLOGY

We strive to remain up-to-date on all techniques and technologies, which enhance the performance and longevity of historic building materials. In accordance with acceptable standards of practice, potential treatments are always tested and analyzed before being applied to historic building material. Our office has completed projects, which involve the restoration, replication, cleaning, stabilization and design of historic building materials:

### *Masonry*

- Interpretation and Significance
- Cleaning Treatments/Evaluation
- Consolidation/Evaluation
- Water Repellents/Evaluation
- Metallic Stain Removal
- Composite Repair and Patching
- Structural Repair

### *Mortar, Plaster and Stucco*

- Interpretation and Significance
- Binder/Aggregate Matching
- Replications
- Repointing
- Repair
- Consolidation/Evaluation

### *Surface Finishes*

- Interpretation and Significance
- Color Matching
- Cleaning Treatments/Evaluation

### *Wood*

- Interpretation and Significance
- Structural Repair/Replacement
- Consolidation/Evaluation
- Preservatives/Evaluation
- Water Repellents /Evaluation

### *Metals*

- Interpretation and Significance
- Corrosion Removal
- Protective Coatings/Evaluation

SELECTED REPRESENTATIVE PROJECTS

**Historic Structures Reports**

Cornwall Iron Furnace, Cornwall, PA  
Boone-DeTurk House, Birdsboro, PA  
Landis Valley Hotel, Lancaster, PA  
Seminary Ridge, Gettysburg, PA  
Alexander Schaeffer House, Schaefferstown, PA  
Ephrata Cloister, Ephrata, PA  
Saal  
Saron  
Carpentry Shop  
Stable  
Solitary House  
Almonry  
Print Shop  
Craft House  
Beissel House and Bake House  
Bake Oven  
Householder's Residence  
Academy  
Associate' Barn  
Conrad Weiser Homestead, Womelsdorf, PA  
Long House, Hope, NJ  
Eastern State Penitentiary Administration Building, Philadelphia, PA  
United States Customs House, Philadelphia, PA  
Selma Mansion, Norristown, PA  
Henry Antes House, Upper Frederick Twp., PA  
Roberts House, Montgomery County, PA  
William Trent House, Trenton, NJ  
Claus Rittenhouse Home, Philadelphia, PA  
Rittenhouse Outbuilding, Philadelphia, PA  
Cornwall Iron Furnace, Cornwall, PA  
Bergey House, Montgomery County, PA  
Old Economy Village, Ambridge, PA:  
The Grotto  
George Rapp House  
Granary  
Feast Hall  
Mechanics Building  
The Store  
OEV Landscape Study  
Brothers' House Complex at Landis Valley Museum, Lancaster, PA

### **National Register Nominations**

Dixie Cup Factory, Easton, PA  
Hedge-Carpenter-Thompson Historic District, Salem, NJ  
Long House, Hope, NJ  
Riviera Apartments, Baltimore, MD  
Eastern State Penitentiary  
River Street School, Red Bank, NJ  
Reservoir Hill Neighborhood, Baltimore, MD  
S. Bethlehem Historic District, Bethlehem, PA  
Allentown National Bank, Allentown, PA  
Trojan Powder Building, Allentown, PA  
Bethlehem Silk Mill, Bethlehem, PA  
Plaza Apartments, Philadelphia, PA  
Jefferson Elementary School, Pottstown, PA  
Chateau Apartments, Baltimore, MD  
Rodale Organic Farm, Emmaus, PA  
Livingston Avenue District, New Brunswick  
Villa Maria School, Erie, PA  
Henry Antes House, Upper Frederick Twp., PA  
David Rittenhouse School, Norristown, PA  
Roberts House, Montgomery Co., PA  
North Scranton Jr. High, Scranton, PA  
Fairmount Apartments, Jersey City, NJ  
Lake Drive Apartments, Baltimore, MD  
Bergey House, Montgomery County, PA  
Hanover Show Co., Hanover, PA  
GoggleWorks, Reading, PA  
Acme Warehouse, Philadelphia, PA  
Wyomissing Club, Reading, PA  
James Madison School (E. Scranton Intermediate School), Scranton, PA

### **National Historic Landmark Nominations**

Henry Antes House, Upper Frederick Twp., PA  
Rittenhouse Town District, Philadelphia  
Alexander Schaeffer House, Schaefferstown, PA

### **Materials Conservation Studies**

WV State Capitol, Charleston, WV  
Iowa State Capitol, Des Moines, IA  
PA State Capitol, Harrisburg, PA  
Curtis Institute of Music, Philadelphia, PA  
U.S. Custom House, Philadelphia, PA  
Barnes Foundation, Merion Station, PA  
Eastern State Penitentiary, Philadelphia, PA

