










Cleveland Heights University Heights City School District

STATEMENT OF QUALIFICATIONS
for Professional Services for a Master Planning Consultant

PREPARED FOR:
Cleveland Heights - University Heights
City School District

BOWEN
RICHARD L. BOWEN + ASSOCIATES INC.

CANNONDESIGN

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A1 Cover Letter

RICHARD L. BOWEN + ASSOCIATES INC.

216.491.9300

FAX.491.8053

13000 SHAKER BLVD

CLEVELAND, OHIO 44120

BRANCH OFFICE

PITTSBURGH, PA

WWW.RLBA.COM

August 19, 2011

Steven Zannoni
Project Management Consultants
127 Public Square, 39th Floor
Cleveland, Ohio 44114

Re: Statement of Qualifications for Master Planning Consultant for Cleveland Heights–University Heights City School District

Dear Mr. Zannoni:

Our firm is so very pleased to present our team's Statement of Qualifications to provide Master Planning services for the Cleveland Heights–University Heights City School District. We have teamed with Cannon Design, a firm with a worldwide reputation for 21st Century School planning, programming and design. Each of our firms has a strong background in providing K-12 planning, design and construction services. Together, we have teamed on seven local projects, six of which were for schools

As conveyed in the RFQ and published reports from the Citizens Facilities Committee, Dejong Healy, and the Ohio School Facilities Commission, CHUH CSD has a blend of distrinctive demographics, goals and challenges. Our team is uniquely qualified to understand the nuances of the school district. Not only are we headquartered just minutes away on Shaker Square, my family and I were residents of Cleveland Heights for more than 20 years. David Bowen, a principal of our firm and a member of Cleveland's Planning Commission, is a Cleveland Heights High School alumnus, having graduated in 1976. David took the lead in public engagement and partnering sessions when the Richard L. Bowen + Associates and Cannon Design Team worked with Cleveland Metropolitan School District on the historic John Hay High School Renovation and five other CMSD school projects.

Our team is committed to the education of children. We know from experience that well-designed buildings can improve test scores, reduce absenteeism, conserve energy, and provide a healthy environment for both students and staff. Please feel free to contact me or David Bowen directly at our offices. Or, you can reach David on his cell phone at 216-570-5747. We would be delighted to present our credentials as a team in person to the School District.

Sincerely,

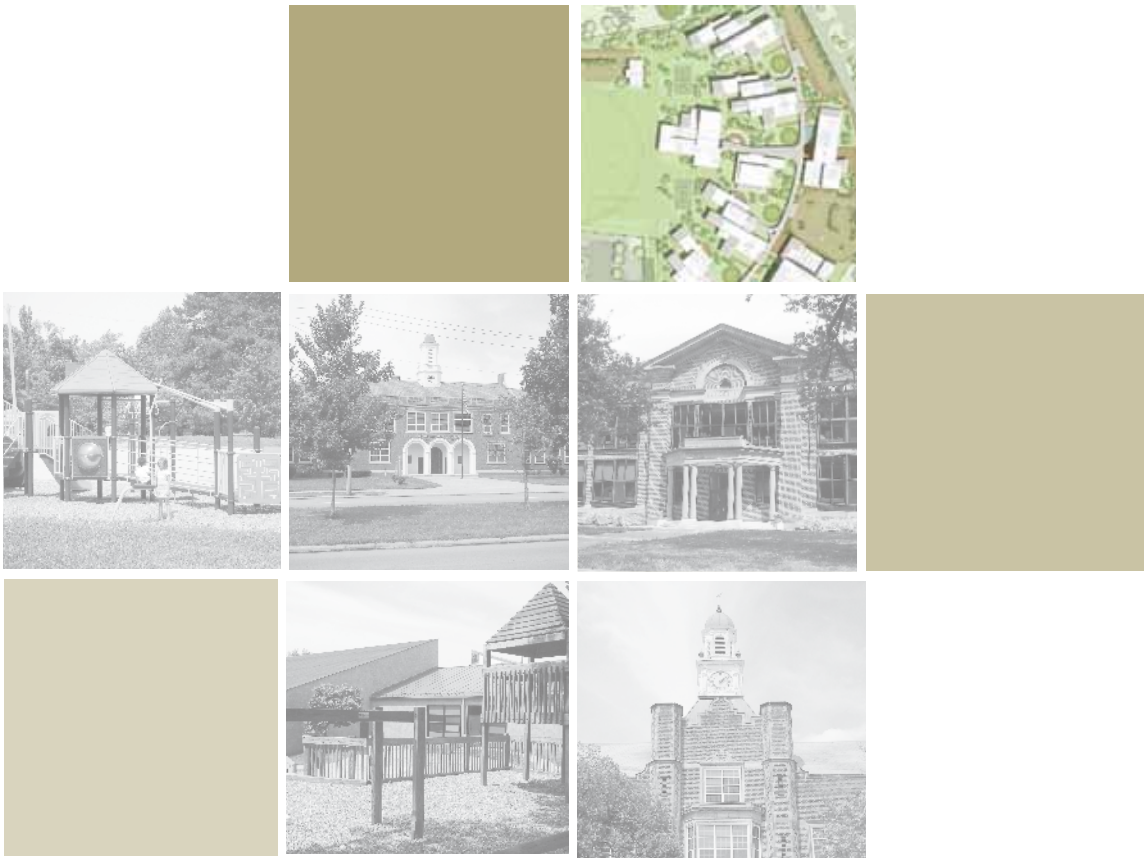
RICHARD L. BOWEN + ASSOCIATES INC.

Richard L. Bowen, AIA
President

ARCHITECTS

ENGINEERS

CONSTRUCTION MANAGEMENT



A2 Company Overview

THE TEAM:

Richard L. Bowen + Associates (RLB+A) and Cannon Design (Cannon) is a collaboration between two firms who have worked together successfully for more than 10 years. Together, the firms have designed multiple K-12 projects for the Cleveland Metropolitan School District. Independently, RLB+A has performed as construction managers for more than 25 Ohio school facility projects and Cannon has established a worldwide reputation as thought leaders in designing 21st Century Schools.

Our Team brings the credentials of 'school' architects and engineers (i.e., A/E's), meaning each of our principals are experts and team leaders that have dedicated their careers to the best practices in their respective disciplines. The delivery of exemplary professional services in the Smart Planning process will be lead by our principal-in-charge. Starting with the senior-most officers in our organization, a spirit of partnering and collaboration then transfuse every member of our team. This collaboration works with our principal planner having the focus upon solving the program and functional aspects with a view towards creating an architectural essence. The design and engineering discipline leaders concurrently mold and integrate the architectural and sustainability opportunities to transform the school into a source of pride for the students, teachers and the greater community.

Our portfolio of successful planning and school projects of all sizes and typologies span 40 years with nearly 20 million square feet of construction. We long ago realized that the best solutions start with a clear focus on how the proposed plan will improve 'each day in the life of each student's pursuit of new knowledge.'

As educational planners and designers, Cannon Design brings experiences from across the country that attest our approach is different. We certainly respect the importance of public schools to the fabric and livelihood of the Cleveland Heights, University Heights and South Euclid communities. We also appreciate the need for schools to earn and reclaim the civic stewardship that encourage the possibilities in our most valued resources -- our children -- to achieve and sustain our leadership role in an ever more competitive and shrinking global marketplace. In that regard, the expectations, conflicts and contradictions cannot be more glaring than in our urban, city school systems.

Our A/E team's commitment to partnering is essentially focused on becoming the most trusted advisor and collaborator with Cleveland Heights-University Heights City School District (CHUH CSD). We are not just seeking to perform an array of tasks, but instead to create a shared vision and results where a school bursts with the dynamism of students and educators not only meeting, but exceeding expectations. Accordingly, we are convinced that good minds and effective communication produce great design that shape perceptions, sense of place, and profound learning experiences in inspired facilities.

RICHARD L. BOWEN + ASSOCIATES INC.

Since 1959, Richard L. Bowen + Associates Inc. (RLB+A) has combined talent, innovation, and technology to provide exceptional architecture, planning, engineering, and construction management services, together as one.

RLB+A's full-service capabilities for all building types and sizes provides our clients with professional management, diligent site supervision, personal attention, and one point-of-accountability. We listen to you for program, budget, and schedule.

Educational Project Portfolio

Although RLB+A's total project portfolio includes a mix of governmental, retail, office and transit facilities, a significant portion of our firm's effort is focused on the educational sector. Combined total workload dedicated to school design and construction is approximately 25%. The majority of these projects have been subject to the requirements of the Ohio School Facilities Commission.

Multiple Disciplines Under One Roof

As a full-service firm, RLB+A offers planning, architecture, engineering (civil, structural, electrical and mechanical) and complete construction management services. Following is a glimpse at the services we offer:

- Master Planning
- Feasibility Studies
- Architectural Design
- Civil Engineering
- Mechanical Engineering
- Plumbing Engineering
- Electrical Engineering
- Structural Engineering
- Interior Design
- Building Information Modeling (BIM)
- Construction Documents
- Specifications
- Bid Review
- Contract Administration
- Renderings and Models
- Highway and Road Design
- Energy Modeling
- LEED Certification
- Building Commissioning
- Project Management
- Programming Analysis
- Environmental Analysis
- Site Planning
- Site Analysis
- Space Planning
- Building Analysis
- Code Analysis
- ADA Analysis
- Master Planning
- Systems Analysis
- Building Design/Renovation
- Community Engagement

CANNON DESIGN

Founded over sixty years ago, Cannon Design is ranked among the leading international architectural, engineering, and planning firms for healthcare, science & technology, education, sports & recreation and government clients. At present, the firm employs a staff of 1,000, delivering services in 17 offices throughout North America, as well as abroad in Shanghai, China, and Mumbai, India. Ranked by volume as the 20th largest practice in the world in World Architecture's 2009 global survey, Cannon Design has been recognized with over 250 awards for design excellence, technological innovation, and imaginative thought leadership.

An Ideas-Based Practice, Cannon Design is recognized for design excellence and technological innovation, and known for performance and dedication to client service. Cannon Design's 'single firm, multi-office' (SFMO) practice approach enables the firm to fully integrate the activities of its offices in Baltimore, Boston, Buffalo, Calgary, Chicago, Houston, Los Angeles, Mumbai,
New York, Phoenix, San Francisco, St. Louis, Shanghai, Toronto, Vancouver, Victoria and Washington, DC., into a single unified firm without walls. This methodology offers clients worldwide consistent access to the full resources of the organization, irrespective of location. As such, the practice serves clients across North America, as well as Europe, the Middle East, India, and the Far East.

A strong team of complementary professionals is essential for success in today's complex planning, design, and building environment. For this reason, Cannon Design is committed to the principle of multi-disciplinary teamwork. By assembling multiple disciplines within our organization, we provide our clients with a single point of responsibility, accountability, coordination, and communication for all required work.

Planning
- Master Planning
- Urban Planning
- Strategic Planning
- Feasibility Studies

Architecture
- Building Design
- Rehabilitation and Renovation
- Restoration, Preservation and Adaptive Re-use
- Facilities Survey and Evaluation

Interior Architecture
- Programming and Space Planning
- Interior Design
- Furniture and Furnishings
- Graphic, Signage, and Art Programs

Engineering
- Structural
- Mechanical
- Electrical
- Telecommunications
- Plumbing
- Fire Protection
- Building Systems Commissioning

Specialty Services
- Program Management
- Construction Management
- Cost Estimating
- Extended A/E Services
- Design Build

The Third Teacher Plus

The Third Teacher Plus is an education design consultancy within Cannon Design's K-12 practice that helps learning communities better serve 21st century learners.

With an eye on the future of learning, the multidisciplinary team of Trung Le, Christian Long and Sarah Malin collaborate with these communities and global thought leaders to formulate systemic strategies for pedagogical, curricular, and environmental change. These strategies can then be fully realized through the integrated architectural/engineering services of Cannon Design.






A3 Insurance Certificate

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 1/24/2011

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Selvaggio, Teske & Associates 3401 Enterprise Parkway, Suite 101 Beachwood OH 44122	**CONTACT NAME:** Patricia A. Cholewa **PHONE (A/C, No, Ext):** 216-839-2807 **FAX (A/C, No):** 216-839-2815 **E-MAIL ADDRESS:** pcholewa@stassociates.net **PRODUCER CUSTOMER ID #:** BOWEN-1
INSURED Richard L. Bowen & Associates, Inc. 13000 Shaker Blvd. Cleveland OH 44120	**INSURER(S) AFFORDING COVERAGE** — **NAIC #** **INSURER A :** Travelers Indemnity Co of CT — 25682 **INSURER B :** Travelers Indemnity Company — 25658 **INSURER C :** Hudson Insurance Company — 25054 **INSURER D :** **INSURER E :** **INSURER F :**

COVERAGES **CERTIFICATE NUMBER:** 215727360 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	**GENERAL LIABILITY** X COMMERCIAL GENERAL LIABILITY [ ] CLAIMS-MADE [X] OCCUR X AI Primary X Severability GEN'L AGGREGATE LIMIT APPLIES PER: [ ] POLICY [X] PRO-JECT [X] LOC	Y	Y	6807469L1111	1/25/2011	1/25/2012	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG OH Stop Gap	$1,000,000 $1,000,000 $10,000 $1,000,000 $2,000,000 $2,000,000 $1,000,000
B	**AUTOMOBILE LIABILITY** X ANY AUTO [ ] ALL OWNED AUTOS [ ] SCHEDULED AUTOS X HIRED AUTOS X NON-OWNED AUTOS X AI Primary	Y	Y	BA7469L62111	1/25/2011	1/25/2012	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) 	$1,000,000 $ $ $ $ $
B	X **UMBRELLA LIAB** [X] OCCUR **EXCESS LIAB** [ ] CLAIMS-MADE [ ] DEDUCTIBLE X RETENTION $10,000	Y	Y	CUP8150Y42111	1/25/2011	1/25/2012	EACH OCCURRENCE AGGREGATE 	$5,000,000 $5,000,000 $ $
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) [ ] Y / N If yes, describe under DESCRIPTION OF OPERATIONS below	N / A					[ ] WC STATU-TORY LIMITS [ ] OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $ $ $
C	Professional Liabililty Claims Made Retro Date: 1/25/1961	N	Y	AEE7245400	1/25/2011	1/25/2012	Each Claim Aggregate	$5,000,000 $10,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

Additional Insured and Waiver of Subrogation as designated above is provided when required of the Named Insured by written contract or agreement.

CERTIFICATE HOLDER

Specimen
For Purposes of Evidencing
Coverage Only OH 44120

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Patricia A Cholewa

ACORD 25 (2009/09) The ACORD name and logo are registered marks of ACORD





B1 Facility Master Planning Experience

Master Planning

From our Team's recent experience with over ten district-wide plans (see summary below), several have been selected for their range of possibilities in the CHUH context. One is from a slightly smaller district, others from larger urban systems, and one is a unique PK/12 private preparatory school campus-within-a-campus of its parent university. We have had the privilege to implement the actual school projects, with the exception of Niagara Falls, NY, where the public referendum vote has been pushed to later this year, or early 2012.

Our intent is to help convey process, as well as some of the techniques and tools we have found to be most successful in our Smart Planning approach. While the sizes of the districts do vary, the common denominator of "transforming schools" to be competitive in the 21st century global marketplace is an over-riding goal shared by all stakeholders.

In should be noted that in the Appendix Section of this submission we have provided additional project experience that illustrate innovations in educational planning and design.

