

**Bear Creek Community Charter School**  
**Bear Creek Township, PA**

# Prequalification of Architectural Design Professionals

## September 27, 2012



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Bear Creek Community Charter School  
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Mr. James Smith  
Chief Executive Officer  
Bear Creek Community Charter School  
2000 Bear Creek Boulevard  
Bear Creek Township, PA 18702

Re: Professional Qualifications for the Proposed Bear Creek Community Charter School, Bear Creek, PA

Dear Mr. Smith:

**hemmler + camayd architects (H+C)** is delighted to submit our team's professional qualifications for architectural, engineering, landscape and civil design services in connection with the above referenced project. Our professional team shares your vision and enthusiasm for the creation of a progressive, enlightened learning environment for your students and the community at large. We understand that in order to fulfill its mission, the physical plant and the schools pedagogy must be thoughtfully aligned. Furthermore, we see the building itself serving as a teaching tool, offering innumerable opportunities to educate students to environmentally responsible behavior; a gift they will carry for the rest of their lives.

**hemmler + camayd architects** have developed considerable experience in both private and public K-12 and higher education facilities throughout Pennsylvania. Those private K-12 clients we have served, include: Scranton Preparatory School, Wyoming Seminary, MMI, and the Lehigh Valley Charter School for the Performing Arts, among others. To best address the sustainable, high performance aspects of your project, we have assembled the strongest team of professionals in our region. For the various engineering disciplines, we have engaged the firm of Greenman Pedersen, Inc. (GPI). For the last ten years, our firms have collaborated on the design of numerous educational projects, including both phases of Marywood's multi-award-winning School of Architecture and the Lackawanna College Environmental Center, currently under construction. Phase I of Marywood's project was awarded LEED Gold certification and we fully anticipate that Phase II and the Environmental Center will also receive certification. SM Design Group, our highly-qualified civil engineering consultant, has provided services to the school and is familiar with the regulatory aspects of the project, including land development submission and the review and approval process. To address sustainable landscape design and conservation of the 97-acre site, we have enlisted Derck and Edson, a leading landscape architecture firm with impressive credentials. We have also included Ruther / Bowen as structural engineers.

The following points address the mandatory qualifications for the lead professional, these are:

- **hemmler + camayd architects** is currently licensed as a registered Architect by the Commonwealth of Pennsylvania.
- **hemmler + camayd architects** has a 34-year history of minimal claims against error and omissions coverage under its professional liability insurance policy.
- **hemmler + camayd architects** has no pending litigation of any private or public institutions.
- **hemmler + camayd architects** has architectural, planning and interior design staff to address the needs of this project. In addition it has the management capacity to administer the coordinated completion of contract documents for this project.

We are honored to be considered as architects for what will surely be a model charter school across the Commonwealth. Our professional team will do everything possible to earn your trust and to make this a very successful project. If you have any questions regarding any aspect of this proposal, please don't hesitate to call me at your convenience. In closing, allow me to invite you along with other members of the Board of Trustees to a guided tour of Marywood's School of Architecture at a time of your choice.

Sincerely,

David M. Hemmler, AIA  
Principal-in-Charge

**Bear Creek Community Charter School**  
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## II. PROJECT PERSONNEL

The Bear Creek Community Charter School represents a refreshing departure from traditional pedagogical principles to a more enlightened approach to K-12 education. This progressive vision must be supported by a 21<sup>st</sup> century physical plant that is aligned with new learning modalities and teaching methods.

Based on this fundamental premise, as the lead professional firm, **hemmler + camayd architects** has carefully assembled a team of professionals who share a devotion to design excellence, a commitment to sustainable design and thirty plus years of experience in designing educational facilities ranging from private K-12 schools to colleges and universities throughout Pennsylvania.



**hemmler + camayd architects**, 409, Lackawanna Ave., Ste 400, Scranton, PA 18503 Phone: (570) 961-1302 Fax: (570) 961-3919, Architecture, Planning, Construction Administration, Interior Design

- David Hemmler, AIA, Principal-In-Charge [dhemmler@hc-architects.com](mailto:dhemmler@hc-architects.com)
- Tom Gercak, RA, LEED AP, Senior Project Manager [tgercak@hc-architects.com](mailto:tgercak@hc-architects.com)
- Brian Doran, AIA, LEED AP, Senior Project Architect [bdoran@hc-architects.com](mailto:bdoran@hc-architects.com)
- Sean McNamara, AAIA, LEED AP, Project Designer [smcnamara@hc-architects.com](mailto:smcnamara@hc-architects.com)
- Angela Sandy, NCIDQ, Interior Design [asandy@hc-architects.com](mailto:asandy@hc-architects.com)

Personnel: 8 Registered Architects, 5 Graduate Architects and Interior Designers, 2 Technical staff, and 3 Support Staff members. 5 of our staff members are LEED Accredited.



**Greenman Pedersen, Inc.**, 50 Glenmaura National Blvd., Ste 102, Scranton, PA 18505 Phone: (570) 342-3700 Fax: (570) 342-4080, Mechanical, Electrical, Plumbing, Fire Protection Engineering.

- Stephen Daiute, PE, LEED AP / Vice President / Engineering Project Manager [sdaiute@gpinet.com](mailto:sdaiute@gpinet.com)
- Kurtis Searing, PE, RCDD / Senior Electrical Engineer [ksearing@gpinet.com](mailto:ksearing@gpinet.com)
- John Havenstrite, PE, LEED AP / Senior Mechanical Engineer [jhavenstrite@gpinet.com](mailto:jhavenstrite@gpinet.com)
- Michael Radzicki, PE, LEED AP / Fire Protection Engineer [mradzicki@gpinet.com](mailto:mradzicki@gpinet.com)
- Thomas Murphy, PE / Senior Structural Engineer [tmurphy@gpinet.com](mailto:tmurphy@gpinet.com)

Personnel: 4 Mechanical Engineers, 4 support; 3 Electrical Engineers, 2 In Training, 3 support; 5 Civil / Survey Engineers, 2 In Training; 3 Structural Engineers; 4 Transportation Engineers, 2 In Training. 10 of their staff are LEED Accredited.



**SM Design Group** 275 Mundy Street, Suite 101, Wilkes-Barre, PA 18702 Phone: (570) 970-0480 Fax: (570) 970-0483, Civil Engineering

- Joseph Stachokus, PE, President [jstachokus@smdesigngroup.com](mailto:jstachokus@smdesigngroup.com)

Personnel: Two Owners who work on civil related projects.



**Derck and Edson** 33 South Broad St., Lititz, PA 17543 Phone: (717) 626-2054 Fax: (717) 626-0954, Landscape Architecture, Land Planning, Site Design

- Steven B. Sproles, RLA, Landscape Architect/Land Planner [ssproles@derckandedson.com](mailto:ssproles@derckandedson.com)

Personnel: 13 Landscape Architects – 10 of which are registered (RLAs), 3 Civil Engineers (PE), 2 CAD technicians and 5 business management personnel.



**Reuther + Bowen** 326 Ward Street, Scranton, PA 18512 Phone: (570) 496-7020 Fax: (570) 496-7021 Structural Engineering

- Marc Bowen, PE, President [mbowen@reutherbowen.com](mailto:mbowen@reutherbowen.com)

Personnel: 4 Licensed Structural Engineers, 3 Structural Engineers in Training, 3 Structural Detailers/Draftsman, 2 Administrative Staff, and 2 Project Managers.



**DAVID M. HEMMLER, AIA**  
Principal



**EDUCATION:** Bachelor of Architecture, Catholic University of America, Washington, DC

**REGISTRATION:** Registered Architect: PA, NY, NJ

**PROFESSIONAL AFFILIATIONS:** American Institute of Architects; NEPA Chapter  
National Trust for Historic Preservation  
Interfaith Forum on Religion, Art & Architecture

Mr. Hemmler has a comprehensive knowledge and discerning insight into the complexities of all phases of the Architectural process, from program development and facilities planning through design analysis, and project constructability. He has participated in professional development courses in facility management and strategic planning. He has been involved in comprehensive planning for many area universities and institutions. Mr. Hemmler's unique experience in all types of project delivery systems, including fast tracking, design/build and construction management, is an asset to the client in selecting the most appropriate system for their project.

In addition to managing the administrative operation of the firm, Mr. Hemmler offers his experience and direction to all projects, constantly stressing quality design, schedule and cost management. Mr. Hemmler consistently stresses a high level of client service, putting himself in the client's place to insure the best value for the owner. Mr. Hemmler maintains a longstanding relationship with the firm's clients to learn of facility management issues that will contribute to improvements in future design work.

Mr. Hemmler's brings over 34 years of experience and expertise to each project, particularly in the following areas:

- K-12 Education facility design
- Higher Education facility design
- Facility planning & programming
- Conceptual design
- Corporate office design
- Healthcare facility design
- Liturgical design
- Project cost management
- Project scheduling
- Project estimating
- Construction Management



**Mr. Hemmler's current projects are:**

Marywood University  
Scranton, PA  
• Learning Commons

Misericordia University  
Dallas, PA  
• New Student Residence

Mt. Airy  
Mount Pocono, PA  
• New Resort Pool

**List of previous clients:**

Lackawanna Trail School District  
Factoryville, PA

Western Wayne School District  
Lake Ariel, PA

Abington Heights School District  
Clarks Summit, PA

Scranton Preparatory School  
Scranton, PA

Wyoming Seminary  
Upper & Lower Schools  
Kingston & Forty-Fort, PA

MMI Preparatory School  
Freeland, PA

Misericordia University  
Dallas, PA

Marywood University  
Scranton, PA

University of Scranton  
Scranton, PA

**Availability:**

Based on our workload, Mr. Hemmler will be available throughout the entire project.

Mr. Hemmler's will be leading the initial phases of the project and have more involvement at the beginning and will shift leadership to Mr. Gercak in Schematic Design.

**THOMAS J. GERCAK, RA,  
LEED AP**  
Senior Project Manager



**EDUCATION:** Bachelor of Architecture, Drexel University, Philadelphia, PA

Associate of Architectural Engineering  
Technology, Pennsylvania State University

**REGISTRATION:** Registered Architect: PA

**PROFESSIONAL AFFILIATIONS:** LEED Accredited Professional  
NCARB Certified

Mr. Gercak has experience in all phases of architectural services, including programming and planning, conceptual design, presentation drawings and models, coordination with project engineers and consultants, field surveys, code reviews, preparation of construction documents, product research, technical specifications, bidding and negotiation, construction administration and shop drawing review.