Fairmount Water Works, Philadelphia, PA  
Irvine Auditorium, U. of Penn., Philadelphia, PA  
Historical Society of Pennsylvania, Philadelphia, PA  
30<sup>th</sup> Street Railroad Bridge, Philadelphia, PA  
Camden Federal Court House, Camden, NJ  
Macomb's Dam Bridge, New York, NY  
PA Railroad Museum, Strasburg, PA  
Mask & Wig Club, Philadelphia, PA  
Newark City Hall, Newark, NJ  
Princeton Battle Monument, Princeton, NJ  
Rayne UMC, New Orleans, LA  
A.L. Ringling Theater, Baraboo, WI  
Single Sister's House, Salem, NC  
Morrill Hall, Iowa State Univ., Ames, IA  
State Gym, Iowa State Univ., Ames, IA  
Cassatt House, Haverford, PA  
Salisbury House, Des Moines, IA  
York Co. Courthouse, York, PA  
Free Library of Philadelphia, Philadelphia, PA  
Nassau Hall, Princeton Univ., Princeton, NJ  
Palmer Hall, Princeton Univ., Princeton, NJ  
Proctor Hall, Princeton Univ., Princeton, NJ  
5<sup>th</sup> Ave. Train Station, NY, NY  
Henry Antes House, Upper Frederick Twp., PA  
Fay House, Harvard Univ., Cambridge, MA  
Pearl S. Buck House, Perkasie, PA  
Slateford Farmhouse, Slateford, PA  
Palace Theatre, Greensburg, PA  
Cumberland County Court House, NJ  
Henry Antes House, PA  
Cornwall Iron Furnace, Cornwall, PA  
Bergey House, Montgomery County, PA  
Berks County Court House, Reading, PA  
Dougherty Hall, U. of DE, Newark, DE  
Packer Chapel, Lehigh U., Bethlehem, PA  
Packer Mansion, Lehigh U., Bethlehem, PA  
Packer Memorial Hall, Lehigh U., Bethlehem, PA  
Moravian Pottery and Tile Works, Doylestown, PA  
Hoffman Library, Bard College, New York, NY  
All Wars Memorial, Philadelphia, PA  
Stover's/Myers' Mill, Solebury, PA  
Allentown Post Office, Allentown, PA  
College Hall, U. of Penn., Philadelphia, PA  
Pittsburgh Post Office, Pittsburgh, PA  
Louis Hall, U. of Penn, Philadelphia, PA  
Hopewell National Historic Site, PA

Claus Rittenhouse Home, Philadelphia, PA  
"Milord La Chamarre", Jean Dubuffet Sculpture, Philadelphia, PA  
Old Economy Village, Ambridge, PA  
Founders Hall, Haverford College, Haverford, PA  
Atlantic City Convention Center, NJ  
Rockland Mansion, Philadelphia, PA  
Haverford College, Haverford, PA

### **Investment Tax Credit Consulting Projects**

James Madison School (E. Scranton Intermediate School), Scranton, PA  
Stegmaier Brewing Company Bottling House, Wilkes-Barre, PA  
Mt. Vernon House Hotel, Easton, PA  
St. Luke's Hospital, Cleveland, OH  
Dixie Cup Factory: Easton, PA  
Reservoir Hill Historic District, Baltimore, MD  
Goggleworks,: Reading PA  
Abraham Lincoln Hotel, Reading, PA  
McFarland Press Building, Harrisburg, PA  
Salem Rehabilitations/Hedge-Carpenter-Thompson Historic District, Salem, NJ  
North Scranton Junior High School, Scranton, PA  
Hanover Shoe Factory, Hanover, PA  
W. Diamond Street Properties, Philadelphia, PA  
Blue Anchor, Burlington, NJ  
West Electronics, Burlington, NJ  
Von Louhr Apartments, Philadelphia, PA  
Regent/Rennoc Apartments, Philadelphia, PA  
Academy Street Properties, Trenton, NJ  
Hanover Street Properties, Trenton, NJ  
Allison Hill Properties, Harrisburg, PA  
232-234 North Second Street, Philadelphia, PA  
Baltimore Court Apartments, Philadelphia, PA  
Villa Maria Academy, Erie, PA  
Doylestown Inn, Doylestown, PA  
Wyomissing Club, Reading, PA  
Riviera Apartments, Baltimore, MD  
Forest Park Senior Center, Baltimore, MD  
Orr's Department Store, Bethlehem, PA  
Coatesville HOPE VI Rehabilitations, Coatesville, PA  
The Chateau, Baltimore, Baltimore, MD  
Jefferson Elementary School, Pottstown, PA  
Bethlehem Steel Merchant Mill #2, Bethlehem, PA  
Lancaster Arts Hotel, Lancaster, PA  
Riviera Apartments, Baltimore, PA  
Acme Warehouse, Philadelphia, PA  
Vernon House Apartments, Philadelphia, PA  
Pomeroy's Department Store, Easton, PA

Bethlehem Silk Mill, Bethlehem, PA