District-Wide Educational Facilities Master Plans Services Provided:	**Addison Central Schools** Addison, NY	**Albany City Schools** Albany, NY	**Buffalo Public School** Buffalo, NY	**Cayman Islands Ministry of Education** Grand Cayman, Cayman Islands	**Chicago Public Schools** Chicago, IL	**Niagara Falls City Schools** Niagara Falls, NY	**Rochester Public Schools** Rochester, NY	**Roosevelt Public Schools** Roosevelt, NY	**University School of Nova Southeastern** Ft. Lauderdale, FL	**Yonkers Public Schools** Yonkers, NY
1.0 Survey & Assess Existing Facilities	✓	✓	✓		✓	✓	✓	✓	✓	✓
2.0 Prioritize Building & Program Needs	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3.0 Benchmark Academic Performance	✓	✓	✓			✓		✓		✓
4.0 Facilitate Meetings: Users, Stakeholders, Town/Community, Review Agencies	✓	✓	✓	✓	✓	✓		✓	✓	✓
5.0 Demographic Alignment by School (raw data provided by others)	✓	✓	✓			✓		✓		✓
6.0 Standards & Core Model Programs (by grade and school type)	✓	✓	✓	✓	✓	✓		✓	✓	✓
7.0 Concept "Test Fits" by School	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
8.0 Master Budget Control/State Reimbursement Eligibility	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
9.0 Master Schedule Control	✓			✓	✓	✓		✓	✓	✓

Yonkers Public Schools Educational Facilities Plan

Yonkers, New York

YONKERS PUBLIC SCHOOLS: EDUCATIONAL FACILITIES PLAN SUMMARY MATRIX — January 2008

SCHOOL NAME	KEY EXISTING BENCHMARKS					PROPOSED PLAN BENCHMARKS					Preliminary State Aid (Percentage)	Preliminary Local Share (Percentage)
	Original Date of Construction	Quartile: State-wide Testing	Quartile: Building Needs Cost / Student	Enrollment (Oct. 2005 BEDS)	Prior Grade Structure	Proposed Grade Structure	Planned Enrollment	Planned Class Sections	Planned Land Acquisition	Proposed Improvements		
A.1 Gorton High School (replacement)	1923	3rd (mid-low)	2nd (mid-low)	1,476	9/12	9/12	1,420	12	No	New	$33.7M (42%)	$47.3M (58%)
A.2 Riverside High School (Campus with Museum School 25)	1992	2nd (average)	1st (lowest)	882	6/8	9/12	870	8	No	Reconstruction/ Addition	$34.3M (37%)	$58.5M (63%)
A.3 Lincoln High School	1951	3rd (mid-low)	2nd (mid-low)	1,714	9/12	9/12	1,045	9	No	Reconstruction/ Addition	$27.8M (46%)	$32.5m (54%)
A.4 Roosevelt High School	1926	4th (lowest)	2nd (mid-low)	1,828	9/12	9/12	1,220	10	No	Reconstruction/ Addition	$24.4M (40%)	$36.1M (60%)
A.5 Saunders Trade/Tech High School	1969	2nd (average)	1st (lowest)	1,395	9/12	9/12	1,396	5 + CTE	No	Reconstruction	$22.2M (46%)	$25.9M (54%)
A.6 Commerce Middle / High School (College Board Math & Science)	1930	4th (lowest)	1st (lowest)	797	6/8	6/12	773	4 MS / 3 HS	No	Reconstruction/ Addition	$18.3 (43%)	$32.4 (54%)
A.7 Yonkers Middle High School (I.B. 'linked' with Siragusa School 14)	1974	2nd (average)	2nd (mid-low)	1,759	6/12	6/12	1,595	6/8	No	Reconstruction	$30.6M (46%)	$35.9M (54%)
A.8 Mark Twain Middle / High School (Montessori Campus with School 11)	1971	3rd (mid-low)	2nd (mid-low)	891	6/8	7/12	1,056	6	No	Reconstruction	$26.6M (34%)	$51.9M (66%)
Sub Total – Secondary Schools	**54 years (average age)**			**10,762 students**			**9,375 students**				**$217.9M (41%)**	**$312.4M (59%)**
B.1 Siragusa School 14 (I.B. /replacement)	1902	2nd (average)	2nd (mid-low)	413	PK/5	PK/5	612	4	No	New	$8.3M (24%)	$27.1M (76%)
B.2 School 21 (replacement)	1914	1st (highest)	2nd (mid-low)	388	PK/5	PK/8	892	4	Yes (street & park)	New	$14.5m (27%)	$39.3m (73%)
B.3 School 22 (replacement)	1914	2nd (average)	2nd (mid-low)	394	PK/5	PK/8	892	4	Yes (street & park)	New	$14.2M (27%)	$38.9M (73%)
B.4 Paideia School 24 (replacement)	1930	2nd (average)	1st (lowest)	268	PK/5	PK/8	892	4	Yes (park + 2 homes)	New	$14.4M (24%)	$45.3M (76%)
B.5 Dodson School	1959	2nd (average)	2nd (mid-low)	774	PK/7	PK/8	940	4	No	Reconstruction/ Addition	$13.7M (29%)	$33.9M (71%)
B.6 Museum School 25 (Campus 'linked' with Riverside High)	1930	4th (lowest)	2nd (mid-low)	479	PK/5	PK/8	940	4	No	Reconstruction/ Additions	Combined with Riverside	Combined with Riverside
B.7 Family School 32	1957	4th (lowest)	2nd (mid-low)	489	PK/7	PK/8	940	4	No	Reconstruction/ Addition	$14.2M (28%)	$36.4M (72%)

Project Responsibilities:
Strategic Planning
Educational Benchmarking
Facility Assessment
Site Analysis/Selection
Space Programming
District Standards
Architecture
Engineering
Cost Control
Schedule Control

Schedule:
2008 -2010
(under State review)

Client Contact
Mr. Bernard Pierorazio Superintendent of Schools
914.376.8105

As one of the "Big 5" largest school districts in New York State, Yonkers has about 25,000 students in 39 buildings with an average age that exceeds 75 years old. Cannon Design was commissioned to address the challenges of developing an internet website data base as an existing Building Conditions Survey (BCS), along with a District-Wide Educational Facilities Plan.

The BCS encompassed 4.3 million sf, and comprehensively documents 130 different building systems and equipment--the bricks and motar--as well as utilities and site improvements. The cost-loaded data base generates customized reports by building, or overall, and can be readily escalated to allow future O&M budgeting.

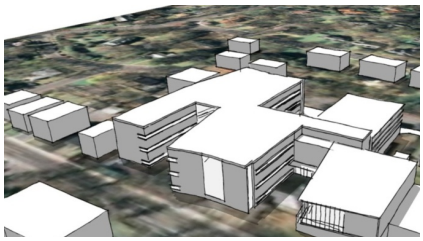
The Plan provides the District with a 10-year framework for the transformation of antiquated facilities up to 21st century standards. The strategic drivers included:

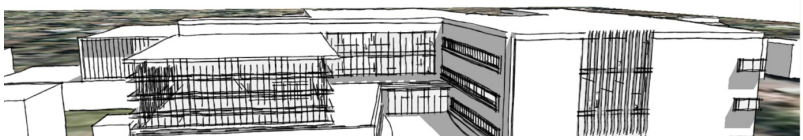
- Equity in terms of durability and sustainabilty.
- Small learning communities that were educationally based.
- Grade re-structuring to PK/8 and academic/career technical high schools supporting project-based, collaborative learning.
- Consolidation from 39 facilities to 32 high performance schools that provided high quality, yet flexible learning opportunities.

The overall plan is budgeted at $1.3 billion, and with creative phasing could implement the reconstruction, additions, and complete replacement of schools with minimal disruption. The key in that regard is using the 7- schools to be retired as "swing space".

Yonkers Public Schools Educational Facilities Plan

Yonkers, New York





Yonkers Public Schools
Educational Facilities Plan

Planned Enrollment & Demographic Summary
Special Education Students "Included"
Cannon Proj. No. 2694.03

Revision Date: 18 Jan. 08

School Name (Proposed Work Scope)	October 2005 BEDS	Grade Structure: 2005/06	Grade Structure: Proposed	ESL	PK	K	1	2	3	4	5	6*	7*	8*	PK / 8 Totals	9*	10*	11*	12*	9 /12 Totals	Spec. Ed. Class Rooms	Planned Total Students
Sub Total Planned PK / 8 Schools	15,076	PK / 6	PK / 8	820	1,152	1,280	1,430	1,430	1,430	1,430	1,496	1,364	1,464	1,728	15,024	0	0	0	0	0	87	15,024
Classroom Sections per Grade (incl. Sci. Labs*):																						
Sub Total Planned High Schools	9,945	9 / 12	9 / 12	160	0	0	0	0	0	0	0	198	384	384	1,126	2,044	2,019	1,969	1,869	7,901	31	9,027
Grand Totals Planned PK / 12 Students	25,021			980	1,152	1,280	1,430	1,430	1,430	1,430	1,496	1,562	1,848	2,112	15,990	2,044	2,019	1,969	1,869	8,041	118	24,051
Planned Total w/ESL Students Distributed PK/12					1,234	1,362	1,512	1,512	1,512	1,512	1,578	1,644	1,930	2,194	15,990	2,084	2,059	2,009	1,909	8,061		24,051
Demographic Projections PK / 8 Students					1255	1588	1646	1666	1373	1473	1454	1442	1400	1278	14,575	0	0	0	0	0		14,575
Demographic Projections PK / 8 Special Education					123	122	122	122	122	122	122	122	122	122	1,221	0	0	0	0	0		1,221
Projected Totals PK / 8 Students					1378	1710	1768	1788	1495	1595	1576	1564	1522	1400	15,796	0	0	0	0	0		15,796
Demographic Projections 9 / 12 Students					0	0	0	0	0	0	0	0	0	0	0	1673	1361	1013	889	4,936		4,936
Demographic Projections 9 / 12 Special Education					0	0	0	0	0	0	0	0	0	0	0	106	106	106	105	423		423
Demographic Projected Total 9 / 12 Students					0	0	0	0	0	0	0	0	0	0	0	1779	1467	1119	994	5,359		5,359
Projected Grand Totals					1378	1710	1768	1788	1495	1595	1576	1564	1522	1400	15,796	1779	1467	1119	994	5,359		21,155
Planned -vs- Demographic Net Shortage or Surplus					-144	-348	-256	-276	17	-83	2	80	408	794	194	305	592	890	915	2,702		2,896
Note: figures in Red indicate Net Shortage																						
Reconciled Grade Leveling (i.e. 100% H.S. Graduations)					1378	1710	1768	1788	1495	1595	1576	1564	1522	1400	15,796	1800	1800	1800	1800	7,200		22,996

University School of Nova Southeastern University

Fort Lauderdale, Florida

Project Responsibilities:
Strategic Planning
Site Analysis/Selection
Space Programming
Architecture
Interiors
Furniture/Signage
Engineering
Info/Communications Technology
Cost Control
Schedule Control

Schedule:
2006 - 2013

Client Contact
Mr. Jerry Chermak
Headmaster
954.262.4419

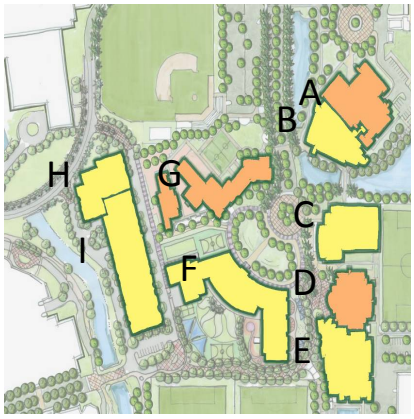
The goal was to systematically redevelop the Nova Southeastern University with its private PK/12 college preparatory schools as the campus centerpiece. The vision is thus the embodiment of the "educational continuum" from early childhood to college grad school. The fund raising is complete, Phase I is occupied, and Phase II is underway. The highlights of this campus-within-a-campus feature:

- Relocation of the Lower School Division (PK/5) into replacement facilities on the enlarged campus.
- A new Arts Center (visual and performance) that helps to define an oval "great yard" with covered walkways and drop-off loop for events.
- New Middle School Division classrooms and Library/Media Center.
- Phase II includes a new Middle/Upper School cafeteria, major science lab and classroom upgrades (9/12).
- The Athletics Center will also be expanded (gym, pool, lockers and supports), along with several new play fields.

The parent Nova Southeastern University will continue the expansion of the campus onto new land to the southeast of the recently completed Student Fusion Center, Cannon's first project on the campus. Phase III will included new student housing and a range of athletic venues for collegiate and intramural sports.

University School of Nova Southeastern University

Fort Lauderdale, Florida



PK/12 Campus-in-a-Campus:

A. Upper School
B. Cafe (Middle & Upper) Addition
C. New Auditorium / Arts Center
D. Sport Center Additions
E. Sport Center Addition
F. New Lower School
G. Middle School
H. New Central Plant (by Univ.)
I. New Parking (by Univ.)

Renovation

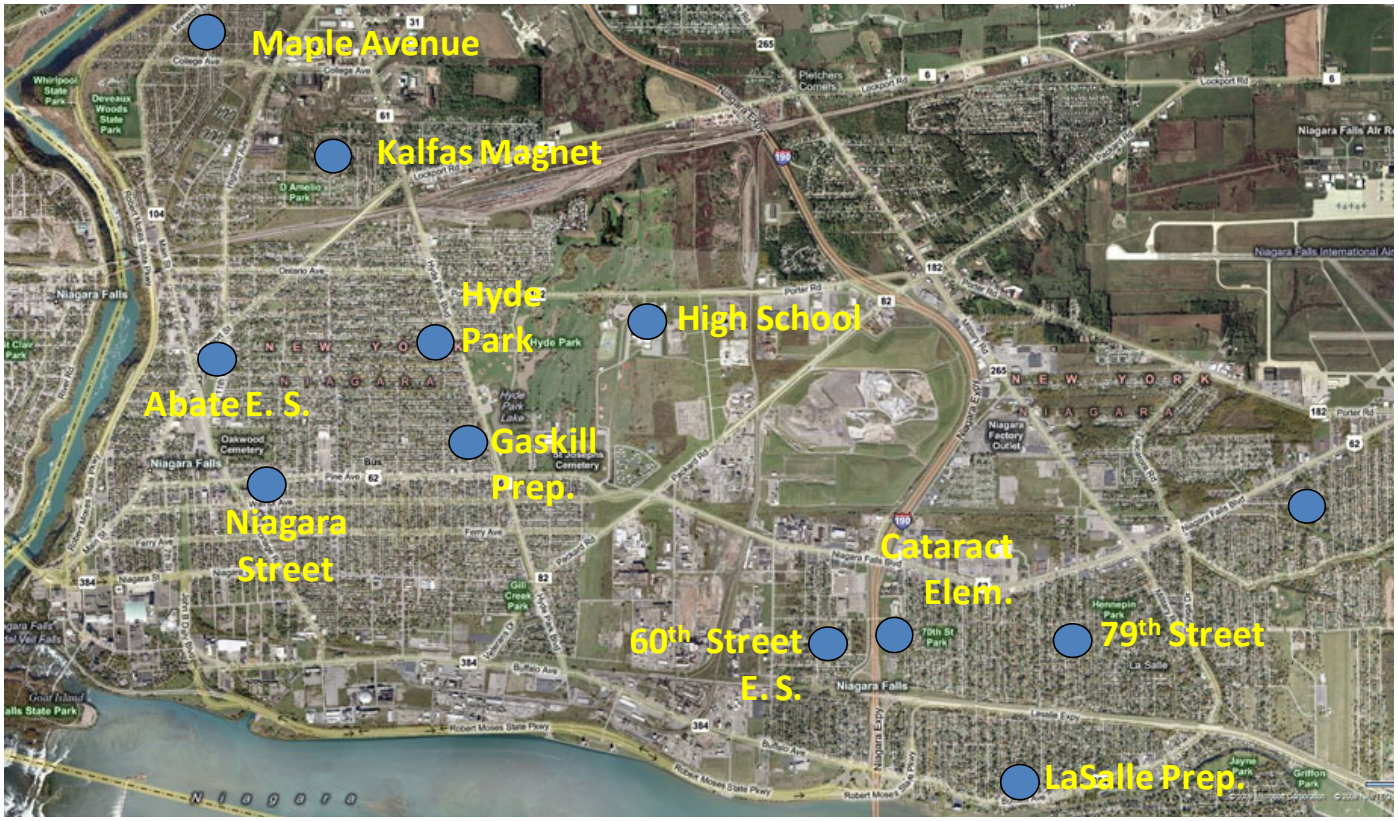
New Construction

Phase I

Phase II

Niagara Falls City School District Educational Facilities Plan

Niagara Falls, New York



Project Responsibilities:
Strategic Planning
Educational Benchmarking
Facility Assessment
Site Analysis/Selection
Space Programming
Architecture
Engineering
Cost Control
Schedule Control

Schedule:
2010 - 2015

Client Contact:
Cynthia Bianco
Superintendent of Schools
716.286.4211

The Niagara Falls City School District faced a major dilemma:

- The age of its school building stock exceeded 60 years old on average.
- The instructional spaces were obsolete--65% of the classrooms, and virtually all science labs were substandard by the State's Education Department criteria.
- The schools were long "overdue" for a district-wide information/communications technology infrastructure.