Mr. Gercak has been involved in a wide variety of projects, from educational facilities to commercial facilities.

Mr. Gercak's areas of expertise include:

- PLAN-CON submittals
- LEED Design
- Feasibility studies
- Conceptual design
- Programming
- Code compliance
- Zoning compliance
- Development of construction documents for all project phases
- Construction administration
- Coordination of multi-discipline project teams
- Renovation projects
- Corporate facilities
- Institutional and government projects



**Mr. Gercak's current projects include:**

Moravian Village  
Bethlehem, PA

- Assisted Living Facility

Marywood University  
Scranton, PA

- Learning Commons

Scranton Sewer Authority  
Scranton, PA

- Fit-Out

**List of previous clients:**

Pleasant Valley School District  
Brodheads ville, PA

Dallas Area School District  
Dallas, PA

Central Mountain School District  
Lock Haven, PA

MMI Preparatory School  
Freeland, PA

Wyoming Seminary  
Upper & Lower Schools  
Kingston, PA & Forty-Fort, PA

Lehigh Valley Charter High School  
for the Performing Arts  
Bethlehem, PA

Misericordia University  
Dallas, PA

Marywood University  
Scranton, PA

**Availability:**

Based on our workload, Mr. Gercak will be available throughout the entire project.

Mr. Gercak will be involved initially and his leadership will intensify starting with Schematic Design and last for the duration of the project.

**STEPHEN C. DAIUTE, PE,  
LEED AP**

Vice-President / Mechanical  
Engineer



**EDUCATION:** Penn State University, University Park, PA  
Bachelor of Architectural Engineering,  
Mechanical Engineering 1996

**REGISTRATION:** Registered Professional Engineer in  
Pennsylvania

Mr. Daiute specializes in the mechanical engineering design of public and private schools. His background also includes responsibility for Project Management and overall coordination of MEP systems from concept design through construction administration. As a LEED Accredited Professional registered with USGBC, Steve regularly looks for opportunities to incorporate sustainable design concepts into every design; from the use of "total energy wheels" for heating, cooling and energy recovery, to ground based geothermal heating/cooling systems, to daylight harvesting. In just the last few years, Steve has led the design of seven geothermal heating cooling systems for projects in the states of Pennsylvania and New Jersey.

Steve was Project Manager for the new Evergreen Elementary School at Western Wayne School District. The project included innovative engineering concepts to reduce energy, minimize consumption and to provide a superior learning environment. Heating / cooling systems included; a ground-coupled geothermal system, low flow water fixtures. All teaching spaces include natural day lighting and day lighting controls. Building finishes were selected with low VOC levels to provide better indoor air quality. The onsite septic system is a "living machine" that utilizes plants and aquatic life to treat sanitary discharge from the school. The new facility is pursuing LEED Gold Certification with USGBC.

Steve led a recent project with Marywood University to repurpose abandoned coal mines beneath the campus into a source of geothermal energy to provide cooling in a building being renovated into an Architectural School. The project takes advantage of flooded underground mine shafts and uses the thermal energy for heating and/or cooling applications for the new facility. The geothermal system is an open system and utilizes two wells extract the energy from the earth. The system consists of a production well, a recharge well, a heat exchanger, pumps, and piping. The production well contains a submersible pump, similar to a traditional potable water well pump, to extract water from the flooded mine and pipe it to the surface. The water is then piped to a heat exchanger to extract heat to the building system.

Steve is a professional engineer licensed in 16 states and a LEED Accredited Professional. Over his twenty year career Steve has completed projects at more than twenty school districts. His experience includes new as well as renovated work for educational clients.

Steve will lead a team that is highly credentialed and experienced with k12 projects and committed to sustainable design concepts. Our team assembled for Bear Creek Charter School includes 120 years of combined engineering experience and an average of 10 years of working together on k12 projects at GPI.

**Present Assignments:**

Lakeland School District  
Scott Township, PA

- High School HVAC Unit Replacement

GSA Richard H. Poff Federal Building  
Roanoke, VA

- Building MEP Renovations

GSA SSA HQ Woodlawn  
Woodlawn, MD

- Advanced Metering

DGS Jacobsburg Environmental Center  
Wind Gap, PA

- New Environmental Center

**List of previous clients:**

Western Wayne School District  
Lake Ariel, PA

North Pocono School District  
Moscow, PA

Dallas Area School District  
Dallas, PA

George Washington Replacement School  
Borough of Edgewater, NJ

Shenandoah Valley School District  
Shenandoah, PA

**Availability:**

Based on GPI's workload, Mr. Daiute will be available throughout the entire project.

Mr. Daiute will be heavily involved in Schematic Design and continue through completion of the project.

## JOSEPH STACHOKUS, PE President / Civil Engineer

**EDUCATION:** Bachelor of Science, Civil Engineering  
Pennsylvania State University, May 1993

**REGISTRATION:** Registered Professional Engineer in Pennsylvania

**PROFESSIONAL AFFILIATIONS:** National Society of Professional Engineers  
Member  
2007-2008 President of the Luzerne County  
Chapter of Pennsylvania Society of Professional  
Engineers.

**CONTINUING EDUCATION:** Attended seminars in Water Quality Management  
and Water Pollution Control.  
Attended PA DEP seminars on permit regula-  
tions changes

**AWARDS:** Luzerne Conservation District  
2009 Engineer of the Year

Mr. Stachokus provides project management, construc-  
tion phase services, and engineering design on a variety of  
civil engineering and land development projects for private  
and governmental clients. These projects include corporate  
land developments, industrial and residential subdivisions,  
stormwater, erosion and sedimentation control, roadways,  
and infrastructure. In addition, Mr. Stachokus's background  
includes all aspects of construction phase services and  
project management.

### Present Assignments:

Richland South  
Plains Township, PA

- Commercial Development - 53,000  
SF Office Building, 5,200 SF Bank, &  
1,778 SF Donut Shop

Richland North  
Plains Township, PA

- Commercial Development - 4-Story -  
101 Room Hotel with 2 Out-Parcels for  
Fast Food Restaurants

Jo Jo Oil Company, Inc.  
Tunkhannock Township, PA

- Permitting and Design of a Water With-  
drawal Facility

Meadow Gate Manor  
Salem Township, PA

- Residential / Multi-Family Develop-  
ment - 7 Single Family Lots and 32  
Multi-family Townhouse Units

Back Mountain Harvest Assembly  
Kingston Township, PA

- Recreation Field

Button Oil Company, Inc.  
Mountaintop, PA

- 2- PaDot Low Volume Highway Oc-  
cupancy Permits

Medico Industries, Inc.  
Plains Township, PA

- Re-zoning and Erosion and Sedimen-  
tation Control Plan

### Availability:

Based on SM Design Group's workload, Mr.  
Stachokus will be available throughout the  
entire project.

Mr. Stachokus will be intensely involved  
during land development and site design  
through completion of the project.





### III. RELEVANT PROJECT EXPERIENCE

A. Educational projects of similar complexity: space for individual learning; facilities meeting community needs:

#### Scranton Preparatory School

**Project Type:** New and Renovated Private Education, K-12

**Location:** Scranton, PA

**Client Name:** Father Keller, SJ

**Contact Information:** Phone (570) 941-7737

**Total Gross Square feet:**

Phase I: 35,000 GSF

Phase II: 65,000 GSF

Phase III-VII: 56,000 GSF

**Initial Budget:**

Phase I: \$9.0 million (Theater/labs)

Phase II: \$12.8 million (Gymnasium)

Phase III-VII: \$6.0 million (Renovations)

**Final Construction Cost:**

Phase I: \$9.3 million (Theater/labs)

Phase II: \$13.6 million (Gymnasium)

Phase III-VII: \$6.2 million (Renovations)

#### Relevance to the Bear Creek Community Charter School:

**Complexity:** hemmler + camayd architects' renovation and expansion of Scranton Preparatory School represents a seven-phase construction project which began with the development of a 1992 Master Plan that called for "facility renewal." The historic structure is located in a busy urban context, which required extensive research of the building's history and an ability to design with contemporary means in integration with historic styles. This resulted in a harmonious complex of memorable quality. The project scope is similar in complexity and incorporates many of the elements envisioned for the proposed new Charter School, including:

- Restoration of the main lobby
- New rear entrance with stained glass seal of the school
- Renovations to the Administrative Suite
- Renovations to the Library and Cafeteria
- Renovations to four floors of classrooms
- Installation of high technology systems, including smart boards, wireless connections, etc.
- Renovation and accessibility of restrooms
- Construction of the new arts and sciences center
- Construction of the new athletic center and student commons
- Development of outdoor play fields: soccer, track and tennis courts.



Renovations to the historic structure provided the opportunity to button up the building's envelop with higher insulating values in both exterior masonry walls and replacement windows. Modern design efficiency standards required complete replacement of the obsolete city steam system with new, more efficient mechanical units. Power and lighting systems were also replaced to meet foot candle requirements and high efficiency lamps throughout the facility.

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**Learning Environment:** Although the pedagogy of Scranton Preparatory School is traditional and highly structured, **hemmler camayd architects** have taken every possible opportunity to bring our knowledge of contemporary school design into the rehabilitation and expansion of this august facility. We have emphasized the sense of community by creating numerous places of various sizes for students to gather, socialize, and study. Although a sizeable complex in totality, the structure breaks down into smaller, comprehensible areas with their own central public spaces. The typical classrooms are sized to accommodate small groups and are equipped with technological advances throughout. The architecture provides abundant natural light, bright, warm colors, and a sense of permanence and quality. The structure speaks to “community” on multiple levels. It reflects the spiritual traditions of the Jesuits, it speaks to the rich history of the city of Scranton, and most of all it instills in the students the importance of learning.



**Special Community Needs:** The new expanded school was to include a new Gymnasium and an 850-seat Theater. Both assembly spaces would be open to the general public after hours while addressing critical security concerns throughout the rest of the school. This challenge was met by creating a system of dedicated entrances and control points which allowed limited access to the activity areas.