Cannon Design developed an Educational Facilities Plan comprised of an internet website data base as an existing building conditions survey as the foundation for a District-wide plan to reinvent this public school system to align with 21st century best practices. The plan established the logic by which on a building-by-building rationale, we could "fix the basics, while building on strengths with confidence". Working with the stakeholder "user groups", the preferred age specific Core Model Programs by school type were prioritized, then consistently applied to determine the needed reconstruction and additions to assure equity of curriculum, opportunity, and facilities.

Our Smart Planning Approach generated building specific "Test Fit" concepts by using design workshops called charettes, where the actual stakeholders could see and participate in the evolution of ideas, and take greater ownership of the results.

Niagara Falls City School District Educational Facilities Plan

Niagara Falls, New York

CANNONDESIGN

School District: Niagara Falls

Five Year Plan Prioritization Worksheet with Aid Projections

Aid Rate: 98.0% **Incidental Allowance** 20.0%

Building ID: 0015

Building Name: Maple Avenue Elementary School

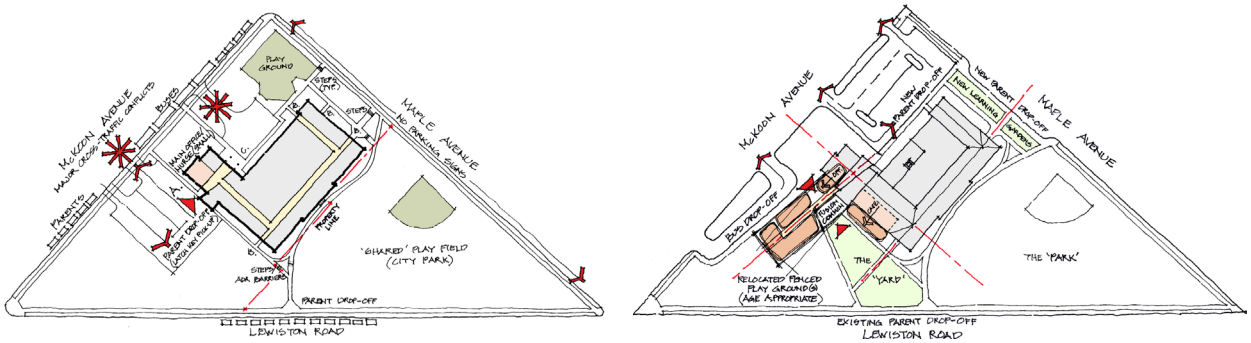
Submisson Date: 5/5/2010 **Status:** Draft

Revision Date: 2/8/2011

Default Building Condition Summary Priorities:
(SHS) Structural Health/Safety: Aspect of facility exhibits deterioration, deformation, etc of an unsafe condition.
(U) Unsatisfactory: Aspect functions unreliably, or has exceeded useful life and needs repair or replacement.
(NF) Non Functioning: Aspect Not Functioning as designed, or unreliable in ways that may endanger health or safety.
(CF) Critical Failure: Same as above (NF) with part of facility not usable/occupied until needed work completed.
(SC) Satisfactory With A Cost: Aspect operates but not at original design level, and is planned for replacement.
(N) New Program Initiative: Proposed new program item.

Total Project Costs Per Priority		
Priority 1:	95.7%	$8,157,379.00
Priority 2:	0.0%	$0.00
Priority 3:	4.3%	$363,640.00
Priority 4:	0.0%	$0.00
Priority 5:	0.0%	$0.00
Total:	100.0%	$8,521,019.00

Pri	Cond	B.C.S. Scope/Line Items	Project Costs 2010	2011		2012		2013		2014		2015		Year 6 +	Special Credits	5 Year Plan Costs	Est. Local Costs	Prosposed Scope/Additonal Comments	Brd Apr
				%	$	%	$	%	$	%	$	%	$						
1	SC	Plumbing Fixtures-84	$51,897	0.0%	$0	100.0%	$56,153	0.0%	$0	0.0%	$0	0.0%	$0		$0	$56,153	$1,038	Gang toilets have been upgraded for ADA. Staff toilet, clinic are in original building and should be updated. Staff toilet in the addition is ADA compliant.	
1	N	New Initiatives: Core Model Program	$6,799,157	0.0%	$0	100.0%	$7,356,688	0.0%	$0	0.0%	$0	0.0%	$0				$135,983		
1	SC	Piping-90	$855,000	0.0%	$0	100.0%	$925,110	0.0%	$0	0.0%	$0	0.0%	$0		$0	$925,110	$17,100	Replace the piping and terminal units.	
1	SC	Communications System-79	$64,325	0.0%	$0	100.0%	$69,600	0.0%	$0	0.0%	$0	0.0%	$0		$0	$69,600	$1,287	PA system is operational but has limited features; approaching end of useful life. Replacement is recommended.	
1	SC	Air Handling-89	$387,000	0.0%	$0	100.0%	$418,734	0.0%	$0	0.0%	$0	0.0%	$0		$0	$418,734	$7,740	Replace pool unit.	
		Subtotals For Priority 1	$8,157,379		$0		$8,826,284		$0		$0		$0		$0	$8,826,284	$163,148		
3	SC	Playgrounds-54	$20,000	0.0%	$0	100.0%	$21,640	0.0%	$0	0.0%	$0	0.0%	$0		$0	$21,640	$400	Older style but serviceable.	
3	SC	Int. Bearing Walls-66	$5,496	0.0%	$0	100.0%	$5,947	0.0%	$0	0.0%	$0	0.0%	$0		$0	$5,947	$110	Provide 2-hour rated enclosure at electrical room.	
3	SC	Pools-80	$4,976	0.0%	$0	100.0%	$5,384	0.0%	$0	0.0%	$0	0.0%	$0		$0	$5,384	$100	Final connections at pool water heater show signs of corrosion; replace. Remove abandoned heat exchanger and piping from pool equipment room.	
3	SC	Interior Door Hardware-74	$6,156	0.0%	$0	100.0%	$6,661	0.0%	$0	0.0%	$0	0.0%	$0		$0	$6,661	$123	See Above	
3	SC	Sidewalks-53	$17,407	0.0%	$0	100.0%	$18,834	0.0%	$0	0.0%	$0	0.0%	$0		$0	$18,834	$348	Cost includes replacement of 50 sf of sidewalk, and repair of portions of a 2 1/2 ft high retaining wall on the south side of the school.	
3	SC	Interior Doors without Hardware-74	$34,735	0.0%	$0	100.0%	$37,583	0.0%	$0	0.0%	$0	0.0%	$0		$0	$37,583	$695	Replace four doors at stair enclosure. (Also see smoke detection system comments.)	
3	SC	Site Gas-38	$8,873	0.0%	$0	100.0%	$9,601	0.0%	$0	0.0%	$0	0.0%	$0		$0	$9,601	$177	Utility has aged past its approximate design life and should be replaced.	
3	SC	Light Fixtures-78	$11,961	0.0%	$0	100.0%	$12,942	0.0%	$0	0.0%	$0	0.0%	$0		$0	$12,942	$239	Upgrade corridor lighting.	
3	SC	Ext. Stairs-62	$109,924	0.0%	$0	100.0%	$118,938	0.0%	$0	0.0%	$0	0.0%	$0		$0	$118,938	$2,198	Re-build stone stairs at one location south elevation; repoint other area 10 lf.	
3	SC	Site Sanitary-37	$5,250	0.0%	$0	100.0%	$5,681	0.0%	$0	0.0%	$0	0.0%	$0		$0	$5,681	$105	Drains in basement back up during heavy storm events. Utility has aged past its approximate design life and should be replaced.	
3	SC	Site Fuel Oil-39	$31,237	0.0%	$0	100.0%	$33,798	0.0%	$0	0.0%	$0	0.0%	$0		$0	$33,798	$625	Existing tank is double-walled steel. It will be brought up to code during Phase 3.	
3	SC	Site Electrical-40	$64,529	0.0%	$0	100.0%	$69,820	0.0%	$0	0.0%	$0	0.0%	$0		$0	$69,820	$1,291	Electrical service upgrade is recommended. The system is operating as intended, but is nearing the end of its useful life.	
3	SC	Water Distribution-81	$12,518	0.0%	$0	100.0%	$13,544	0.0%	$0	0.0%	$0	0.0%	$0		$0	$13,544	$250	Replace galvanized piping; water service on site was replaced at time of last addition.	
3	SC	Fire Alarm-93	$23,040	0.0%	$0	100.0%	$24,929	0.0%	$0	0.0%	$0	0.0%	$0		$0	$24,929	$461	Add fire alarm devices in selected locations for system improvements.	
3	SC	Emerg. Exit Lighting-96	$4,654	0.0%	$0	100.0%	$5,036	0.0%	$0	0.0%	$0	0.0%	$0		$0	$5,036	$93	Add emergency lighting in selected locations to meet Section 1028 of the NYS Fire Code for 1 footcandle.	
3	SC	Interior Electrical-77	$2,884	0.0%	$0	100.0%	$3,120	0.0%	$0	0.0%	$0	0.0%	$0		$0	$3,120	$58	Add receptacles in selected rooms.	
		Subtotals For Priority 3	$363,640		$0		$393,458		$0		$0		$0		$0	$393,458	$7,273		
		Totals For Building	$8,521,019		$0		$9,219,743		$0		$0		$0		$0	$9,219,743	$170,420		



Test Fit Concept Diagrams and Budget (above)

Roosevelt Union Free School District
Educational Facilities Plan
Roosevelt, New York

Project Responsibilities:
Strategic Planning
Educational Benchmarking
Facility Assessment
Site Analysis/Selection
Space Programming
District Standards
Architecture
Interiors
Furniture/Signage
Engineering
Info/Communications Technology
Cost Control

Schedule:
2002 - 2003

Client Contact:
Mr. Ronald Ross
Former Superintendent of Roosevelt School District
914.763.5387

Mr. Carl Thurnau
Director of Facilities, Planning & Design
New York State Education Department
518.474.3906

Mr. Edward McCormick
Former Board President
845.264.1222

Roosevelt Union Free School District was elevated to a unique status in the history of New York State education, as the first public school system completely taken over by the State Education Department (SED). The process began with the appointment of a new School Board by the State Board of Regents. In order to reestablish a direction for the Roosevelt schools, the State commissioned Cannon Design to develop a comprehensive facilities plan for the entire District and reassure residents that the delivery of quality education in up-to-date facilities was indeed an attainable goal.

Once commissioned, Cannon Design quickly set out to build consensus among the various user groups and stakeholders. The State passed unprecedented legislation granting the District 98% funding aid on 'eligible costs' based on the assumption that the work could be addressed through renovations. However, Cannon's detailed existing facility assessments confirmed that all of the District's schools had deteriorated to the point they could no longer be cost-effectively renovated. The funding was subsequently adjusted through the development/evaluation of alternatives and negotiations over a year that the State would provide 88% of the total actual project costs, while local school taxes would cover the balance. The solution to build four new replacement schools became a 'win/win' proposition that was supported by a record 3:1 margin in the public referendum vote in June 2004 that approved the largest capital program ever for a Long Island district.

Because land is so limited in this District, Cannon conceived a 'domino strategy' for neighborhood schools using existing facilities as 'swing' schools, or temporary facilities, while the new facilities are being designed and constructed. A new middle school is planned for a site to be assembled from underutilized land currently owned by the Town and County. This ambitious building program commenced in June 2004, with the 'fast track' design/construction (a first for SED) and occupancy of the first of three replacement elementary schools in a record 14 months was truly an accomplishment. The SED Commissioner himself was on hand to welcome the students and teachers to the "opening day" milestone in the re-birth of a better public school system.

New Classroom Computer Daylight Model Study

Roosevelt Union Free School District
Educational Facilities Plan
Roosevelt, New York

Existing Facilities Assessment Summary
Roosevelt Union Free School District
Facility: Junior / Senior High School

Rating Codes: 1 = Excellent; 2 = Satisfactory; 3 = Unsatisfactory; 4 = Major Deficiency / Failure; 5 = Indeterminate

Built: 1955 | Const Type: 2A | Stories: 2 | Site Area: 19.8 acres | Students: 1,060
Addition: 1962, 1979 | Const Type: 2B | Grades: 7-12 | Floor Area: 136,730 sf | Staff:

A. Architectural / Structural:

Subsystem	Rating	Comments
1. Parking Pavement Drainage	3	Significant cracks, local depressions; inadequate drainage.
2. Bus Provisions	-2	Curbside along entire block, but also cross traffic conflict with parking.
3. Sidewalks	3	Significant spalling & cracking.
4. Exterior Steps / Ramps	-2	Original main entries & auditorium need no ramps; all other entries non-ADA.
5. Exterior Signage	4	Inadequate; need complete system.
6. Exterior Lighting	3	Inadequate; need major upgrade.
7. Play Areas / Fields / Fencing	3	Need re-grading, topsoil, re-seeding; completely replace fencing.
8. Landscaping	-2	Minimal, front flower beds are not planted, rear hedges are overgrown.
9. ADA Accessibility	3	Comprehensive plan required, including entries, doors, toilets, play fields.
10. Foundation/Drainage /Below-Grade Walls	2	Minor repairs needed; water leakage; structure is satisfactory.
11. Slabs-on-Grade *	-2	Patch minor cracks in 1975 classroom block. (*mostly in crawl space)
12. Structure / Load Bearing	2	Average for age / construction type.
13. Exterior Walls / Masonry	2 4	Patch expansion joints @ new addition. Many cracks at corners/lintels/openings.
14. Windows / Sills / Hardware	4	Lintels severely rusted, cracking joints, allowing water freeze / thaw problems.
15. Emergency Windows	4	All windows need replacement.
16. Exterior Doors / Hardware	4	Completely obsolete; replacement needed.
17. Automatic Doors	4	None provided / non-ADA.
18. Roof Covering / Drains / Flashing	3 4	Roof membrane beyond warranty. Drains inadequate, flashings failing.
19. Floor Finishes	-3	Maintaining extensive / patched VAT; VCT also dated, with localized cracking.
20. Wall Finishes	-3 -2	Original plaster is rutted by chairs. CMU walls need repainting.
21. Interior Doors / Hardware	4	Complete replacement is needed.
22. Ceilings	4	Complete replacement is needed.
23. Toilet Rooms / Partitions	4	Non-ADA; replace completely.
24. Fire Separations	2 3	Locations adequate; assemblies fair. Unmanageable 5'-0" door leafs at links.
25. Exit Stairways / Rails	4	Replace railings; some open stairwells, conflicting door swings.
26. Elevator(s) / Lifts	3	ADA upgrade is required; also need more convenient second location.