We believe that the main entry is a very important element of school design. The entry should be warm, welcoming, and represent both the community and the student body. It is the signature element that speaks to what makes a school special. The central student entrance is flanked by the two additions resulting in a symmetrical composition. It creates a formal oasis in the urban context. The assemblage asserts Scranton Preparatory School as dignified place of learning with a traditional collegiate character. The new additions rely on expanses of relatively simple and economical masonry to set off entrance archways and bay windows carefully detailed in a Gothic manner to tie to the original central building.



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B. Projects that demonstrate an innovative approach to sustainable high performance “green” design.

**School of Architecture**

**Project Type:** Education – Post Secondary

**Location:** Dunmore, Pennsylvania

**Client Name:** Marywood University, Gregory K. Hunt, FAIA, Founding Dean

**Contact Information:** Phone (570) 348-6211 ext. 6063

**Total Gross Square Feet:**

Phase I: 37,229 GSF

Phase II 29,420 GSF

**Initial Budget:**

Phase I: \$4.7 million

Phase II: \$5.8 million

**Final Construction Cost:**

Phase I: \$4.5 million

Phase II: \$5.8 million

**Sustainable high performance “green” design**

Marywood University’s new School of Architecture focuses on sustainable design; all professional-track students attain LEED accreditation before graduation.

Housed in the new Center for Architectural Studies, Phase 1 renovated a former gymnasium; Phase 2 expands into the adjacent former natatorium. Recycling existing construction supports a sustainable approach. Phase 1 achieved LEED Gold Certification and Phase 2 awaits designation. Showcased elements of the design teach student architects and interior designers about sustainability.



The Architects began with a windowless, 1950’s concrete-block pool house. Reuse preserves original construction whenever possible. New elements form insertions into or deletions from original fabric.

The primary insertion is an independent steel and concrete structure that creates an upper level studio for 96 students. The structure reemploys the round columns and open trusses selected for Phase 1. Sprinkler lines, chilled beams, and light fixtures are exposed and suspended below the floor deck.

The architects explored how the pool area could house program and reveal the history of the building. Ultimately, the design creates a series of accessible step-down studios that culminate in a sunken, book-lined, shared-resource area. Original depth markers and areas of tile remain.



The former bleacher area provides gallery space with an overlook of glass-walled faculty offices above. A bridge connecting the upper studio and offices suspends from the roof structure and steps down from adjacent floor levels to clear a massive bridge-like roof girder. The span is best viewed against a picture-framed area of compression glazing in the new glass that expresses the deletion of the concrete-block west wall.





### **Highlight special energy saving and sustainable products strategies utilized.**

The project reuses a functionally obsolete structure at the heart of campus. Clerestory additions and replacement of solid masonry and aged translucent panels with clear, Low E insulated glass introduce daylight, minimize the need for artificial light, and save energy. The design retains a majority of wall and ceiling areas. Over 60% of demolition and construction debris was diverted from landfills and recycled. Many original doors and frames were salvaged and reused.

The site development reserves parking spaces for fuel-efficient vehicles and includes new racks to encourage bicycle transportation. A reflective roof coating reduces building heat gain.

At the interior, use of Low-VOC (volatile organic compounds) paints, sealants, mastics, and finish materials throughout follow LEED guidelines. Furnishings offer high recycled material content and have high potential for post-consumer reuse.

Mechanically, chilled beam technology provides passive cooling that relies on natural principals of convection to cool rising hot air, saving electricity and eliminating fans and forced air movement. Reclaimed mine water feeds the chilled beams with a constant supply of 55 degree water.

Electrically, energy efficient light fixtures and controls minimize energy consumption. Occupancy sensors throughout the building turn lights off when rooms are not in use.

New bathrooms include waterless urinals, low-flow faucets and shower heads, and water-usage monitoring systems.

### **Concerns raised or challenges encountered as the result of integrating emerging technologies**

Some emerging technologies available today are untested, unproven, or at least uncommon. There are concerns about the actual performance of the chilled beams. If the dewpoint is not accurately determined, the units could generate condensate and it could drip in the space. The geothermal system makes use of reclaimed mine water that has a high acidity level. Initially, this proved hard on piping and equipment; however the problem was addressed by collecting less acidic water at a higher elevation. Glare could become an issue with increased daylighting, and the addition of layers of light filtering becomes costly and adds maintenance costs. The true durability of some renewable materials is open to question, as there is little history of use. A highly reflective roof in Northeastern Pennsylvania provides a 25% energy savings during the summer months but creates a 5% loss during the heating season. In addition, it increases the ice and snow load demanding a heavier structure.

There is a definite cost factor at this time for building in a green manner. If LEED certification is not demanded, there needs to be a "return on investment" evaluation of each element. In addition, the increase in first costs does not always guarantee operational savings over time. Operations and maintenance also require special training and products or the original construction intentions may be compromised.

We have experienced no effect on the project construction timeline, although actual LEED certification can be a lengthy process.





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**C. Buildings that require a team approach to community design and planning**

**Steamtown National Historic Site**

**Project Type:** New and Renovated historic site and buildings

**Location:** Scranton, PA

**Client Name:** National Park Service

**Contact Information:** Phone

**Total Gross Square feet:** 90,000 GSF on a 67-acre site

**Initial Budget:** \$40 million (construction of site and buildings)

**Final Construction Cost:** \$36 million

**Relevance to the Bear Creek Community Charter School:**

**Community Involvement:** hemmler + camayd architects was selected by the National Park Service as lead architects for the conversion of the former DL&W rail yard into a live steam museum that celebrates the history of railroading in the Northeast United States. The project, sponsored by Congressman Joseph McDade, required extensive federal funding for the purchase of the site, repairs to the collection and the construction of a large museum complex capable of exhibiting and operating vintage steam engines. Customary with NPS methodology, a series of public meetings and workshops were held where the Agency sought public input on the aspirations of the community itself. H+C participated in these meetings by providing graphic information presented to the public and facilitated discussion among those present. Additionally, H+C led many presentations to various interest groups, including historians, rail buffs and the general public. The substance of these meetings was recorded and published in newsletters so as to keep the general public informed as to the progress of the planning and design process.



The meticulous planning, design, and construction process lasted seven years and forever impacted H+C's practice. These lessons in public engagement were widely used in the subsequent planning effort for the Lackawanna Heritage Valley Plan, a study coauthored by H+C. This document led to the creation of the first Heritage Park in Pennsylvania. Today, numerous conservation, preservation and stewardship projects have been accomplished focusing on the land, the people and the industry that fueled the industrial revolution in the Anthracite Region. These include joint efforts with the Lackawanna River Corridor Association's efforts to clean and preserve the natural beauty of the Lackawanna and reduce pollution (acid mine water) to the Chesapeake bay; the development of over six miles of recreational "rails to trails" linking numerous communities along the Lackawanna River; and the preservation of numerous historic buildings and settings.

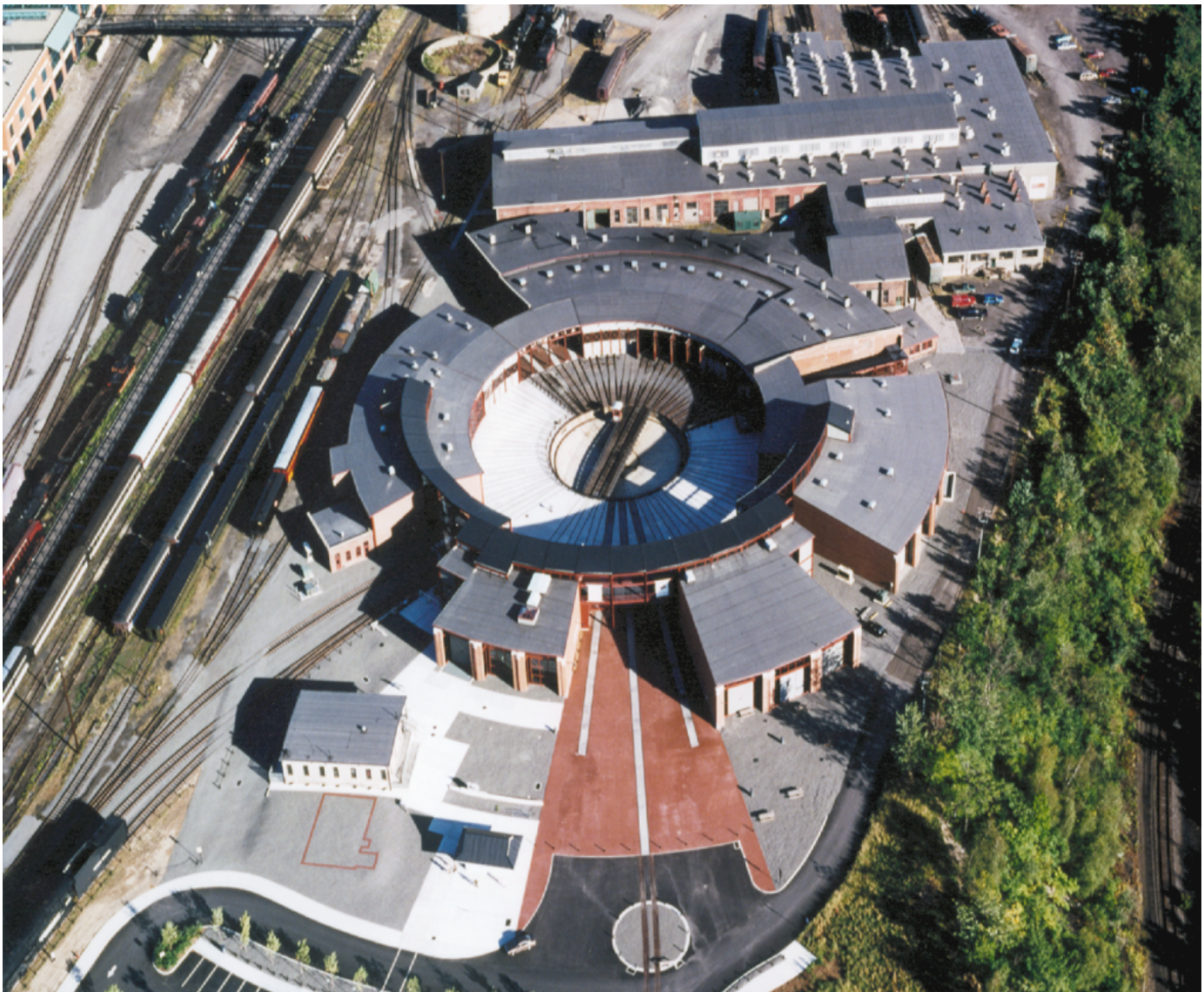






**Impact of Public Input on the Design Process:** hemmler + camayd architects' transformation of the abandoned rail yard into a universally accessible live steam museum benefited greatly from the public input received in the early planning stages. The range of issues raised in these public hearings included the testing and disposal of contaminated soils, the archaeological excavations of historically significant remains, and the formulation of a master plan that combined original and new structures into a welcoming, safe informative museum experience.