B. Major Program Functions

Subsystem	Rating	Comments
1. Main Entry / Canopies	3 4	Most entries recessed but w/o vestibules. Not ADA compliant.
2. Main Office	4	Single location / layout dysfunctional for separate junior / senior high school.
3. Assistant Principal / House Office(s)	4	Completely inadequate retro-fits.
4. Display Case(s) / Corridor Lockers	3 -3	Inadequate for junior / senior high. Original lockers are 23-47 years old.
5. Guidance Office(s)	4	Converted, over-crowded, non-ADA and poor location.
6. Nurse Office	4	Clinic type layout lacking privacy.
7. Health Clinic	4	State grant, converted classroom has inefficient layout, poor HVAC.
8. Social Work / Psych	3	Found spaces virtually ad hoc.
9. Transportation Office	5	No provisions; confirm policy.
10. Security Office	3	Found space (original dental exam room).
11. Staff / Resource / Support Rooms	4	Inadequate for junior / senior high school.
12. General Classrooms	4 3	Furniture / millwork poor; chalk / tack boards inadequate; need rehab.
13. Computer Room(s)	4	Rooms too small, no cable management, no air conditioning.
14. Science Room(s)	4	Completely obsolete; replace.
15. Special Ed Room(s)	4	No provisions; confirm policy.
16. Art Room(s)	4	Obsolete; too small.
17. Music – Band	4	Original (1955); too small; non-ADA.
18. Music – Vocal	4	Original (1955); too small; non-ADA.
19. Home Careers	4	Original (1955) obsolete; senior high has no facilities.
20. Technology Shop	4	Intro to occupations is inadequate; senior high uses BOCES; shops converted.
21. Library / Media	4	Shared facility is inadequate.
22. Auditorium	4 1	Original ('55) needs complete renovation. Seating capacity is very good.
23. Gym(s) / Pool	4	Non-regulation size in junior high. Over 30 years old in senior high.
24. Lockers / Showers	4	Obsolete, too small; replace.
25. Cafeteria / Kitchen	4	Separate facilities, each too small; kitchens inefficient; no receiving.
26. Receiving / Storage	4	Found space; poor location.

Existing Facilities Assessment Summary
Roosevelt Union Free School District
Facility: Junior / Senior High School

C. Mechanical / Plumbing

Subsystem	Rating	Comments
1. Site Utilities	2	
2. Plumbing / Sanitary	2 4	Many sections have been replaced. Many back-ups, leaks in crawlspace.
3. Plumbing Fixtures	3	Are old, and have been vandalized.
4. Storm Drainage	2	
5. Fire Protection	N/A	Stage is not sprinklered.
6. Boilers / Head-end	-3	One out of service; others original & beyond useful life; evidence of leaks.
7. Heating / Cooling	3	Air handling units are original equipment and are beyond their useful life.
8. Ventilation	4	Many air handling units are not operating and the controls do not function.
9. Controls / Energy	4	Controls are antiquated pneumatic; many areas do not function properly.
10. HVAC Piping	2	
11. Exhaust Fans	2	Generally in good condition; some fans in need of replacement.
12. Water Heaters	2-	Tank apparently in satisfactory condition; interior inspection should be performed.
13. Oil Tank	5	Appears to have been replaced; age and condition is unknown.

D. Electrical

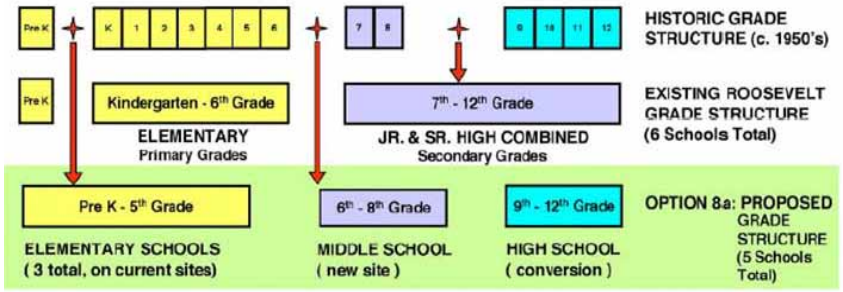
Subsystem	Rating	Comments
1. Main Service	3	Increase service transformers / equipment to 1600-amp, 480-volt capacity.
2. Power Distribution	3	Replace distrib. / branch circuits; install clean power distrib. for computer tech.
3. Lighting / Controls	3	Install auto lighting controls. Replace auditorium/stage/exterior lighting.
4. Emergency Power / Lights	4	Install emergency generator. Replace emergency lights and exit signs.
5. Technology / Cable Infrastructure	4	Install LAN infrastructure and video distribution system.
6. Communications – Telephones	3	Install new telephone system with administrative and classroom handsets.
7. Paging System	4	Replace entire paging system. Replace auditorium sound system.
8. Clock System	4	Replace clocks with synchronous, 3-wire system.
9. Security System	2	Expand to protect tech equipment; install more motion detectors/CCTV cameras.
10. Fire Alarm System	3	Replace to comply with current codes/ ADA standards.

E. Environmental

1. Hazardous Material	4	Multi-locations & types (insulation, packing, VAT, linoleum, lead paint)

Option 8a :

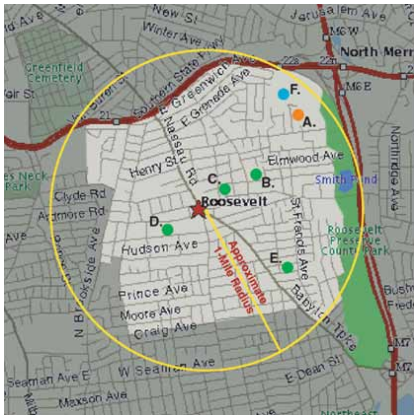
Three Pre-K to 5th Grade Elementary Schools
One 6th through 8th Grade Middle School
One 9th through 12th Grade High School



- Classrooms, 5 each grade (35 Total CR's) using 'team' teaching
- Projected Enrollment @ 615 plus Special Education, 18 students average class size
- Special Education Self Contained Classrooms @ 8 to15 students each
- Building Size = 97,300

- Classrooms, 10 each grade 2 'swing' (32 Total CR's) dedicated 'house' concept
- Projected Enrollment @ 790 plus Special Education
- Self Contained Special Education Classrooms @ 6 to 15 students each
- BOCES, 3 Classrooms @ 9 students each
- Building Size = 162,600

- Classrooms, 10 each grade (40 Total CR's), conversion to modified 'house' concept
- Projected Enrollment @ 986 plus Special Education
- Self Contained Special Education Classrooms @ 9 to 15 students each
- Incorporates the Project Grad Program
- Building Size = 209,400



Roosevelt UFSD Facilities Inventory

Existing Schools:	Year Built
A. Pre-Kindergarten Center (portable trailers)	1971
B. Harry Daniels Elementary	1962
C. Washington Rose Elementary	1913
D. Centennial Avenue Elementary	1929
E. Ulysses Byas Elementary	1929
F. Junior / Senior High School	1955

Project Responsibilities:
Strategic Planning
Educational Benchmarking
Facility Assessment
Space Programming
District Standards
Architecture
Interiors
Engineering
Information/Communications Technology

Schedule:
2001-2013

Client Contact:
Mr. Paul McDonnell
Associate Architect
716.816.3562

Buffalo Public Schools Strategic Plan

Buffalo, New York

New York State Governor Pataki appointed a Joint School Construction Board in 2001 to unravel the disarray in the Buffalo Public Schools, and oversee a program to rebuild the facilities. Having planned and completed the largest school project in each of the first two phases of this 10-year redevelopment expected to cost $1 billion, Cannon Design was retained to prepare the Districe-wide Standards and Strategic Plan. The scope covered nearly 80 schools with an average age exceeding 75 years old, as well as varying conditions, facility provisions, and grade configurations.

Prior to this Update, the district operated facilities in nine (9) different grade configurations for 38,000 students, which was completely dysfunctional in terms of administration, teaching continuity and balanced enrollments.

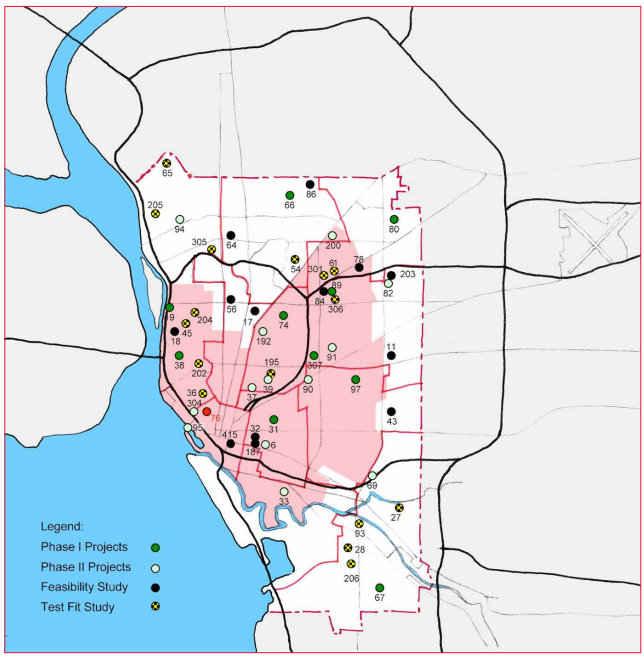
The issues of equity and basic operating efficiencies profoundly complicate the need to re-organize / re-tool the District with a 21st century educational delivery that competes in a worldwide marketplace. All of the Buffalo Schools were consistently evaluated in terms of Building Conditions, per the State Education Department (SED) requirements, with a far greater emphasis placed upon the educational aspects and supports necessary to address the demographic extremes of a large urban school system.

A critical aspect of our 'smart planning' approach is a visioning process where we partner with a special 'kitchen cabinet' convened and empowered by the Superintendent. The Program goals, objectives, and criteria are generated in a series of work sessions involving the District's educational leaders, department heads, principals, teachers and the city-wide District Parent Community Council. A set of 'Core Models' were developed that delineated the Program requirements line-by-line for each of the preferred school types.

The available building stock was then rigorously studied building-by-building as a 'test fit' concept to validate the best candidates for reconstruction, major additions, enlarged sites, and/or relocation. For the first time in the District's history, a consistent and systematic assessment was documented using the guiding principle of making the facilities fit the educational initiatives, rather than forcing the Program into buildings that do not work.

A total of nine schools have been unanimously approved by the Board of Education and SED for Phase III.

The Buffalo Plan as of Phase III will represent a $650 million investment in the public schools.



Buffalo Public Schools Strategic Plan

Buffalo, New York

Buffalo Public Schools
Strategic Plan Update

Program Biograph:
South Park High School P.S. 206

The majestic, federalist styled building occupies an entire city block, and is the only High School located in South Buffalo. The 160,000 square foot building has four occupiable floor levels and was constructed in 1914. The plan is symmetrical about the center main entry, semi-circular auditorium, with courtyard light wells to either side. The resultant circulation is a very compact, continuous "loop" that simplifies way finding.

Benchmarks 2003/05	Percent/District Quartile
• Students graduating in 4 years	41% / 3rd
• Graduates with Regents Diplomas	28% / 3rd
• Student dropouts during High School	20% / 4th

Program Concept
South Park is representative of most of the City's high schools where the usable classroom areas fall well below the State's minimum guidelines. (See the highlighted key plans to the right.) The proposed Program Concept would reorganize the school into dedicated grade-level "houses" consistent with the approved Core Model Program for a comprehensive High School. The concept creates the District's ideal configuration of five classroom sections per grade clustered with the full array of specialized and instructional support facilities including Special Education, computer, and science classrooms along with convenient student toilets and a dedicated administration office area for each "house". The technology education curriculum components would be addressed by a wide array of career/technology labs giving the students choices, and the District the ability to adapt to new fields of study as market or new career trends emerge.

Strategic Concerns
Achieving the overall reorganization requires a classroom and Physical Education building addition. The following Core Model Program elements appear to be cost prohibitive, or impractical to incorporate:

- ADA accessibility regarding the historic Auditorium/Stage.
- Economic viability of any major improvements to Physical Education facilities.
- Outdoor play field(s), without having to cross a city street (currently using that vacant, private land by easement).

Existing Context

Proposed Program Summary

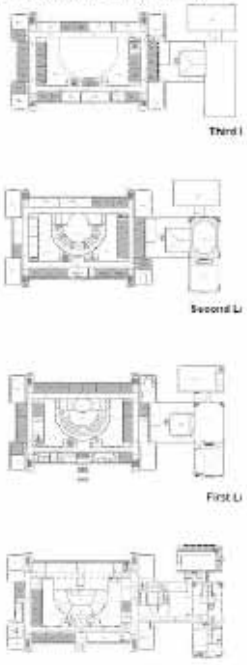
Original Building Date: 1914 (1936 addition)
Proposed Addition / Area: Yes / 33,840 sf
Total Gross Building Area: 229,925 sf
Outdoor Play Field: None/adjacent private land
Planned Enrollment: 930 Students

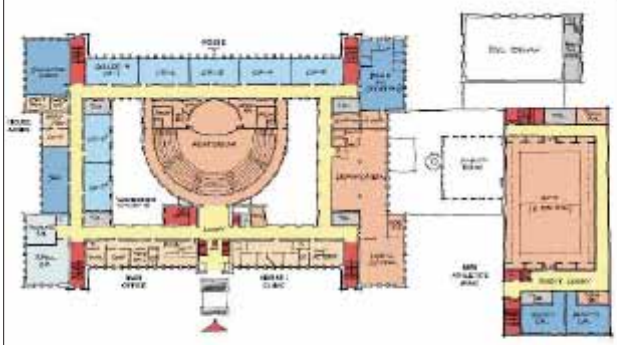
Grade Structure: The High School occupies an entire city block, and would be reconstructed as a house concept providing the District's ideal five (5) classroom sections per grade. A new P.E. wing including health CR's is also required.

Major Program Elements	Grade 9	Grade 10	Grade 11	Grade 12
• General Classrooms (CR's)	5+2*	5	5	5
(*Commencement Academy Alt.)				
• Special Education CR's	2	1	1	1
Resource Rooms	2	1	1	1
• Computer CR	1	1	1	1
• Science CR	1	2	2	2
• Remodel House Administration	Yes	Yes	Yes	Yes
• Toilet Rooms by Grade Level	Yes	Yes	Yes	Yes

Specialized Functions:						
	Nurse:	Yes	Art:	2	Library:	Enlarge
	Clinic:	Yes	Chorus:	1	Cafe/Kitchen:	Enlarge
	Faculty Development:	Yes	Band:	1	Gym/Lockers:	New/Enlarge
			CIT Labs:	8	Auditorium	Existing

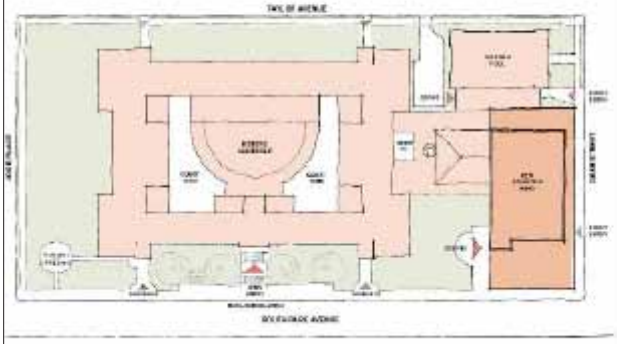
Note: Shaded areas indicate classrooms significantly below the State minimum area



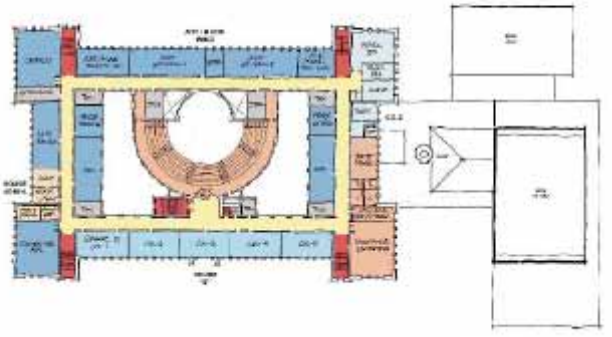


South Park High School P.S. 206
First Floor Level

South Park High School P.S. 206
Third Floor Level



South Park High School P.S. 206
Proposed Site Plan



South Park High School P.S. 206
Second Floor Level

Albany City School District
Master Plan
Albany, New York

Project Responsibilities:
Strategic Planning
District Standards
Facility Assessment
Site Analysis/Selection
Space Programming
Architecture
Engineering
Info/Communications Technology
Cost Control
Implementation/Peer Review

Schedule:
1999-2007

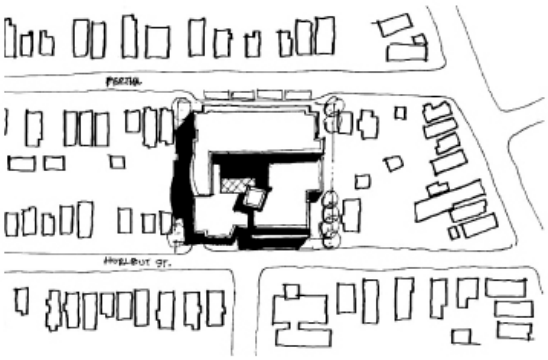
Client Contact:
Eva Joseph, Ed.D
Former Superintendent
518.438.7895

The average age of a school was over 85 years old in the state capital of Albany, NY. Faced with widespread deterioration of aging and outdated facilities, Cannon Design was retained by the City School District of Albany to provide a district-wide master plan to address how the building inventory could best support the district's educational objectives for the future.

The initial phase of Cannon Design's work involved a thorough assessment of the district's 21 buildings in order to systematically conduct an architectural and engineering survey of each building to define current physical quality and condition, identify critical physical deficiencies compromising the health and safety of occupants or the basic integrity of the building, and evaluate the degree of "fit" between each building and the functional objectives of the current educational program relative to the needs of students, faculty, community, and school district

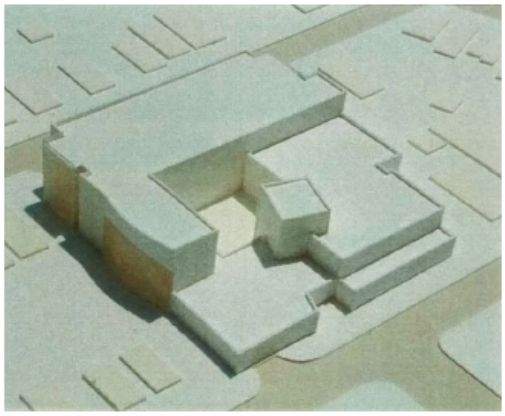
Concurrent with the building assessment, Cannon Design assessed demographics, educational philosophy, curriculum, and other relevant factors, relying heavily on input from administration, faculty, and community groups to establish the direction the school district should take. Following this information-gathering and analysis stage, the Cannon Design team developed several options, exploring various combinations of renovation and new construction. Each option was evaluated both qualitatively and quantitatively against an established set of criteria, with components ranked in terms of high, medium, and low priority for development. With the aid of the school board, the community, and state education personnel, the best option when compared to the evaluation criteria was then selected for implementation.

Albany City School District
Master Plan
Albany, New York



First Floor Plan

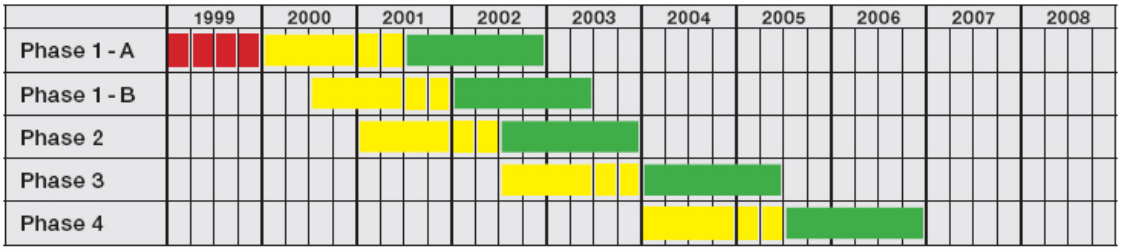
Second Floor Plan



Proposed School No. 18

Third Floor Plan

Alternative "D" Summary: Grade Restructuring to PK-5/6-8/9-12 Schools



Building Program Summary:	New	Renov.	Total	Construction Budget	Incidental Budget	Current Total	Escalated to Cons't Midpoint
Phase 1	4	3	7	$48.14	$18.51	$66.65	$76.20 (July 2002)
Phase 2	4	1½	5½	$54.08	$22.06	$76.14	$85.48 (April 2003)
Phase 3	0	5½	5½	$37.24	$11.20	$48.44	$57.42 (Oct. 2004)
Phase 4	0	3	3	$10.79	$3.13	$13.92	$16.75 (April 2006)
Grand Totals	**8**	**13**	**21**	**$150.25***	**$54.90***	**$205.15***	**$235.85***

* Figures in Millions (Aug. 1999)




B2 Project Team and Organization

Understanding our Client's objectives and the roles and responsibilities of Key Team members is the first step in the management of the overall process to achieve meaningful results that exceed our Client's expectations. Our proposed Team is a long standing association between two highly regarded professional design firms, Richard L Bowen + Assoc, along with Cannon Design. RLB + A would be the prime and local consultant responsible for the performance of our overall team. Mr. David Bowen from RLB+A will serve as the co-principal-in-charge with a particular focus upon building partnerships between the CHUH and local private businesses and organizations. Mr. Rick Dewar will be the co-principal from Cannon Design advising and assuring that public participation in the planning receives our Team's highest attention. The accompanying overview and organization chart depict our Team's structure to accomplish the comprehensive planning services in the CHUH City School District's RFQ. In that spirit, we look forward to the opportunity to discuss and clarify our initial set of assumptions relative to the many exciting possibilities in your District, and the level of effort we anticipate.
Key Roles and Responsibilities

The ***Co-Principals-in-Charge*** are responsible for:

- Negotiating the contract for A/E services consistent with corporate guidelines and the District's scope of work.
- Participating in the development of project goals
- Leading and guiding the project team
- Assuring appropriate resources are made available to project team
- Attending or leading key meetings and presentations
- Assessing overall team performance
- Maintaining positive client relations including references and long-term retention in the implementation of subsequent projects / phases.

Estimated Time Commitment: 5%

The ***Project Manager*** is responsible for:

- Coordinating activities to support planning and design leadership
- Participating in negotiating the contract for A/E services with the Principal-in-Charge
- Assisting in development of project goals
- Developing the project work plan, budgets and schedule
- Attending key meetings and presentations
- Maintaining Client and Program Manager communications and relations
- mplementing coordination of project team activities to assure achievement of project goals
- Assuring appropriate team communications, dissemination of information, and completeness of all deliverables
- Managing team to assure achievement of project financial objectives from both the client's and team's perspectives (i.e. win/win)

Estimated Time Commitment: 30%

The ***Design Principal*** is responsible for:

- Participating in the development of district vision and goals
- Leading the integrated design process -- initial brainstorming ideas, charette 'test fit' concepts, and feedback refinements
- Leading and guiding the quality and image aspects of the Client's 'branding'
- Carrying out all work in conformance with project time, cost and quality parameters

- Attending key meetings and presentations
- Developing the design concept and guiding its execution throughout all stages of current work and subsequent projects / phases

Estimated Time Commitment: 20%

The ***Principal Planner*** is responsible for:

- Collaborating with the Design Leader in developing or confirming a project program with client and conveying the program to the project team.
- Participating in developing project goals
- Facilitate client visioning, and user group meetings
- Core Model Programs -- initiate, incorporate user input, finalize
- Collaborate on assessment of existing conditions / latent opportunities
- Attending or leading key meetings and presentations
- ntegrate successful emerging trends to initiate 'test fit' concept possibilities
- Develop and reinforce positive client relationships via creative alignment of District policies, aspirations, users' needs and community stakeholder inputs in the process of transforming schools into inspired civic architecture
- Collaboration with Design Leader and Project Designer to develop and implement final design
- Assisting Project Architect, Engineers and Interior Designers in program / technical execution of each stage of work / projects

Estimated Time Commitment: 25%

The ***Educational Strategist*** is responsible for:

- Assisting in the development of district vision and goals
- Providing thought leadership in collaboration with the Design and Planning Principals
- Assisting in the development of the vision and guiding principles
- Advising the design concept under the direction of the Design Principal, contributing to its execution throughout all phases of the work
- Coordinating the work of the design support / CAD staff
- Develop mission and program for 21st century learning that CHUH aspires to achieve
- Attending meetings and presentations with, and in the absence of the Design and Planning Principals

Estimated Time Commitment: 40%

The ***Project Engineering Coordinator*** is responsible for:

- Participating / contributing to the vision, mission, and guiding principles of the Program to assure a seamless recognition of the importance and necessity for sustainability
- Conducting on-site assessment of existing conditions and coordinating the documented findings of each engineering discipline to project team
- Collaborating with design team to conceptualize sustainability and engineering systems
- Developing engineering systems, standards, and components in coordination with other disciplines

Estimated Time Commitment: 10%

Project Team and Organization

Organizational Chart

Cleveland Heights/University Heights City School District

Project Management Consultants

President

Richard L. Bowen, AIA, NCARB
Richard L. Bowen + Associates

Principal Leadership

David H. Bowen
RLB+A

Rick Dewar, AIA
Cannon Design

Private Partnerships

Public Participation

Project Management

Alan Renzi, AIA, NCARB, LEED AP
Richard L. Bowen + Associates

Planning

Roland A. Coleman, II
Principal Planner, Cannon Design

Anthony Borgesa, AIA
Architecture/Planning, Cannon Design

Kimberly Williams, MBA
Programming, Cannon Design

Pietro DiFranco, PE, SI, LEED AP, CPESC
Landscape/Civl Engineer, RLB+A

Joseph Cohen, AIA, CPA
Cost/Peer Review, Cannon Design

J. Scott Burton, PE
Constructibilty Review, RLB+A

Thought Leadership

Trung Le, AIA
Principal Designer, Cannon Design

Christian Long
Educational Strategist, Cannon Design

Sarah Malin
Educational Ethnographer, Cannon Design

Engineering

Peter McClive, PE
Project Engineering Coordinator Cannon Design

Eric Liundstrom, PE, LEED AP
Mechanical, Cannon Design

Gregory Sutyak, PE
Electrical Engineer, RLB+A

Salvatore Bonetta, RDCC,EIT, CDT
Technology/Communications Engineer, Cannon Design

Michael Tolliu, PE, LEED AP
Energy/Sustainability Engineer, Cannon Design

Donald Theisen, PE
Structural Engineer, RLB+A

Day-to-Day Support by a Professional Staff of 90 People at RLB+A

BOWEN
RICHARD L. BOWEN + ASSOCIATES INC.

DAVID H. BOWEN
Principal

Education

Attended John Carroll University

Linear Sales School, Atlanta, Georgia

AT&T National Management School, Denver, Colorado

Certificate "USGBC Commissioning for LEED Buildings"

Appointments

Planning Commission, City of Cleveland

Chairman, Northern Ohio District Export Council

Association of Ohio Commodores

Memberships

Brownfield Finance Partnership

Urban Land Institute

American Planning Association

National Association of Industrial and Office Properties (NAIOP), Board Member and Public Affairs and Legislative Chairperson

NAIOP of Ohio PAC, Board Chairman

Mr. Bowen has helped to implement successful business plans and strategies for the firm since 1993. He is experienced at working with all stakeholders in connection with publicly funded projects and actively participates in project-related community engagement. Mr. Bowen takes the initiative in guiding clients through the grant application process in order for them to obtain available funds at the local, state and federal levels. These programs have included NOACA TLCI grants, and funding through Clean Ohio Assistance and the American Recovery and Reinvestment Act.

Mr. Bowen is the leader of our sustainable practice and urban design group, which has included brownfield planning and redevelopment, and LEED certification. As an advocate for sustainable architecture and green building design, he believes brownfield redevelopment is one of the most effective ways to alleviate urban sprawl and rejuvenate our cities.

Selected Projects

Academic

- Robert Jamison K-8 School, Cleveland, Ohio
- Adlai Stevenson K-8 School, Cleveland, Ohio
- John Hay High School Renovation, Cleveland, Ohio
- West Side Relief High School, Cleveland, Ohio
- Garfield K-8 Schools, Cleveland, Ohio
- Harvey Rice K-8 School, Cleveland, Ohio
- Patrick Henry K-8 School, Cleveland, Ohio
- Jefferson Area Local Schools - two new elementary schools, Ashtabula County, Ohio
- Montpelier Exempted Village School District, new middle school, Montpelier, Ohio
- Patrick Henry Local School District, new middle school, Henry County, Ohio
- East Guernsey Local School District, new elementary school and high school renovation, constructability review and value engineering, Guernsey County, Ohio
- Holgate Local School District, new PK-12, new middle school, Henry County, Ohio
- Parma City Schools, cost estimating and value engineering, Parma, Ohio

Office

- Weizer Building Historic Restoration and Renovation, Cleveland, Ohio
- Steris Corporation, Mentor, Ohio
- Cole Vision, Twinsburg, Ohio
- Cole National Campus, Twinsburg, Ohio

Master Planning

- Central Neighborhood Master Plan, Cleveland, Ohio
- Kinsman Union Neighborhood Master Plan, Cleveland, Ohio
- Stockyard Neighborhood Master Plan, Cleveland, Ohio
- St. Luke's Master Plan, Cleveland, Ohio
- Great Northern Multi-Modal Plan, North Olmsted, Ohio
- Clifton Boulevard Corridor Improvements, Cleveland and Lakewood, Ohio

CANNONDESIGN

Richard H. Dewar, AIA

Principal, K-12 Education Leader

Years of Experience: 30

Education

Bachelor of Arts in Architecture
Iowa State University, 1981

Registrations

Registered Architect, Illinois
1991

Professional Affiliations

American Institute of Architects

Association of School Business Officials

Council of Educational Facility Planners International
Secretary, Midwest Great Lakes Chapter

Illinois Association of School Business Officials
Past Chair, Service Associates Committee
Delegate, Delegate Advisory Committee
Membership Committee, 2005

State of Illinois
School Construction Guideline Task Force, "Build Smart-School Construction in Illinois"
Health/Life Safety Committee

Illinois Public Building Commission, School Facilities Sub-Committee

Illinois School Board Reviewer, Life Safety Process Service Associate Advisory

Healthy Schools Campaign Task Force

Capital Development Board, Task Force on a Uniform Building Code

Recent Speaking Engagements

"From Chicago to the Caymans" Building Better Schools Summit, London, June 2008

"Local and State Building Programs - Case Studies From Ohio, Kentucky and Illinois Schools," AIA Committee of Architecture for Education, Cincinnati, Ohio, May 2006

"Sleep At Night: School Construction Doesn't Have to be a Nightmare," NSBA Annual Conference, San Diego, California, April 2005

Rick Dewar has a way of connecting with everyone he meets, particularly with clients and educators. With three decades of experience, he is also a national expert on K-12 projects—known for his ability to lead school districts through complex decision-making, campus planning and design, and arduous referendum processes. Rick's projects benefit from his collaborative team approach.