As lead architects for your project, we would employ a similar process with the planning of the proposed school, which focuses on the educational, physical and community aspects of the project. These issues must be addressed openly and inclusively to build consensus before proceeding with the actual design of the building proper. In effect, by engaging parents, teachers and students in a creative, "blue-skying" process, the professional team will gain first-hand information on the goals and aspirations of the various contingencies of the Bear Creek Community Charter School. Only then, can these goals be shaped into tangible learning environments that will support the mission of the school.





#### IV. DESIGN PHILOSOPHY

(Integrated approach to sustainable design)

We firmly believe that our professional values are entirely consistent with the stated aspirations and core principles that guide the mission for the proposed Bear Creek Community Charter School. This alignment of purpose and vision will no doubt facilitate communication and collaboration between the Client and Professional teams. This will also enable the creation of an integrated team that will collaborate continuously from setting project goals to the finished product.

The core values that have guided **hemmler + camayd architects'** philosophy of practice for the last thirty four years are:

- Seize every opportunity to build community
- Enhance and preserve our built and natural environments for generations to come
- Achieve design excellence within our client's available resources



As the lead professional, **hemmler + camayd architects'** will adhere to a design philosophy that fosters an inclusive, interdisciplinary approach to the design process. This integrated design process invites the active participation of representatives of the client team, all the professional team, construction managers, user groups, and when appropriate members of agencies having jurisdiction over the project.

During the initial Pre-Design phase of the project, the integrated team will address your stated concerns in educational, physical plant and community planning aspects of the projects. **hemmler + camayd architects** will collaborate with the entire team in conducting a needs assessment that will ultimately result in a comprehensive Space Program. This document will describe the quantitative and qualitative aspect of each space. Similarly, once a careful analysis of the site's limitations and opportunities has been completed, the team is able to initiate the exploration of conceptual design alternatives during the Schematic Phase of the project.

Once a strong consensus is achieved among all stakeholders on a preferred alternative, the integrated team will proceed with the customary design phases. This interdisciplinary course of action will ensure that every aspect of the building contributes to holistic and sustainable design solutions. If properly conducted, this process should yield an inspiring teaching / learning environment within a building that itself is a teaching tool. See Section III b: Marywood School of Architecture.

At the conclusion of each design phase, our team will prepare a construction cost estimate and will track it against the "baseline" project budget. These documents will be presented to the Client Team on a regular basis to obtain a clear design direction before proceeding with subsequent design phases.

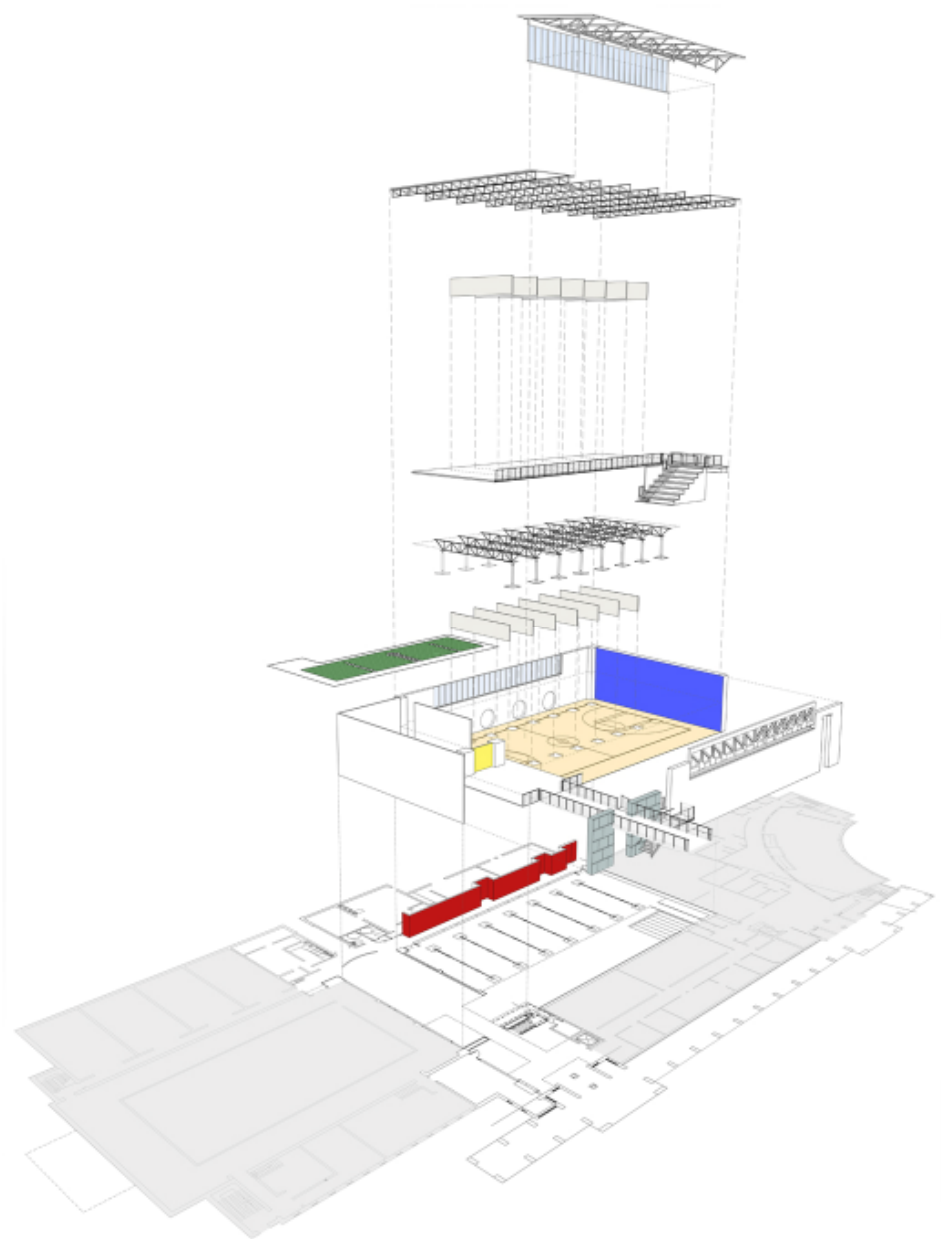


**Bear Creek Community Charter School  
Bear Creek Township, PA**

Prequalification of Architectural Design Professionals  
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Once contract documents are completed, these can be issued to seek bids from qualified contractors. The professional team will remain fully involved during this important phase of the project. Among other responsibilities, it is incumbent to the professional team to represent the Owners' interests and assist the Construction Manager in interpreting the contract documents so that the finished product is fully compliant with the design intent.



*Marywood University, School of Architecture*





## V. PROJECT APPROACH

The firm's leadership has crafted a balanced design methodology that is applied to all of the firm's projects. This time-tested approach invites the members of the client team to actively participate in the design process and explores and formulates thoughtful design alternatives. As a rule, this exploration leads to the best-value/ most-responsive solution to the client's program, budget, and construction schedule. The effective implementation of this inclusive design process yields efficient and cost effective solutions that consistently exceed our client's' expectations.

Guided by a strong consensus, the professional team is able to properly develop the conceptual scheme. Please see Section IV. regarding our integrated design process. The mature solutions more specifically respond to a contextual aesthetic that incorporates honesty of structure, use of appropriate materials, and expressed functionality. Far from a preconceived, recognizable style, the emerging design solution responds to project-specific circumstances.

Our architectural team will include Mr. David Hemmler, as the Principal-in-Charge. In that role, he will direct, guide and review the professional team throughout the project. Mr. Hemmler also will lead with client relations. Our Senior Project Manager, Mr. Tom Gercak, will deal with the project and the professional team more specifically, and will manage the relations between architects, engineers, landscape architects, interior designers, and any project specialists that may be required. In addition, there will be technical and design architects and interior designers assigned to the project who will bring their expertise to the design process. Technical staff will round out the architectural team to ensure that all graphics and documentation occur in a timely manner.

Greenman Pedersen, Inc. will provide mechanical, electrical, and plumbing, engineering services, SM Design Group will provide civil engineering, Derck and Edson will be our landscape consultants, and Reuther/ Bowen will provide structural engineering. Their qualifications are more fully fleshed out elsewhere in this document.

The professional team is aware that this project may need to comply with the requirements and considerations of USDA Rural Development. We have noted requisite submissions and reviews to USDA in our discussion of the design and construction phases.

### a. Learning Environment Planning

There are a number of ways that the principal learning areas for a school may be arranged. We will work closely with, and engage your team to understand the preferred pedagogy of Bear Creek Community Charter School and structure the classrooms, learning studios, and small learning spaces in such a manner that supports the desired spatial, psychological, physiological, and behavioral outcomes.

We will define what would constitute a welcoming entry for the school, and consider how best to incorporate student display space. With your input, we will define the goals for the design of individual student storage/ locker areas. We will work with the Client Team to understand specialized areas for science, art, music and the like, and ultimately, jointly determine the best relationships that can be realized among the various learning components. We will discuss and assess various options for eating areas, soft-seating areas and the possibility for places for individual study, reflection, and quiet reading. We would seek to create settings that would easily generate constant passive adult supervision.

Together, we will identify those elements of the learning environment that may be shared with the community and will seek to zone our conception of the new school in a manner that will allow the desired level of integration and secure separation to take place safely.





Given the character and size of the site, we would look to see how meaningful connections could be made between the interior and exterior for student access and use. In terms of sustainable design, we would look to see how both the natural setting and the sustainable design features could be show-cased and used as teaching tools for environmental education.