Relevant Experience

International School of Indiana, Indianapolis, Indiana

- New elementary school and upgrades to existing upper school for school serving grades pre-K through 12

Cayman Islands Ministry of Education, Cayman Islands

- Three new high schools, each accommodating 500-1,000 students

Evanston Community Consolidated School District 65, Evanston, Illinois

- Life Safety Surveys
- Additions to library, administration and main entry at Dewey Elementary School
- Controlled multi-sensory stimulation learning center ("Katie's Corner")
- Life safety studies at 16 schools

Chicago International Charter School, Ralph Ellison High School, Chicago, Illinois

- Addition/renovation of previously unoccupied building to house offices, classrooms, labs, and a new gymnasium

- Adlai E. Stevenson High School District 125, Lincolnshire, Illinois
  Multiple building additions and renovations bringing the school from 800 students to its current 4, 420 enrollment, which is divided into smaller "houses"
- New entry, upgrades to the career/college resource center and food services
- Addition/renovation to music department and dance studio
- 60,000 sf addition including 30 classrooms, new offices and commons expansion
- Master plan, major facility additions and renovation, life safety, roofing and energy retrofit to existing facility

Chicago Public Schools, Chicago, Illinois

- Managing and design architect for major capital improvement program for new construction, renovations and additions
- Westinghouse College Preparatory - a new 240,000 sf replacement school, LEED certification
- Little Village High School- a new 1,400-student, 280,000 sf school
- North Grand High School - a new 200,000 sf replacement school
- Tarkington Elementary School - a new 1024 student,132,000 sf school, including Chicago Park District field house and regional office facilities within the school, first CPS school to attain LEED certification
- Linear K-8 Prototype Design first implemented at Haugan School, a 115,000 sf K-8

"Trends in School Planning and Design," Total Facility Management/CSI Conference, Chicago, Illinois, April 2005

"Design in Urban Schools: Programs, Politics and Architects," AIA National Conference, Las Vegas, Nevada, May 2005

"Energy! Control Costs and Be Sustainable," ASBO International Annual Conference, Cincinnati, Ohio, October 2004

"Big School/Small School, Old School/New School, "NSBA Annual Conference, Orlando, Florida, March 2004 and ASBO International Annual Conference, Phoenix, Arizona, October 2002

"The Managing Architect Approach - A New Paradigm in Construction Delivery," CEFPI Northeast Region Conference, Annapolis, MD, April 2003

"Evaluating an existing building for today's educational needs," CEFPI 2002 Midwest/Great Lakes Regional Conference, Chicago, Illinois, May 2002

"Leadership Institute II: It Is Possible and You Can Do It!," Knowledgeworks Foundation, December 2002

"General Assembly Update," IASBO 50th Annual Conference, 2001

"21st Century Tools for Architectural Planning," IASBO's Annual Conference, May 2000

"New Learning Environments: Beyond Bricks and Mortar," IASB/IASA/IASBO, Chicago, Illinois, November 1999

Juries and Panels

CEFPI School Buildings Week Juror, Washington DC, 2010, 2009, 2007

AIA West Virginia Design Awards Juror, 2004

"Funding and Resources for School Construction and Renovation," IASB/IASA/IASBO 69th Joint Annual Conference, Panelist, November 2001

Illinois Association of School Boards' Exhibition of Educational Environments Juror, 2001

school serving 920 students including facilities for Chicago Park District within school

- L-shape K-8 Prototype Design for 1,200 students at 100,000 sf for implementation at Oscar Depriest School, Anderson Community Academy and Edward "Duke" Ellington School
- Albany Park Middle School - 103,000 sf for 650 students including LEED certification
- Skinner K-8 replacement school
- Waters Elementary School - remodeling and addition including cafeteria, library and classrooms

Cleveland Municipal School District, Cleveland, Ohio

- New K-8 schools: Garfield, Patrick Henry and Harvey Rice Schools
- John Hay High School - 210,000 sf renovation to incorporate the concept of small school learning environments
- West Side Relief High School - new school to accommodate 1,600 students

Red Clay Consolidated School District, Wilmington, Delaware

- Managing Architect and Consultant to JAED Corporation for $190 million major capital improvement program

Grant Community High School District 124, Fox Lake, Illinois

- Design of a new 13,400 sf library/learning center
- New fieldhouse and classroom additions

Rochelle Township High School District No. 212, Rochelle, Illinois

- New 205,000 sf replacement high school designed for 1,200 students

College of DuPage, Carol Stream Regional Center, Carol Stream, Illinois

- Adaptive reuse of existing 12,000 sf fire station into the college's newest regional educational facility

Woodland School District 50, Gurnee, Illinois

- Preliminary planning for new 240,000 sf, 4th-5th grade school for 1,880 students

Carbondale Community High School, Carbondale, Illinois

- New 160,000 sf addition and 65,000 sf renovation for 1200 students in grades 9-12

Evanston Township High School District 202, Evanston, Illinois

- Ongoing consultation, master planning services, miscellaneous remodeling including athletics, cafeteria and classroom renovations, and life safety implementation

Oak Park School District 97, Oak Park, Illinois

- New 950-student replacement middle schools for Julian and Brooks schools

BOWEN
RICHARD L. BOWEN + ASSOCIATES INC.

ALLAN L. RENZI, AIA, NCARB, LEED AP

Project Manager

Education

Bachelor of Architecture, Kent State University
Kent, Ohio

Bachelor of Art in Urban Geography,
The Ohio State University
Columbus, Ohio

Registration

Architect – Ohio
NCARB

LEED Accredited Professional

Memberships

American Institute of Architects

Mr. Renzi's experience represents a diverse background as a Project Manager and Project Architect. He has guided renovation and new construction projects for retail centers, civic complexes, office buildings, health and educational facilities, and community recreation centers.

Mr. Renzi is an integral part of the Bowen design team, having skills that transfer equally well between several market areas. His pass ion for design, strong management ability and valuable communication skills give him the strongest foundation as a Project Manager.

He gives his complete attention to form, function and detail, working with the client and the architectural/engineering team to ensure a successful project.

Selected Projects:

Academic

- CMSD Harvey Rice K-8, Cleveland, Ohio - *with Cannon Design*
- CMSD Adlai Stevenson K-8, Cleveland, Ohio - *with Cannon Design*
- CMSD Garfield K-8, Cleveland, Ohio - *with Cannon Design*
- CMSD Robert Jamison K-8, Cleveland, Ohio - *with Cannon Design*
- Cuyahoga Community College Sports and Wellness Wing, Parma, Ohio
- Cuyahoga Community College Student Center Renovations, Parma, Ohio
- Cuyahoga Community College Professional Development Center, Brunswick, Ohio
- Cleveland State University (Ohio), 17th-18th Street Block Master Plan
- Parma City Schools Window & Door Replacement, Parma, Ohio
- University of Toledo (Ohio), College of Engineering
- Parma City School District (Ohio), Development of 21st Century Educational Program; Facility Study; Program Analysis
- Berea City School District (Ohio), Library and Computer Room Addition
- Auburn Career Center, Chardon, Ohio

Governmental

- Canton Federal Building, *Project Manager,* Canton, Ohio
- Mayfield Village Police Station, *Project Manager,* Mayfield Village, Ohio
- SSA Building, *Project Manager,* West Palm Beach, Florida
- FBI Automotive/Electronic Radio Processing Facility, *Project Manager,* Cleveland, Ohio
- Federal Bureau of Investigation (FBI) Design Competition for Office Building, *Project Manager,* New Springfield, Illinois
- IRS Building, *Project Manager,* Springfield, Illinois
- U.S. Attorney General Office Building Design Intent Documents and Building Design, *Project Manager,* Lexington, Kentucky
- Federal Bureau of Investigation (FBI) Design Competition for a New District Office, *Project Manager,* Cleveland, Ohio
- Rezoning Study for the City of Berea, Ohio
- Blight Study for the City of Cuyahoga Falls, Ohio

- Kent Municipal Court, *Project Manager,* Portage County, Ohio

Office

- SMV America offices, Laboratories, Assembly Space and Warehouse Facilities, *Project Manager,* Twinsburg, Ohio
- Cole Vision Headquarters, *Project Architect,* Twinsburg, Ohio
- CT Consultants Office Building, *Project Manager,* Mentor, Ohio
- Developers Diversified Campus Plan, *Project Manager,* Beachwood, Ohio
- Associated Estates Corporate Headquarters, *Project Manager,* Richmond Heights, Ohio
- Bellevue Medical Office Building, *Project Manager,* Bellevue, Ohio

Urban Planning and Design

- Juvenile Detention Center Adaptive Re-Use Study, *Project Manager,* Cleveland, Ohio
- Great Northern Multi-Modal Transit Study, North Olmsted, Ohio
- Ward 5 Master Plan, Cleveland, Ohio
- Forgotten Triangle Master Plan, Cleveland, Ohio
- Union Miles Corridor Study, Cleveland, Ohio
- Beehive Site Senior Living Campus, *Project Manager,* Cleveland, Ohio
- Maple Heights Community Recreation and Senior Center, *Project Manager,* Maple Heights, Ohio
- Middleburg Heights Community Recreation Center, *Project Manager,* Middleburg Heights, Ohio
- Ravenna Wellness Center Feasibility Study Including Partnering Options, *Project Manager,* Ravenna, Ohio
- Broadview Heights Community Center Feasibility Study and Conceptual Design, *Project Manager,* Broadview Heights, Ohio
- Greene County, County-Wide Recreation Center, *Project Manager,* Ohio
- City of Lorain Community Recreation Center, Conceptual Design, *Project Manager,* Lorain, Ohio
- Bethlehem Township Community Recreation Center Feasibility Study, *Project Designer,* Bethlehem, Pennsylvania
- North Ridgeville Recreation Center Feasibility Study, *Project Manager,* North Ridgeville, Ohio
- Eastlake Civic Center - Feasibility Study and Conceptual Design for both new construction and renovation of an existing facility, *Project Manager,* Eastlake, Ohio
- Delaware Community Recreation Center, *Project Designer,* Delaware, Ohio
- Mentor Community Recreation Center and Ice Arena, *Project Manager,* Mentor, Ohio

Transportation

- Altoona Railroaders Museum, *Supervisor,* Altoona, Pennsylvania
- Cleveland Airport Systems Operations & Maintenance General Task Order Contract, *Supervisor,* Cleveland, Ohio
- Truck Inspection Station, *Project Manager,* Fort Detrick, Maryland

CANNONDESIGN

Roland A. Coleman, II

Planning Principal

Education

B/Architecture: Cornell University

Affiliations

Board of Education, Buffalo, NY - Mission and Goals Committee

Campus East Magnet School, Buffalo, NY - Community Task Force

Commissioner's Waterfront Task Force, City of Buffalo, NY

Board of Directors, Westminster Community House

Buffalo Federation of Neighborhood Centers

Capital Planning Commission of the City of Buffalo (representative for the Board of Education)

Mr. Coleman has more than 35 years of experience managing design teams, with a focus on educational planning, design and client partnering. His ability to integrate these components fully into the planning process has produced outstanding educational facilities that reflect clients' spirit and vision and meet their goals for budget, scheduling, and function.

Notable projects have ranged from campus master plans to complex building renovations for primary, secondary, and higher education clients. His special interest in educational projects - from existing-conditions assessments to programming, user/stakeholder consensus building, renovation, and new replacement facilities - has earned him well-deserved recognition for meaningful results.

Mr. Coleman was the City of Buffalo's first Planning Manager, and his insights continue to be sought by several special committees of the Buffalo School Board. His leadership has brought about award-winning projects at Geneva High School, the historic Erie Community College City Campus, the State University of New York at Albany, AND Tower City Center in Cleveland. He has also coordinated Cannon Design's public/private partnership with Buffalo's nationally recognized City Honors School.

Publications

- The Public/Private Partnership: Virginia Dept of Transportation Joint Development Conference
- Science Facilities – The Fusion Lab: School Planning & Management
- Smart Planning – District Wide Equity: American School Board Journal

Representative Experience

Albany City School District, Albany, NY

- Master Plan - Long-range master plan and subsequent implementation for a public school system serving over 10,000 students in New York State's capital city. Key elements of the plan focus on an evaluation of the district's 19 existing facilities, a survey of current versus needed equipment, and an analysis of how well facilities can support programmatic goals.
- Sheridan Preparatory Academy - Programming, planning, and design services for a new $9 million, three-story elementary school building for 500 students.
- Stephen & Harriet Myers Middle School - Programming, planning, and design services for a new 140,423 sf middle school project including an auditorium, a natatorium, a gymnasium, and a three-story classroom wing.

Buffalo Public Schools, Buffalo, NY

- Strategic Plan Update (Phase III, IV, V) - Study and recommendations for next steps in $1.5 billion reconstruction project, including review of previous strategic plan, test fits, and feasibility studies of various schools. In association with LPCiminelli
- Survey & Evaluation - Complete assessment services for 13 district facilities per the RESCUE regulations.
- Performing Arts High School - Planning and design services for the conversion of an existing 9-12 high school into a $27 million, 225,000 sf performing arts 9-12 school.
- Harvey Austin Middle School - Programming, planning, and design services for a $21 million conversion of an existing vocational/technical school to a middle school.

- McKinley Academy/Career Technical High School - Architectural and engineering services for $33 million addition/renovation program.
- School 53 - Planning, design, engineering, and construction administration for $13 million, 112,862 sf project encompassing construction of 10,086 sf addition, demolition of 6,500 sf annex building, and renovation of remaining community school.
- South Park High School - $30 million renovation of high school as part of Buffalo City School District's long-term reconstruction plan.
- Niagara Falls City School District, Niagara Falls, NY
- Comprehensive Facility Assessment - Comprehensive facility assessment of buildings encompassing 1 million sf, including evaluation of classroom and lab spaces, indoor and outdoor athletic facilities, building envelope, code compliance, and mechanical, electrical, plumbing, telecommunications, and structural systems. Also included assistance in developing strategic plan.