There are many more aspects to the creation of truly effective learning environments that would be pursued and studied through the design process for your project. These include the incorporation of natural light, the use of color, and the nature of furnishings and décor.

A key element in today's environment is technology infrastructure planning. A comprehensive approach evaluates all current technological needs and anticipates future requirements. From that perspective, all components of the infrastructure can be designed such that they are fully effective at the core level and when combined and integrated with other systems. The resulting solution becomes greater than the sum of its parts. What makes that possible? Convergence. All systems, voice, data, video, security, building management, lighting control, and power monitoring can provide the facility and its occupants with cutting edge technology, information, and control of their systems and environment while utilizing the same infrastructure. Having those capabilities is one thing, utilizing them in a learning environment and supporting operations for a fiscally responsible entity is another. All systems are migrating toward IP (Internet Protocol) and open architecture. That affords multiple different vendors of various equipment to utilize the same copper and fiber solutions that are prevalent today. The key for future proofing and expandability resides with implementing a data infrastructure that has high capacity capabilities today, and can be easily upgraded or modified for tomorrow. This can be achieved through innovative design approaches and collaborative planning. In today's technology environment, endless capabilities are available; the key is selecting the best way to combine them effectively.

## b. Physical Environment Planning

hemmler + camayd architects is committed to incorporating principles of sustainable design and energy efficiency into all of its building projects, these principles are:

- Optimize site potential
- Minimize non-renewable energy use
- Use environmentally responsible products
- Protect and conserve water
- Enhance indoor environmental quality
- Optimize operational and maintenance procedures

hemmler + camayd architects believes that responsible design is sustainable design. Solutions that integrate items such as renewable materials, efficient water and energy consumption, and proper site use not only helps the environment, but also help us and our clients maintain our responsibility to the world we live in. The U.S. Green Building Council's LEED Certification program has helped develop benchmarks that we can help our clients attain. Whether or not a client is seeking a certification, hemmler + camayd architects uses the LEED rating system as a guide to identify potential sustainable responses that can be integrated into the project. While LEED certification may be a goal for some projects, others may find that the money required for this process can be better utilized incorporating additional sustainable solutions. At hemmler + camayd architects, we pride ourselves in assembling a design team that can accurately identify green solutions that stay in tune with budgetary and aesthetic project concerns.



*Green Roof at Marywood University's School of Architecture*



### c. Community Environment Planning

As previously described under Section III C, Steamtown National Historic Site public involvement, the **hemmler camayd architects'** approach to community involvement will follow the lessons learned from that project. The firm also makes use of this outreach process (charrette, work shop or focus group) when commissioned by religious organizations. These clients typically empower a building committee to interact with the architect in a number of civic / community issues and program planning.

The RFP suggests Community Environment Planning will consider the possibility for the school to serve as a "hub" for the Bear Creek community. It is therefore essential that the planning process addresses those activities that require the potential community use of the facility, such as: access to auditorium / theater spaces for performances and events open to the general public; access to the gymnasium and other wellness facilities that could serve the general public; and other instructional spaces such as technologically-rich information center where adult continuing education could take place.



All of the activities listed above and other community uses mentioned in the RFP could be made possible without impacting the School's operations and safety. Issues of access control, scheduling of after-hours activities carefully address security and safety for the student body. The incorporation of principles of Crime Prevention Through Environmental Design (CPTED) is a valid, cost-effective approach to safety and security.

### THE DESIGN PROCESS

Learning Design, Physical Environment, and Community Environment Planning will begin with the Pre-design phase. At the project start-up, **hemmler + camayd architects** will consult with the Client Team to ascertain the requirements of the Project and review the understanding of such requirements with the Owner. Such consultation shall include, but not be limited to, comprehension of Programming requirements, confirmation of the general Project Schedule, and preliminary analysis of the Project Budget requirements, each in terms of the other, and a review with the Owner of alternative approaches for design and construction of the Project.

The Pre-Design Phase will be an ongoing process structured into regularly scheduled Team meetings involving exchange of information, analysis of gathered data, refinement of the Budget, establishment of the building Program, and formulation of specific goals, and schedule deadlines. Minutes of these meetings will contain specific information which will govern the architectural and engineering design process, as well as the establishment of a comprehensive vision of the final product.

The Program will be analyzed regarding specific needs, spatial relationships, finishes, etc. From this data analysis, a final version of the Program will be created and submitted for review prior to development of preliminary designs to serve as a guide for development of overall design concepts.

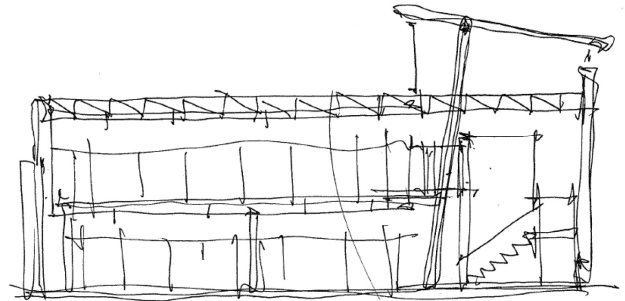
Conceptual designs will explore and present alternatives. These will relate to different interpretations of the learning environment, physical environment, and community environment planning process and to different ways that the facility can relate to the site. Prior to beginning the Schematic Design phase, **hemmler + camayd architects** will review with the Client Team these alternative approaches to design and construction of the project, as well as a preliminary establishment of the construction schedule. **hemmler + camayd architects** will provide assistance to the Client in defining and choosing a preferred alternative.





#### d. Schematic Design

During the Schematic (Preliminary) Design phase, a preferred design solution will be conceptualized along with a revised Order of Magnitude Budget. Schematic Drawings will be developed which respond to the specific building space allocation and space relationship needs as determined through establishment of the Final Program formulated in the Learning, Physical, and Community Environment Planning Phase. The purpose of these documents will be to show the disposition of the structure within the site, internal layout, and the general visual appearance of the structure. **hemmler + camayd architects** will provide an internal code review and schedule a preliminary code meeting with the local building code official to resolve potential code misinterpretations.



We will endeavor to include all comments and suggestions from the Client Team in the formulation of Schematic Design concept. The Schematic Design documents, including an updated Project Schedule and a preliminary Cost Estimate based on square footage, will be submitted to the Client for review and approval prior to entering the project's Design Development Phase.

**hemmler + camayd architects** will submit this schematic design package along with the required feasibility report to the state architect representing the US Department of Agriculture Rural Development for their review and compliance.

#### e. Design Development, Construction Documents & Bidding

The Design Development Phase will fully develop all aspects of the approved Design Concept, including design of all interior spaces. Design Development will include preparation of drawings and outline specifications, determination of sustainable design alternatives relative to appropriate building systems and materials, and an updated Preliminary Construction Cost Estimate. A Design Scheme in the form of a Color and Materials Board depicting the use of colors, finishes and textures will also be developed, with samples of materials provided, where appropriate and as available, of a size large enough to allow the Client to make critical design decisions. These recommendations will be presented to the Client's representatives for their review and approval. The selected items will be translated into formal Specifications for all built-in materials during the Construction Documents phase. The Design Development Documents will be submitted to the Client Team for review and approval prior to proceeding to the Construction Documents phase. Also during this phase, **hemmler + camayd architects** will assist with preparing documents required for the approval of governmental authorities having jurisdiction over the project to assure that approvals have been secured prior to the project's Bidding phase.



We will review site and architectural mitigating measures identified in the environmental review with the state architect representing USDA Rural Development.



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We also will assist you in connection with your responsibility for securing review, revisions and approvals of authorities having jurisdiction over the Project. Prior to the beginning of Phase II (Bidding) of the Project, we will furnish drawings and specifications and assist you with applications for reviews required by governmental jurisdictions.

During the Construction Documents Phase, subsequent to the Client Team's review and approval, **hemmler + camayd architects** will prepare a complete set of Construction Documents including all necessary Drawings and Specifications. Specifications and drawings will be detailed and completed in preparation for Bid Packages (which will include all necessary bidding information, bidding forms, the Conditions of the Contract for Construction, and the Form of Agreement between the Owner and Contractor). The Construction Documents will fully elucidate the intended use, applications, and relationships of all building materials and systems, as well as provide guidance to the Contractor during the Construction Phase. Concurrently, the selected environmentally responsible building systems and materials will be analyzed by the Team to ascertain applicability for use and to determine contributing construction cost, and a detailed Final Construction Cost Estimate will be developed.

**hemmler + camayd architects** will submit the construction document package to the USDA Rural Development Office to obtain acceptance of the documents prior to bidding.

**Hemmler + camayd architects** will provide assistance to the Client in defining and choosing preferred alternatives in terms of Construction Alternatives and the Phasing of the Construction Process. Following your approval of the Construction Documents, the Final Construction Cost Estimate, and the receipt of all applicable approvals from participating agencies, we will assist you in seeking competitive bids and in the evaluation and recommendation of Bid Proposals for Construction.

**hemmler + camayd architects** will also incorporate front end documents as required by USDA.

## **f. Construction Administration**

**hemmler + camayd architects** will provide administration of the Contract for Construction as a representative of and in consultation with Bear Creek Community Charter School during construction. Services will include agency coordination; Shop Drawing review and approval; responding to contractor questions in the field; client representation at Construction Job Conferences; weekly field construction progress observation as required by USDA to determine whether work is being performed in accordance with the construction documents; and approval of payment requisitions to the Contractor.

**hemmler + camayd architects** will conduct a pre-construction conference with USDA Rural Development prior to the notice to proceed.



*Notre Dame Jr./Sr. High School*

**Project Completion and Post-Construction Services:** At the time of Substantial Completion of the project, **hemmler + camayd architects** will develop a Punch List and assist in closing out the project. A Post-Construction Visit will be scheduled by our firm with the Client's representatives and the Contractor in the eleventh month after the project is closed out, before the Twelve Month Warranty is over, to make certain that there are no outstanding problems to be carried beyond the warranty period. **hemmler + camayd architects** will assist you in having the Contractor solve any problems that may arise within the warranty period.

**Bear Creek Community Charter School  
Bear Creek Township, PA**Prequalification of Architectural Design Professionals  
September 27, 2012**g. Pennsylvania Department of Education**

Mr. Tom Gercak, RA, LEED AP BD+C who will serve as overall Project Manager, has experience in all phases of the Pennsylvania Department of Education PlanCon process inclusive of preparation of parts A (Project Justification) through J (Project Accounting Based on Final Costs) including district-wide feasibility studies, land acquisitions and Act 34 public hearings.

For the Bear Creek Community Charter School project, the Pennsylvania Department of Education provides the following requirements:

- Use of funds: a charter school may construct a facility with state or local funds. However, they are not eligible for reimbursement from the Commonwealth on construction projects.
- Nature of facility: A charter school must limit construction work to its school facilities and may not include non-school facilities in the construction project.
- Health and safety: The Commonwealth requires a charter school to comply with facility laws and regulations that pertain to the health or safety of pupils. To insure this, the charter school is required to submit PDE-397 to the Division of School Facilities at PDE prior to beginning construction. This form acts as confirmation that the school project is meeting all applicable building construction codes or professional guidelines. Charter schools also need to meet certain requirements of the Public School Code of 1949 as amended including design considerations, prevailing wage rates, steel procurement act, etc. PDE also requires advertisement for bid for projects of this size.

**hemmler +camayd architects** will review and comply with these requirements and assist in processing the PDE-397 form with Bear Creek Community Charter School.



*Notre Dame Jr./Sr. High School*



## VI. PROJECT SCHEDULE

### a. Project Schedule

Please see schedule sheet at the end of this section.

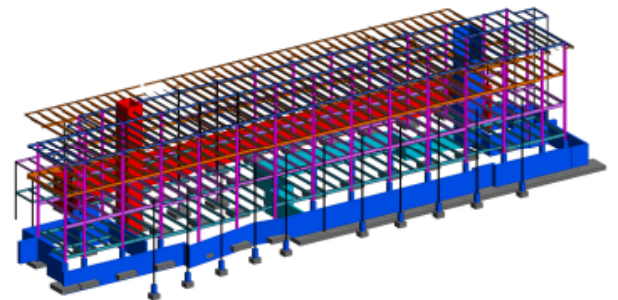
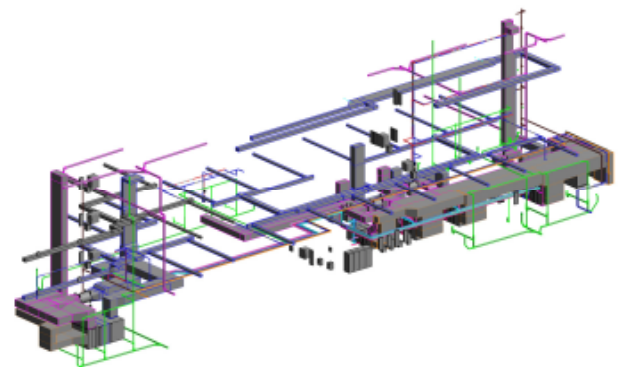
### b. Integrated/Multidisciplinary Planning and Design Process

As stated previously, **hemmler + camayd architects** has assembled the strongest team of professionals in our region for your project. We believe that a strong consensus among all stakeholders and an integrated design process will ensure the best possible results for Bear Creek Community Charter School. The integration of disciplines would begin in PreDesign with architecture, engineering, landscape, and interior design professional providing input into the formulation of conceptual plans. The integrated team would then assist the client team in the selection of a preferred alternative and then continue to work together throughout the design process to flesh out and document the design solution. A critical aspect of this early integration would be the coordination of various environmentally responsible design solutions. The coordination effort throughout the entire project would be led by **hemmler + camayd architects'** project manager who would review all discipline's designs/drawings and communicate with the entire team through meeting minutes and emails. Near the end of each stage, the design and its statement of probable cost would be shared and reviewed with the client team. One leading technology that we could utilize in the development of fully integrated contract documents would be BIM (Building Information Modeling).

BIM three-dimensional (3D) design is a technique that uses specific software to create a shareable model among all professionals as well as the client. A working 3D model can also serve as the foundation for a more thorough tool in the form of a Building Information Model (BIM). The 3D model is upgraded to BIM by adding associated output reports to create a combination of graphical and non-graphical data used to demonstrate the entire building life cycle, including construction and operation. BIM models encompass building geometry, spatial relationships, geographic information, and quantities and properties of building components.

During Construction Administration, the integrated process continues right through to final completion of the project with the contractor added to the team. An important element of this process during construction is the submittal review. Typically, submittals are usually given a ten-business day turn-around. That usually is sufficient to allow for cross-disciplinary review and processing of the requisite paperwork. If the project schedule demands a quicker response, we would respond accordingly.

Another potential aspect of integrated planning could be the inclusion of a third party for commissioning services. This would provide another layer of checks and balances on building systems during construction so that these systems are working properly before the owner moves in.







### c. Interfacing

As stated previously, **hemmler + camayd architects** has much experience through our work with the National Park Service and with various religious institutions in reaching out to stakeholders and the broader community for input and review of a construction project. Early on, we would hold a number of meetings where we seek input and discuss issues.

Typically, we would hold such meetings again when we have design alternatives for review. The stakeholder's responses would weigh in the selection of the preferred design alternative. Our next such meeting would be at the completion of Schematic Design, where the fleshed-out preferred alternative would be presented.

Mr. David Hemmler, AIA, Principal-in-Charge, would lead the professional team in interfacing with project stakeholders. We would ask that you structure the Client Team in such a manner that decisive action could be taken. We will bring our professional judgment to all situations, and make recommendations to possible outcomes. Ultimately, the choices and direction will be yours. We will provide the graphic and quantitative data that will inform you to make good decisions.



Our role during the construction phase is defined as administering the contract between the owner and contractor. In general, we observe construction, attend all meetings, answer questions and provide sketches and details if required. We review applications for payment and in general, inform you if construction is proceeding in accordance with the documentation and the schedule. This update would be communicated at the board's monthly meeting by **hemmler + camayd architects'** project manager.

### d. Public Relations

Not only is it good practice to keep the public and stakeholders informed, but it is also common courtesy to let them know what the next steps in the process will be.

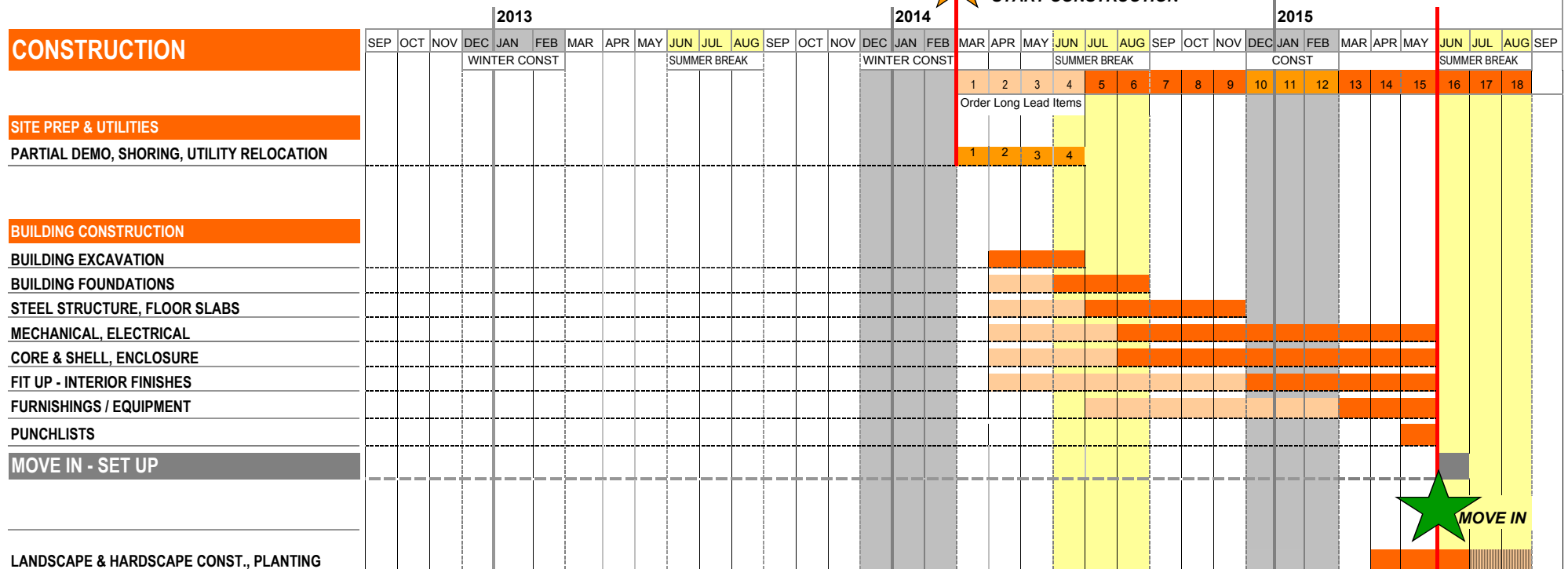
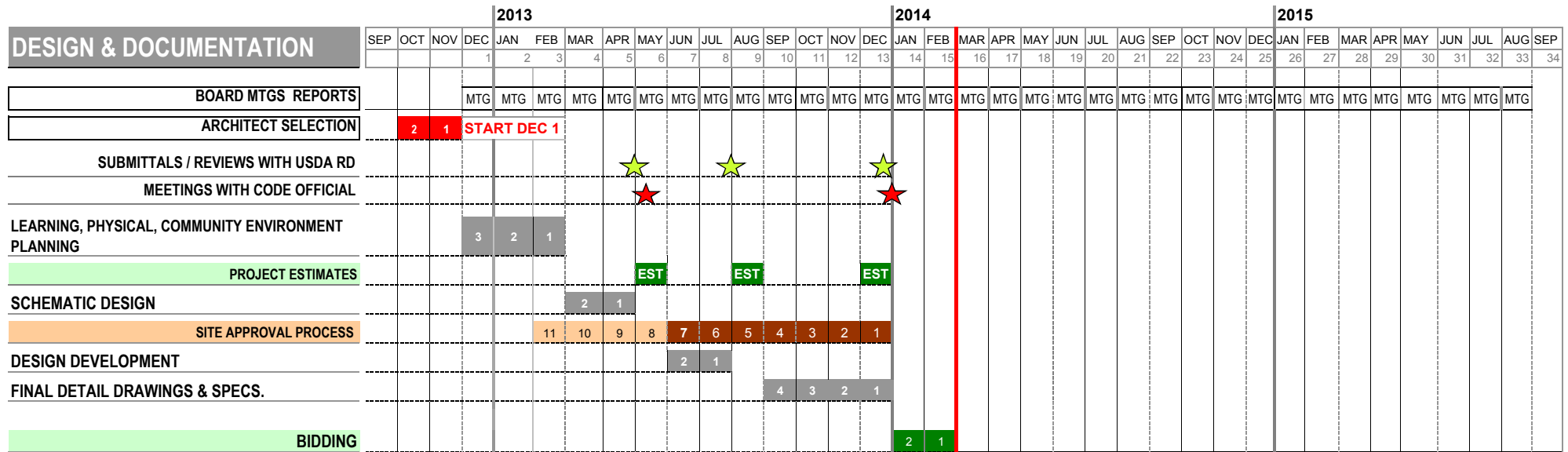
Public involvement requires conscientious documentation. From informational brochures or newsletters to a live construction camera on the Charter School's web site, all of these tools will contribute to the effectiveness of the public involvement in project development. **hemmler + camayd architects** will provide content and updates to the School throughout every phase of the project so they can keep the public and stakeholders informed.