Yonkers Public Schools, Yonkers, NY

- Strategic Plan – Building conditions survey and development of re-phased capital improvement plan for all district-owned buildings. The comprehensive Education Facilities Plan involved 39 buildings (4 million sf) to be re-organized into 32 schools with a cost of $1.3 billion over 10 years.
- Envelope Project - Renovation and restoration of exterior envelope at Lincoln High School and Roosevelt High School as "emergency" stabilization projects.

Roosevelt Union Free School District, Roosevelt, NY

- Centennial Elementary School - Planning and design services necessary to provide 65% completion of construction documents for the new Centennial Elementary School.
- Comprehensive A/E Services - Facility assessment and evaluation, educational planning, and capital project planning and implementation services for all new district facilities to replace aging existing facilities.
- High School - 230,000 sf of renovations and additions to convert junior/senior high school to high-school use, including enlargement of library, new cafeteria, gym, locker rooms, classroom wings, and support and administrative spaces.
- High School Conversion/Pool Addition - $50 million reconstruction and additions project.
- Middle School - Design of a new 162,000 sf middle school project featuring academic "house plans" including flexible science "fusion labs", auditorium, gymnasium, dance and culinary arts.
- Washington Rose Elementary School - Planning and design services for $30 million, 101,000 sf school featuring early-childhood house, library/media center, 230-seat cafeteria, faculty lunch room, and 350-seat gymatorium.

University School of Nova Southeastern University, Fort Lauderdale, FL

- New Lower School and Performing Arts Building - Architectural and interior design services for new 855-student lower school; 500-seat cafeteria and performing arts center for shared use; and renovations to 700-student upper school and 470-student middle school.

Cleveland Hill Union Free School District, Cheektowaga, NY

- Capital Improvement Project - Planning and design services for a $28 million capital project including a building-wide assessment and evaluation involving alterations and additions to an existing 300,000 sf school facility with phased construction.

CANNONDESIGN

Antonino Borgese, AIA, LEED AP

Project Designer

Education

BPS/Architecture: State University of New York at Buffalo

MArch/Architecture: State University of New York at Buffalo

Professional License

VA,

Affiliations

American Institute of Architects

LEED® Accredited Professional

Mr. Borgese has designed several of Cannon Design's most successful projects, design statements that have been recognized by his peers as buildings of exceptional quality and a source of pride for the client, facility users and the community. With a portfolio featuring educational facility projects from across the country and abroad, he has the perspective needed to develop comprehensive design solutions that make the most of site characteristics while respecting the surrounding community and context.

While at Cannon Design, Borgese has served as project designer on a number of the firm's most successful higher education and K-12 assignments. His work includes Boston University's 33 Harry Agganis Way and Worcester Polytechnic Institute's East Hall as well as Roosevelt Union Free School District's Middle School. His current efforts are Buffalo Public Schools' Community School 53 and work for the West Seneca Central School District.

Representative Experience

Yonkers Public Schools, Yonkers, NY

- Comprehensive Facility Assessment - Comprehensive facility assessment and development of five-year capital improvement plan for 40 buildings encompassing 4.5 million sf, including evaluation of classroom and lab spaces, indoor and outdoor athletic facilities, building envelope, code compliance, and mechanical, electrical, plumbing, telecommunications, and structural systems.

Albany City School District, Albany, NY

- Stephen & Harriet Myers Middle School - Programming, planning, and design services for a new 140,423 sf middle school project including an auditorium, a natatorium, a gymnasium, and a three-story classroom wing.

Buffalo Public Schools, Buffalo, NY

- McKinley Comprehensive School of Choice - Architectural and engineering services for $33 million addition/renovation program.
- School 53 - Planning, design, engineering, and construction administration for $13 million, 112,862 sf project encompassing construction of 10,086 sf addition, demolition of 6,500 sf annex building, and renovation of remaining community school.

Roosevelt Union Free School District, Roosevelt, NY

- Middle School - Design of a new 162,000 sf middle school project featuring academic "house plans" including flexible science "fusion labs", auditorium, gymnasium, dance and culinary arts.

West Seneca Central School District, West Seneca, NY

- Capital Improvements - Architectural, engineering and construction management services for the district's $5.75 million capital improvement program consisting of districtwide technology upgrades, including wireless and video distribution systems and air-conditioning of computer labs.

Clarkstown Central School District, New City, NY

- Design for Felix Festa Middle School, including a 50M pool with related facilities,

classroom additions and building renovation.

National Cathedral School for Girls, Washington, DC

- Athletic Center - Programming, planning, and design services for a new 90,000 sf field house including competition court, three-court multipurpose gymnasium with raised running track, fitness center, training/wellness center, administrative offices and conference room, reception/Hall of Fame room, multipurpose dance studio, locker/changing rooms and other support spaces, and 50-car underground parking facility.

Frontier Central School District, Hamburg, NY

- Capital Program - Architectural and engineering services for capital building project.

Boston University, Boston, MA

- 33 Harry Agganis Way - 396,000 sf, 960-bed high-rise residence in two towers of 19 and 26 stories, featuring both apartment-style and suite-style units and sustainable design features.

Gettysburg College, Gettysburg, PA

- Center for Athletics, Recreation, and Fitness - LEED Gold, 55,000 sf addition to NCAA Division III athletic and recreation facility, including aquatic center, climbing wall, squash/racquetball courts, locker rooms, coaches' offices, and multipurpose rooms.
- Athletic and Recreation Complex Master Plan - Preparation of a comprehensive sports master plan including fieldhouse, aquatic center, fitness center, multipurpose room, and other sports support spaces involving 110,000 sf of new construction and 80,000 sf of renovation.

Kyonggi University - Suwon Campus, Seoul and Suwon, South Korea

- Master Plan - Master plan including organizational and growth concepts for a two-campus institution with over one million sq ft of facilities serving 15,000 students. The new facilities will be "built for life", incorporating energy-efficient building systems and low-maintenance materials that have a high return on investment. Awarded as the result of an international design competition.
- Dormitory Building - Design of an 18,000 sm dormitory building housing residences (with parking) with recreational, conferencing and dining areas for students and visiting faculty.
- Teleconferencing Auditorium - Design of a 4,600 sm, 1,300-seat global teleconferencing facility for transnational and multidisciplinary teaching and conferencing, featuring sustainable design elements including water recycling, solar shading, and recycled building materials.

State University of New York College at Buffalo, Buffalo, NY

- Science Building - Architectural and engineering services for 200,000 sf multiphased renovation of four-story science building housing programs in biology, chemistry, physics, earth science, and science education. Project is LEED Gold certified.
- Science Building Phase 2 - $36 million second phase of Interdisciplinary Science Complex project.

CANNONDESIGN

Kimberly Williams, CDT, MBA

Programmer

Education

BPS/Architectural Technology: SUNY Buffalo

MBA/Business Administration: SUNY Buffalo

Affiliations

Construction Documents Technologist (CDT)

A critical thinker whose insight is sought by educators, government officials, and business leaders, Ms. Williams has focused her career on the design of buildings for learning. Her work exemplifies a central tenet of her design philosophy, that a successful school is aesthetically engaging, functionally accurate, and open to change. Ms. Williams consistently leverages her distinctive skill set in both architecture and business administration to minimize local project costs. She recently completed her research as one of Cannon Design's two Educational Planning Fellows for 2008-2010

Representative Experience

Niagara Falls City School District, Niagara Falls, NY

- Comprehensive Facility Assessment - Comprehensive facility assessment of buildings encompassing 1 million sf, including evaluation of classroom and lab spaces, indoor and outdoor athletic facilities, building envelope, code compliance, and mechanical, electrical, plumbing, telecommunications, and structural systems. Also included assistance in developing strategic plan.

Yonkers Public Schools, Yonkers, NY

- Comprehensive Facility Assessment - Comprehensive facility assessment and development of five-year capital improvement plan for 40 buildings encompassing 4.5 million sf, including evaluation of classroom and lab spaces, indoor and outdoor athletic facilities, building envelope, code compliance, and mechanical, electrical, plumbing, telecommunications, and structural systems.

Buffalo Public Schools, Buffalo, NY

- Comprehensive Facility Assessment - Comprehensive facility assessment of 65 school buildings encompassing 9 million sf, including evaluation of classroom and lab spaces, indoor and outdoor athletic facilities, building envelope, code compliance, and mechanical, electrical, plumbing, telecommunications, and structural systems.
- McKinley Comprehensive School of Choice - Architectural and engineering services for $33 million addition/renovation program.
- School 53 - Planning, design, engineering, and construction administration for $13 million, 112,862 sf project encompassing construction of 10,086 sf addition, demolition of 6,500 sf annex building, and renovation of remaining community school.
- Strategic Plan Update (Phase III, IV, V) - Study and recommendations for next steps in $1.5 billion reconstruction project, including review of previous strategic plan, test fits, and feasibility studies of various schools. In association with LPCiminelli

Niagara Wheatfield Central School District, Sanborn, NY

- Comprehensive Facility Assessment Survey of architectural, electrical, and mechanical condition of district's facilities as required by State Education Department.
- Roof Replacement - Prereferendum services for roof replacement at two elementary schools and then design and construction services.

Roosevelt Union Free School District, Roosevelt, NY

- High School - 230,000 sf of renovations and additions to convert junior/senior high

school to high-school use, including enlargement of library, new cafeteria, gym, locker rooms, classroom wings, and support and administrative spaces.

West Seneca Central School District, West Seneca, NY

- Capital Improvements - Extended architectural and engineering services for $19 million improvement program encompassing renovations and additions to athletic facilities and districtwide energy management upgrades.

Frontier Central School District, Hamburg, NY

- Capital Program - Architectural and engineering services for capital building project.

Grand Island Central School District, Grand Island, NY

- Capital Projects - Architectural and engineering services for design and implementation of capital projects.

New York Medical College, Valhalla, NY

- Facilities Assessment - Assessment of nine buildings totaling 1,000,000 sf on NYMC campus.

Seneca College, Toronto, ON Canada

- Programming Study - Programming study and conceptual design for Seneca College's Markham, Newnham, and King campuses.

State University of New York College at Oswego, Oswego, NY

- Laboratory Building - $110 million, 220,0000 sf of renovations and additions to science, engineering, and technologies building, including design of telecommunications, security, and audiovisual systems, environmental graphics design, and parking study.Owner will pursue LEED Gold certification.

State University of New York College at Oswego, Oswego, NY

- Science Laboratory Building - Planning and design services for 70,000 sf expansion providing science classrooms, teaching and research laboratories, interaction spaces, planetarium, meteorology observatory, and greenhouse. Owner is pursuing LEED Gold certification.

BOWEN
RICHARD L. BOWEN + ASSOCIATES INC.

PIETRO A. DiFRANCO, PE, SI, LEED AP, CPESC

Director of Civil Engineering

Education
Bachelor's Degree in Civil Engineering, Cleveland State University

Registrations
Professional Engineer: Ohio, Kentucky, Michigan, Pennsylvania, Virginia, West Virginia
Surveyor Intern
LEED Accredited Professional
Certified Professional in Erosion and Sediment Control (CPSEC)

Special Training
Ohio Wetlands
Real Estate Law
Boundary Surveying
Sub-division Design
Route Surveying
Geographical Information Systems (GIS)

Affiliations
Member – Municipal Engineers Association of Northeast Ohio
Chairman of American Society of Civil Engineers (ASCE) Membership Committee, Cleveland Section (1999-2002)
President of the American Society of Civil Engineers (ASCE), Cleveland State University Student Chapter (1996-1997)
National Member of American Society of Civil Engineers (ASCE)
Cleveland Green Building Coalition

Mr. DiFranco has more than fourteen years of experience in design, analysis and project management. He is knowledgeable in both public and private construction and has been involved in all aspects of project management, including proposal writing, due-diligence reports, master planning, design, bidding, and construction administration. Mr. DiFranco understands the importance of communication in ensuring project success and has acted as an Owner's coordinator with tenants, subconsultants and regulatory agencies. Mr. DiFranco currently serves as City Engineer for the City of North Olmsted.

Selected Projects:

Academic

- CWRU Alumni House Renovation and Restoration, *Civil Project Engineer,* Cleveland, Ohio. Responsible for complete design of site layout, grading, & utilities for this building expansion project. Prepared all site work construction drawings & specifications, and secured all site work approvals & permits
- John Hay High School Comprehensive Renovation, *Civil Project Engineer,* Cleveland, Ohio. Responsible for complete design of site layout, grading, & utilities, including new parking areas, a recreation field, and new domestic & fire water service. Prepared site work construction drawings & specifications, and secured all site work approvals & permits.
- Shiloh Middle School Addition, *Civil Project Engineer,* Parma, Ohio. Responsible for site layout, grading, & utility design for this 12,200 S.F. building addition project.
- Kent State University Stark Campus Audit*, Field Survey & Assessment of All Existing Pavement Within Campus,* Canton, Ohio
- Rice Branch Library, *Project Manager,* Cleveland, Ohio
- Cleveland Municipal School District, *Civil Project Engineer,* Cleveland, Ohio
  - Harvey Rice K-8 School
  - Adlai Stevenson K-8 School
  - Robert H. Jamison K-8 School
  - Patrick Henry K-8 School
  - Garfield K-8 School
- Cuyahoga Community College Brunswick University Center, *Preliminary Site Planning,* Brunswick, Ohio

Governmental

- Medina County Transit Building, *Civil Project Engineer,* Lafayette Township, Ohio
- Mayfield Village Police Station; *Civil Project Engineer,* Mayfield Village, Ohio
- Strongsville Police Station Addition/Renovation, *Civil Project Engineer/Complete Site Design,* Strongsville, Ohio
- Bedford Municipal Center, *Civil Project Engineer/Complete Design,* Bedford, Ohio - Design Engineer responsible for the preparation of site work construction drawings. The plans included the design of over 1,300 linear feet of new 8" and 10" on-site water line and 3 new service taps, resulting in the system being connected to two different municipal water mains. The plans were prepared according to standards of the City of Cleveland Division of Water, as requested by the City of Bedford.
- Lake County Engineer's Master Site Plan, Painesville, Ohio
- Lake County Courthouse Expansion, *Civil Project Engineer,* Painesville, Ohio - Responsible for complete design of site layout, grading, & utilities including new

domestic & fire water service for this building expansion project. Prepared site work construction drawings & specifications, and secured all site work approvals and permits.