Recording the process and the results is also important because that record is often consulted during decision-making. Accurate documentation also enables learning from successes and failures, allowing project managers and project concept team members to go back and evaluate what was done, what wasn't done and what might have been done better.

Ongoing documentation will help determine the best means for sharing information about the location, design and construction schedule.

a. Project Schedule

# Conceptual Schedule for Bear Creek Community Charter School



**Bear Creek Community Charter School**  
**Bear Creek Township, PA**

Prequalification of Architectural Design Professionals  
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## **VII. APPENDIX**

### **a. Addenda**

We acknowledge receipt of Addenda #1 dated September 5, 2012.



## FIRM PROFILE



(hemmler + camayd reminds us)

*"...everything we design and build has an impact on the place where it is built and on the people who live there; and that good design is a function not of size of firm, but of design talent and skill and commitment to excellence"*

*Walter F. Wagner Jr.  
Editor of Architectural Record*

Scranton Preparatory School



David Hemmler, AIA  
Alex Camayd, AIA

**hemmler + camayd architects**, an award-winning firm, services K -2, higher education, historic preservation, religious, corporate and hospitality markets centered in Northeastern and Central Pennsylvania.

Its professional staff of architects, planners and interior designers provides services ranging from feasibility studies and master planning to programming, design, construction contract administration, conditions assessments, ADA and building code compliance, facility management support and sustainable design.

With a roster of twenty employees, **hemmler + camayd architects'** offices are located in the historic Oppenheim Building in downtown Scranton, PA.

Over the last thirty four years, **hemmler + camayd architects** has earned recognition from its peers and awards from PHMC, GSA and the American Institute of Architects. Its work has been featured in national publications such as Architectural Record, Faith and Form, Architecture, among others.

## EDUCATION EXPERIENCE



Moravian College, Hurd Campus Living and Learning Center



Scranton Preparatory School, Xavier Center Gymnasium

### Design Methodology

The firm's leadership has crafted a balanced design methodology that it applies to all of the firm's projects, large or small. This time-tested approach invites the members of the client team to actively participate in the design process and explores and formulates thoughtful design alternatives. As a rule, this exploration leads to the best-value / most-responsive solution to the client's program, budget, and construction schedule. The effective implementation of this inclusive design process yields efficient and cost effective solutions that consistently exceed our clients' expectations.

Guided by a strong consensus, the professional team is able to properly develop the conceptual scheme. The mature solutions more specifically respond to a contextual aesthetic that incorporates honesty of structure, use of appropriate materials and expressed functionality. Far from a pre-conceived, recognizable style, the emerging design solution is intended to respond to project-specific circumstances.



## EDUCATION EXPERIENCE



Thomas Gercak, RA,  
LEED AP

### Educational Projects

Our considerable experience with various educational building types stems from our sustained involvement with K-12 schools, colleges and universities throughout Pennsylvania. Our higher education work has impacted twelve Pennsylvania campuses. Our K-12 clients include Scranton Preparatory School, Wyoming Seminary, MMI Academy, Notre Dame High School and the Abington Heights School District.

The services rendered to these institutions range from on-going facility management to the planning, design and construction of libraries, theaters, gymnasiums and restoration of irreplaceable historic structures.



Richard Leonori, AIA, PHMC

### Historic Preservation / Adaptive Reuse

hemmler + camayd architects has from its inception endeavored to preserve Pennsylvania's rich historic legacy. Our firm's leading role in the master planning and design of Steamtown National Historic Site commissioned by the National Park Service inspired in us a deep respect for the preservation and adaptive reuse of historic structures. The knowledge the firm acquired over a five-year long design / construction process proved invaluable for the preservation of many large and small historic structures throughout Pennsylvania.



Lackawanna College



MMI Preparatory School, Joseph A. Turri Library



## EDUCATION EXPERIENCE



### Interior Design

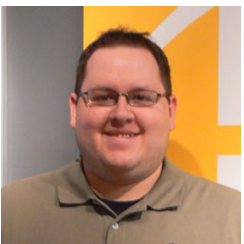
Far from limiting our interior designers' role to the narrow selection of finish materials and colors, these important members of our practice are, from the start, an integral part of the design team. Our interior designers' responsibilities encompass critical disciplines such as acoustics, lighting design, building code compliance and mechanical system integration to create a visually coherent and comfortable environment that supports the intended use.

Angela Sandy, NCIDQ

The interior design services provided by our firm include the selection of all finish materials and color schemes, and when required to do so, the selection, specification and installation of furniture, fixtures and equipment. Thoughtful material selections contribute to the broader goals of sustainable design and safer interior spaces.



Scranton Preparatory School, Bellarmine Theater



### Sustainable Design

**hemmler + camayd architects** believes that responsible design is sustainable design. Solutions that integrate items such as renewable materials, efficient water and energy consumption, and proper site use not only helps the environment, but also help us and our clients maintain our responsibility to the world we live in.

The U.S. Green Building Council's LEED Certification program has helped develop benchmarks that we can help our clients attain. Whether or not a client is seeking a certification, **hemmler + camayd architects** uses the LEED rating system as a guide to identify potential sustainable responses that can be integrated into the project. While LEED certification may be a goal for some projects, others may find that the money required for this process can be better utilized incorporating additional sustainable solutions.

At **hemmler + camayd architects**, we pride ourselves in assembling a design team that can accurately identify green solutions that stay in tune with budgetary and aesthetic project concerns.



## EDUCATION EXPERIENCE



Notre Dame Jr./Sr. High School



Ken Ruby, LEED AP BD+C

**Cost Control**

At **hemmler + camayd architects**, we take this often-overlooked aspect of the profession very seriously. We make it a practice to prepare increasingly detailed cost estimates as the design develops and system selections are finalized. Our approach is based on realistic pricing applied to accurate quantity take offs. To avoid the temptation of self-serving, misleading rationalizations, we rely on current reference material, including: RS MEANS Building Construction Cost data; in-house historical project and unit cost databases; and on our own cost estimating professional.

The ever-present challenge of formulating dependable budgets is to reconcile the Client and Design Team aspirations with the realities of the construction market. Our intention is to inform the design process so as to keep it focused on the critical decisions that affect the quality and performance of the finished product.

Our process allows the Client and the Design Team to promptly identify potential problems and make the necessary adjustments to avert costly redesign in the latter portions of the documentation process. When appropriate, we closely collaborate with expert cost estimators or construction managers whose responsibilities include the formulation of detailed construction cost estimates.



Phil Scheuermann, RA, CSI

**Software**

**hemmler + camayd architects** produces all work on its Windows network based computer system, utilizing Autodesk Architecture 2011 CAD Software and Building Information Modeling (BIM)/REVIT for all working drawings and construction documents. We are able to produce highly detailed digital renderings using 3D Max Design 2010. Microsoft Office is used for all of our administrative work. **hemmler + camayd architects** exchanges information throughout these systems and to other firms' systems on a regular basis. All files can be supplied to our clients via ftp, compact disc or via e-mail.

## Greenman-Pedersen, Inc. (GPI)

GPI is a full-service engineering firm specializing in the innovative engineering design of k12 facilities and site engineering systems. GPI is currently ranked 66th among the top 500 engineering design firms in the United States by *Engineering News Record* (April 2012).

GPI is second to none when it comes to providing *comprehensive* engineering services for the planning and engineering of k12 schools, additions & renovations. At every school district where we have the privilege of providing our services, our team of licensed engineers works in-concert with the architects, administrative and facilities personnel to develop the functional and budgetary goals of each project or situation. We provide the most advanced technological strategies available to effectively meet those goals, such as the incorporation of green building technologies whenever possible.



Over GPI's 40+year history we have provided our services to a variety of clientele including many colleges and universities, corporate clients, retailers, developers, hospitals, state and federal agencies, but during the past 12 years, **public and private schools account for 40% of our business** which has resulted in over \$1 billion in k12 construction. We attribute our long-lasting success in this arena to the talented, responsive service-oriented professionals employed by the firm - it is our people that set us apart.

We specialize in incorporating energy efficient designs with "healthy building technologies" to create spaces factoring in both immediate budget constraints and life cycle cost payback. We have applied many aspects of this philosophy on green architecture to several of our projects in the last ten years. We embrace an integrated approach to sustainable materials and building systems. Sustainable design has always been a concern to satisfy the needs of today's clients without diminishing the options of the clients of tomorrow. Addressing building issues such as energy, materials, waste, indoor air quality and maintenance in an "integrated system," or "nonlinear," approach provides opportunities for overlapping benefits of these concerns to reinforce each other and increases the efficiency of this approach.



Western Wayne School District  
Evergreen Elementary Center  
South Canaan, Pennsylvania



Western Wayne School District has been a client of GPI since 1998 - having provided continuous full-service engineering services for multiple projects, large and small, on various district facilities and sites. GPI worked with the District to identify a site for a new primary school at the southern end of the district boundary. The new primary center consolidates two existing elementary centers which have outlived their useful life span, and was the catalyst to begin early childhood education (pre-K) throughout the district.

The new 90,000 sf facility contains classrooms to accommodate 900 students in grades pre-K through 5, a cafeteria to seat 300, gymnasium facility to accommodate public venues, and a large group instruction space to seat 450 students. The site design included parking for 250 cars and four new athletic fields for varsity / junior varsity level sporting events. A portion of the site also includes amenities for public recreation activities. The total project cost is \$25 million. The site design incorporates rain gardens and bio-retention swales to minimize site stormwater runoff.

The project includes innovative architecture and engineering concepts to reduce energy, minimize consumption and to provide a superior learning environment. Heating / cooling systems include; a ground-coupled geothermal system, low flow water fixtures to reduce building water consumption by 40%. All teaching spaces include natural day lighting and the daylighting controls to turn lights off when there is adequate daylight available to illuminate spaces. Building finishes were selected with low VOC levels to provide better indoor air quality. The onsite septic system is a "living machine" that utilizes plants and aquatic life to treat sanitary discharge from the school. No chemicals are used in the treatment of sewage from the building.

The facility completed construction September 2011.



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Western Wayne School District  
Evergreen Elementary Center  
South Canaan, Pennsylvania



The new Evergreen Elementary School, designed for up 900 students and 100 staff, is approximately 90,000 square feet including classrooms, a library, cafeteria, gymnasium and administrative space. Along with a pleasant, energy and water efficient building, the building also creates a learning environment fostering environmental awareness and stewardship. The project site design included parking for 250 cars, four new athletic fields for varsity /junior varsity level sporting events and amenities for public recreation activities. The Elementary School Project incorporated several sustainable designs such as:

- A Tidal Flow Wetland Living Machine System that treats all sanitary flows from the School District by removing pollutants biologically. The system consists of 6 cells that have Tropical Plants and Wetland Media that creates an aeration process to breakdown the pollutants. The system is an open system that allows students to easily follow the sequential treatment process and creates a learning environment.
- The School recycles 100% of its wastewater. The effluent leaving the Living Machine System is chlorinated and then flows to an effluent storage tank and is pumped to a reclaimed water system (with further UV disinfection) to flush all toilets in the school. Treated effluent beyond flushing demands overflows to an irrigation disposal system with reuse benefits. The remainder of the effluent irrigates the Baseball and Soccer Fields.
- A total of six Bioretention Areas located in series were constructed on the site with native plants to remove pollutants and infiltrate storm water from the sites parking areas. A green roof was incorporated into a section of the roof to capture and naturally treat storm water.
- A geothermal system provides all heating and cooling. The closed loop system consists of a geothermal field, circulation pumps and water source heat pumps (one per classroom). Seventy-two geothermal wells (approximately 400 deep) transfer heat to/from the earth, heating the building on the coldest days without fuel-fired boilers.
- The buildings bright and friendly spaces were achieved with energy-efficient daylight harvesting, light colored material finishes, proper proportion and orientation of rooms and attention to location and size of windows. Highly reflective light shelves redirect natural light deeper into perimeter spaces and exterior sunshades reduce solar heat gain and glare in classrooms.
- The building was designed to be energy and cost efficient yet human and earth-friendly. An excellent thermal building envelope is provided through permanent insulated concrete form (ICF) bearing wall construction along with high performance windows, glazing and roofing system.





## COMPANY PROFILE

SM Design Group, LLC is a civil engineering firm located in Wilkes-Barre Pennsylvania. Our firm specializes in the design of both commercial and residential land development projects. We serve a wide array of clients including private, commercial, municipal, utility companies, both educational and religious institutions as well as to other professional firms. We are a start to finish civil firm meaning we can complete land development projects from the initial feasibility stage to final design and thru construction administration phase of the project.

The Company was established in June of 2006, and is privately owned and managed by two founding partners: Joseph Stachokus, PE and Robert B. Moosic, SEO. The two partners have a combined 39 years of experience in the civil engineering design and consulting field. Our mission is to assist our clients in the transformation of their goals and ideas into reality. We are committed to client satisfaction with unsurpassed service, dedication, and technical excellence.

Our firm has vast experience with the permitting process of projects from regulatory agencies such as the Pennsylvania Department of Environmental Protection, County Conservation Districts, the Pennsylvania Department of Transportation and Municipal and County Planning Commissions. These projects have ranged in size and scope as small as a Minimum Use Driveway Permit for a single-family house to as complicated as an Individual National Pollutant Discharge Elimination System (NPDES) Permit for the construction of a 50-acre life style retail center.

SM Design Group, LLC offers the following comprehensive civil engineering services:

- Commercial/Retail Land Developments
- Commercial and Residential Subdivisions
- Land Use Planning
- Roadway and Utility Infrastructure Design
- Stormwater Management Design
- Hydrology and Hydraulic Studies
- Storm and Sanitary Sewer Designs
- Erosion and Sedimentation Pollution Prevention Plans
- NPDES and DEP Permitting
- Highway Occupancy Permits
- On-Site Sewage Disposal Systems
- Flood Plain and Watershed Studies
- Bidding and Construction Phase Services
- Athletic/Recreation Facilities





## DERCK & EDSON ASSOCIATES

### *firm overview*

Our mission at Derck & Edson Associates is to make the outdoors great. We provide quality planning and design services to shape the natural and built environment in innovative and functional ways.

Our staff of dedicated landscape architects, civil engineers, and land planners provides the full range of design and technical capabilities necessary to carry a project through the entire design and construction process.

Since the establishment of the firm in 1940, our dedication to satisfying clients' needs for function, responsiveness, economy, and creativity has produced innovative and enduring design solutions.

At Derck & Edson Associates, we provide the best in land planning, site design, civil engineering, and construction administration services. Our firm is built on a long and rich history, tomorrow's technology, and a talented team of design professionals.

Clients include higher education and secondary education, downtown centers, corporate facilities, senior living communities, athletics, and parks and recreation facilities throughout the Mid-Atlantic region.

We can be reached at our Lititz or Bellefonte offices or through our web site:

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DERCK & EDSON  
ASSOCIATES





## Landscape Master Plan Hershey, Pennsylvania

Sustainability, and its relationship to campus landscape, can be studied in light of two key approaches: an environmental approach and a maintenance approach.

At Milton Hershey School, a campus of over 2,500 acres, we are taking a macro look at the campus first and delineating areas that require a traditional landscape treatment from areas that can be more naturalized.

In the naturalized areas, less time will be spent on what would be considered traditional landscape maintenance tasks (mowing, mulching, trimming shrubs). Instead, attractive meadow planting will be installed and groundcover will be used instead of yearly mulching. Shrub beds will be kept orderly by first, carefully selecting appropriate shrubs, and then placing them properly so they have room to thrive.



Traditional landscapes on a campus are areas characterized by order - order in the design of planting beds and plant selection as well as order in maintenance practices that are achieved through greater attention and labor. In areas where a traditional landscape is more appropriate, the cost savings realized through establishing naturalized areas will be redirected to the traditional areas, allowing them to take center stage and receive



the maintenance treatments these areas require.

In addition to mowing, mulching, and trimming of shrubs, water is another key maintenance issue. The increased meadows proposed will be a benefit to storm water management because meadow areas are better than lawn areas at absorbing runoff.



Along the top, several transformation sketches are used to illustrate the concepts of the landscape master plan. Directly above, the plan for Spartan Commons/Town Center shows an increase in plantings in this traditional landscape area.



## PROJECT HIGHLIGHTS FOR BEAR CREEK COMMUNITY CHARTER SCHOOL



### Linden Hall School for Girls, Stengel Hall Addition

A new 1,600 square foot addition was capped off by a new green roof to manage storm water for the site, advance the sustainability goals of the PROJECT school, and provide a unique and aesthetically-pleasing element to the campus.



### Birmingham-Southern College, Urban Environmental Park

Used as a living laboratory and teaching venue as well as a recreational venue, the Urban Environmental Park brings together many sustainable features including: storm water/ water quality elements, native and adaptive native plants, locally-sourced hardscape materials, and lighting that supports dark skies criteria.



### Susquehanna University, New Science Building

As part of the overall design team for this project, we were also responsible for the new plaza, created with stone pavers to look like a large-scale periodic table of elements. In addition to speaking directly to the scientific curriculum, the pavers are a green solution that allows storm water to infiltrate back into the soil. Donor opportunities are also available for individual pavers or "elements." The project has received LEED Silver certification.



## Firm Profile

Founded in 2000, Reuther & Bowen, P.C. is a highly accomplished, talented and diverse structural engineering firm working with architects, owners, steel fabricators and contractors on many complex issues. Areas of practice include college & university buildings, research laboratories, healthcare facilities, public and private schools, office buildings, commercial and residential projects. We also offer in-house, enhanced structural services, including; structural detailing (shop drawing development) and building information modeling (BIM), Integrated Project Delivery (IPD), peer review services, value engineering, and structural integrity investigations.

Throughout our history, we have developed and maintained a preferred status with our clients because of our dedication to service - and by having exceptional and creative design capabilities. Our team also brings a positive attitude toward working in a team and a desire to accomplish the goals of each project – functionally and aesthetically. This ability to combine innovation with cost-effective solutions is fundamental to a successful partnership with our clients and for our continued success.

## Colleges & Universities

Reuther & Bowen have designed numerous types of facilities for colleges and universities throughout the United States and beyond. This has included both new signature buildings and major renovation projects. Type of buildings we have designed are; new student housing complexes, classroom buildings, scientific research laboratories, athletic facilities, parking garages, libraries, natatoriums, healthcare & wellness facilities, culinary arts centers, schools of architecture, faculty housing, arts centers, student centers, administrative buildings and technology buildings.

Some of the institutions Reuther+Bowen have had the opportunity to serve are;

Bergen County Community College  
City College of New York (CCNY)  
Duke University  
East Stroudsburg University  
Fordham University  
George Mason University  
Keystone College  
Kutztown University  
Luzerne County Community College (LCCC)  
Marywood University  
Misericordia University  
Morrisville State University (SUNY)  
Moravian University

Montclair State University  
New Jersey Institute of Technology (NJIT)  
Pennsylvania State University  
Princeton University  
Rutgers University  
The College of New Jersey  
Shippensburg University  
University of Scranton  
University of Medicine & Dentistry of New Jersey (UMDNJ)  
University of Puerto Rico  
University of Southern Alabama  
William Paterson University