- Medina County Prosecutor's Office, *Design Engineer,* Medina, Ohio
- Parma Justice Center, *Design Engineer,* Parma, Ohio
- Maple Heights Fire Stations 1 & 2 Expansion, *Design Engineer,* Maple Heights, Ohio
- Aurora Police Station Expansion, *Design Engineer,* Aurora, Ohio
- City Kennel, *Civil Project Engineer,* Cleveland, Ohio
- United States Postal Service, East 55th Street Station, *Design Engineer,* Cleveland, Ohio
- United States Postal Service, Lorain Carrier Annex, *Design Engineer,* Lorain, Ohio
- United States Postal Service, Storm Water Management, *Design Engineer,* Garfield Heights, Ohio

Maintenance

- Middleburg Heights Municipal Service Center, *Design Engineer,* Middleburg Heights, Ohio. Design of more than 1,600 linear feet of new fire and domestic water service requiring the approval of the City of Cleveland Division of Water.
- Wickliffe Service Center, *Civil Project Engineer,* Wickliffe, Ohio

Office

- Marathon Office Building, *Civil Supervision & QA/QC,* Canton, Ohio
- West Side Community House, *Project Engineer,* Cleveland, Ohio
- Weizer Building Addition & Restoration, *Project Engineer,* Cleveland, Ohio
- Gliatech Research/Office Building, *Design Engineer,* Highland Hills, Ohio
- NRP Office Building, *Design Engineer,* Garfield Heights, Ohio
- Canton Federal Center, *Preliminary Site Planning,* Canton, Ohio
- Consolidated Graphics Office, *Preliminary Site Planning,* Cleveland, Ohio
- Associated Estates Corporate Headquarters, *Civil Project Engineer,* Mayfield Heights, Ohio
- Cleveland Metropolitan Housing Authority, Administration Building Owner's Rep, *Civil Engineering Assistance,* Cleveland, Ohio

Recreation

- Middleburg Heights Community Recreation Center, *Design Engineer,* Middleburg Heights, Ohio
- Chagrin River Walk, *Civil Project Engineer,* Willoughby, Ohio

CANNONDESIGN

Joseph L. Cohen, AIA, CPA, LEED AP

Associate Principal

Education

BS/Accounting: State University of New York at Buffalo

BS/Architecture: State University of New York at Buffalo

Professional License

NY

Affiliations

U.S. Green Building Council, LEED® Accredited Professional

American Institute of Architects

A registered architect, certified public accountant, and LEED-accredited professional, Mr. Cohen possesses a unique combination of skills and expertise that he has powerfully harnessed throughout his 20 years as a cost engineer/estimator. At Cannon Design, his responsibilities range from cost modeling, estimating, and programming to value engineering and construction management of both new construction and renovation, and he is well versed in the latest sustainable construction cost-control software, construction documentation, and project field management techniques. Mr. Cohen provides consulting services to the Department of Veterans Affairs on national construction market trends.

Representative Experience:

Albany City School District, Albany, NY

- Public School 16 - Programming, planning and design services for a new 49,000 sf, $9 million elementary school providing state-of-the-art educational facilities for 500 students in grades K-5.
- Sheridan Preparatory Academy - Programming, planning, and design services for a new $9 million, three-story elementary school building for 500 students.
- Stephen & Harriet Myers Middle School - Programming, planning, and design services for a new 140,423 sf middle school project including an auditorium, a natatorium, a gymnasium, and a three-story classroom wing.

Buffalo Public Schools, Buffalo, NY

- Performing Arts High School - Planning and design services for the conversion of an existing 9-12 high school into a $27 million, 225,000 sf performing arts 9-12 school.
- Science Magnet School - Planning and design services for the renovation and additions to science magnet school, a Phase II project.
- Strategic Plan Update - Long-term reconstruction plan for the Buffalo City School District, incorporating changes/updates within the community and focusing on the configuration of Phase III projects.

Niagara Falls City School District, Niagara Falls, NY

- Capital Project - Architectural, engineering, and construction management services for $16 million capital project.

Chester Union Free School District, Chester, NY

- Master planning, architectural and engineering services for a $32 million district-wide capital improvement program including the construction of a new high school/middle school with associated sports fields and renovation of the existing elementary school.

Albany Park Middle School, Chicago, IL

- Albany Park Multicultural Academy Middle School - Design services, including interior finishes, for new 104,000 sf LEED certified middle school.

Cleveland Hill Union Free School District, Cheektowaga, NY

- Capital Improvement Project - Planning and design services for a $28 million capital

project including a building-wide assessment and evaluation involving alterations and additions to an existing 300,000 sf school facility with phased construction.

Fort Zumwalt School District, St. Peters, MO

- Dubray Middle School -110,000 sf facility for 1,200 students.
- South High School Expansion/Renovation - $3 million, 32,000 sf classroom wing addition and new gymnasium and renovation.
- West Middle School Gym Addition - Planning and design services for approximately 10,000 sf of new space to accommodate a new gymnasium and related support space, including locker rooms and a weight room.

Hebrew Academy of the Five Towns & Rockaway, Cedarhurst, NY

- High School - Programming and extended A/E services for additions and renovations to high school campus, including gymnasium, lockers, classrooms, and administrative space.

Brooks School, North Andover, MA

- Athletic Facility - Programming, planning, and design services for a new 60,000 sf sports facility including three-court gymnasium, fitness/weight-training center, wrestling room, lockers, training room, and offices.

New York City School Construction Authority, New York, NY

- Two-year term contract for A/E services in connection with feasibility studies, design-build/design documents, and full a/e documents.

Niagara Wheatfield Central School District, Sanborn, NY

- Additions and Alterations - Architectural, engineering, and construction management services for a $29 million project consisting of approximately 60,000 sf of additions and renovations at a high school, a middle school, and three elementary schools.

North Collins Central School District, North Collins, NY

- Renovations - Construction management services for a major 139,000 sf renovation program that will enable the district's elementary and secondary facilities to support future educational initiatives.

Roosevelt Union Free School District, Roosevelt, NY

- Centennial Elementary School - Planning and design services necessary to provide 65% completion of construction documents for the new Centennial Elementary School.
- High School Conversion/Pool Addition - $50 million reconstruction and additions project.
- Middle School - Design of a new 162,000 sf middle school project featuring academic "house plans" including flexible science "fusion labs", auditorium, gymnasium, dance and culinary arts.
- Ulysses Byas Elementary School - Planning and design services for $30 million, 101,000 sf school featuring early-childhood house, library/media center, 230-seat cafeteria, faculty lunchroom, and 350-seat gymatorium.

BOWEN
RICHARD L. BOWEN + ASSOCIATES INC.

J. SCOTT BURTON, PE

Cost and Constructability Review

Education

MSCE Construction Management, The Ohio State University

BSCE Construction & Structural Engineering, The Ohio State University

Certificate *"USGBC Commissioning for LEED Buildings"*

Registrations

Professional Engineer - Ohio

Organizations

Construction Managers Association of America (CMAA) – Chapter Board Member

American Society of Civil Engineers

Council of Educational Facility Planners International (CEFPI)

Mr. Burton is a dedicated professional with over 30 years of experience in numerous segments of the construction industry including: project management, procurement, scheduling, estimating, engineering, field management, value engineering, risk management, inspection, and information systems. He has extensive experience with large projects, both new and renovation, and multi-phase and occupied facilities projects.

Mr. Burton is experienced with the partnering process and his quality related achievements include earning one of the country's first general contracting ISO certifications.

Ohio School Facilities Commission

Mr. Burton stays current with OSFC's policies and procedures and ensures that his team implements the same. He is a dedicated professional with over 30 years of experience in numerous segments of the construction industry including: project management, procurement, scheduling, estimating, engineering, field management, value engineering, risk management, inspection, and information systems. He has extensive experience with large projects, both new and renovation, and multi-phase and occupied facilities projects.

Selected Projects:

Academic

- CWRU Alumni House Renovation and Restoration, *Construction Manager,* Cleveland, Ohio
- Indian Creek Local SD, New Middle School, *Prinicpal-in-Charge,* Jefferson County, Ohio
- Ottawa-Glandorf Local SD, Two New Elementary Schools, *Project Executive,* Putnum County, Ohio
- Leipsic Local SD, New K-12, *Project Executive,* Putnum County
- Columbus-Grove, Renovation/Addition K-12, *Project Executive,* Putnum and Allen Counties
- Brookfield Local SD, New PK-12, *Project Executive,* Trumbull County
- Barberton Local SD, One New Middle School and One New Elementary School, Various Renovations/Addition Projects, *Project Executive,* Summit County
- Rittman Exempted Village SD, New 5-12, *Project Executive,* Wayne County
- Ada Exempted Village SD, New PK-12, *Project Executive,* Hardin County
- Lincolnview Local SD, Renovation/Addition, PK-12, *Project Executive,* Van Wert County
- Waynesfield-Goshen Local SD, Renovation/Addition, PK-12, *Project Executive,* Auglaize County
- New Knoxville Local SD, Renovated PK-12, *Project Executive,* Auglaize County
- Cory-Rawson Local SD, New Segmented Elementary School, *Project Executive,* Hancock County
- Black River Local SD, Elementary School Renovations, *Project Executive,* Lorain/Medina/Ashland Counties
- Jefferson Area Local Schools, Two New Elementary Schools, *Project Executive,* Ashtabula County, Ohio
- Montpelier Exempted Village School District, New Middle School, *Construction Manager,* Montpelier, Ohio

- Patrick Henry Local School District, New Middle School, *Construction Manager,* Henry County, Ohio
- East Guernsey Local School District, New Elementary School and High School Renovation, *Constructability Review and Value Engineering,* Guernsey County, Ohio
- Holgate Local School District, New PK-12, New Middle School, *Construction Manager*, Henry County, Ohio
- Evergreen Local School District, New Elementary and Middle School, *Construction Manager,* Fulton County, Ohio
- Cleveland Metropolitan School District, E*stimating and Constructability Review*, Ohio
  John Hay High School Renovation
  West Side Relief High School
  Garfield School (K-8)
  Harvey Rice School (K-8)
  Patrick Henry School (K-8)
- Antwerp L. S.D, OSFC CFAP, *Construction Manager*, Antwerp, Ohio
- Edon-Northwest L.S.D., OSFC CFAP, *Construction Manager*, Edon, Ohio
- Paulding Ex. Village S.D., OSFC CFAP, *Construction Manager*, Paulding, Ohio
- Wayne Trace Local S.D., OSFC CFAP, *Construction Manager*, Payne, Ohio
- Brecksville-Broadview Heights Schools, *Master Plan Facilitator,* Brecksville, Ohio
- Parma City Schools, *Cost Estimating and Value Engineering,* Parma, Ohio
- Brunswick Senior High School Renovations, F*ield Supervisor,* Ohio
- Independence Local SD, Various K-12 Renovations, *Field Supervisor,* Ohio
- The Ohio State University Ohio Stadium Renovation, *Project Manager,* Columbus, OH
- Case Western Reserve University, Various Renovations, *Project Manager,* Cleveland, Ohio

Governmental

- Lake County Courthouse Expansion, *Cost Estimator and Pre-Construction Construction Management Services,* Painesville, Ohio
- Aurora Police Department Expansion, *Construction Manager,* Ohio
- Bedford Municipal Complex, *Planning and Estimating* for City Hall, Municipal Courts, Fire Station and Police Department, Ohio
- Parma Municipal Justice Center, *Startup, Commissioning and Warranty Follow-up,* Ohio
- Stow Police Department Expansion, Ohio
- City Mission, Cleveland, Ohio
- USPS Main Branch Office, Cleveland, Ohio
- USPS Branch Facilities, Mentor, Ohio
- Strongsville Police Station Addition and Renovation, *Construction Manager,* Strongsville, Ohio

Office

- Ben Venue Laboratories Headquarters Facility, *Project Manager,* Bedford Heights, Ohio
- IC Construction Company Headquarters, Office and Warehouse, Brecksville, Ohio
- IC Construction Company Office Expansion, Cleveland, Ohio
- Goodyear Store, Cleveland, Ohio
- Huber Village, Westerville, Ohio

CANNONDESIGN

Trung Le, AIA
Design Principal

Total Years Experience: 22

Education

Master of Architecture
University of Illinois, 1989

Bachelor of Science in Architecture
University of Illinois, 1987

School Building Program 2000 Research Study, City of Vienna, Austria, 2001

Ecole D'Architecture et Urbanisme
De Versailles
Versailles, France, 1985

Registrations

Registered Architect, Illinois 1991

NCARB Certification, 2005

Professional Affiliations

American Institute of Architects Committee on Architecture for Education
AIA Design Committee

Council of Educational Facilities Planners International (CEFPI)

Chicago Architectural Club

US Green Building Council

Recent Speaking Engagements

TedxReset, Invited Speaker, Istanbul, Turkey

"Why Innovation Matters," EduCon 2.3, Science Leadership Academy, Philadelphia, PA

"The Entanglement Between Learning and Design," Koç Foundation Education Conference, Istanbul, Turkey

"Education and the Spiky World," Structures for Inclusion Conference, Chicago, IL

"Re-Imagining Libraries," RE-ED Symposium, Lovette School, Atlanta, GA

Prototype Design Camp, eTech Ohio Conference, Columbus, OH

"Third Millennium Teaching & Learning," Big Ideas Fest, Half Moon Bay, CA

"Education and the Creative

Trung Le is a pioneer of Cannon Design's education practice and has an incessant energy and passion for learning. He is widely recognized as an advocate for incorporating multiple intelligences and learning styles in the design of education environments. As the lead designer for the firm's education group, he creates spaces that encourage student inquiry and offer a sense of what it means to be a part of a global community.

Relevant Experience

International School of Indiana, Indianapolis, Indiana

- New elementary school and upgrades to existing upper school for school serving grades pre-K through 12

Academy for Global Citizenship, Chicago, Illinois

- New 60,000 sf carbon-neutral learning environment serving preK-8 grade

Champaign Unit Four School District, Booker T. Washington Elementary School, Champaign, Illinois

- Planning, programming and design of a new 60,000 sf K-5 school that transformed the elementary school into a STEM Academy

Oklahoma City Public Schools, Oklahoma City, Oklahoma

- New Elementary School - New $7 million downtown elementary school; part of Oklahoma City Metropolitan Area Public Schools (MAPS for Kids) initiative.

KIPP Schools, Nationwide

- Design manual for KIPP learning environments across the United States

American Architectural Foundation and the Bill and Melinda Gates Foundation, Washington, DC

- STEM Learning Design Workshop

Mt. Lebanon School District, Mt. Lebanon, Pennsylvania

- Planning and design for renovation and addition of 475,000 sf high school

Leslie Shankman School Corporation, Chicago, Illinois

- Master planning for Orthogenic School for students with special needs at Hyde Park Day School
- New 14,000 sf Hyde Park Day School on the Hyde Park campus

North Shore Country Day School, Winnetka, Illinois

- Master planning and renovation of private K-12 school; complete transformation of the Upper School

Cayman Islands Ministry of Education, Cayman Islands

- Three new high schools, each accommodating 500-1,000 students

Economy," CEFPI National Conference, Washington, DC

"Is Design The Third Teacher in Schools?," WBEZ Chicago Public Radio, Chicago, IL

"The Third Teacher" BCSE Conference, Liverpool, United Kingdom

Go Green Radio, *The Third Teacher*, Chicago

A+DEN Conference, Panelist/ Speaker

"From Chicago to the Caymans" Building Better Schools Summit, London

"Reimagining 21st-Century Learning: Environment as the Third Teacher," London Think Tank, March 2008

Roundtable Chair, The Design Leaders Summit, May 2008

"The Micro Revolution: Neighbors Making a Difference," Chicago Architecture Foundation, January 2008

AIA National Convention, San Antonio, Texas, May 2007

"Case Study for Sustainable Schools: Westinghouse College Preparatory High School," Chicago Center for Green Technology, March 2004

"Urban and Innovative Schools: The Architecture of Learning in Vienna," AIA - Committee on Architecture for Education Annual Conference, October 2003

"Technology and Learning Environment Case Studies," Learning Technology Illinois State Board of Education, May 2001

"21st Century Tools for Architectural Planning," IASBO's Annual Conference, May 2000

"Designing on Screen," AIA Professional Development, January 2000

Community Activity

Metropolitan Planning Council Neighborhood Placemaking in Chicago

Project Lead The Way A partnership of schools and organizations focused on bringing a more diverse interest in the field of engineering and engineering technology

Selection Panelist for Public Art, Chicago Police District Stations

Ida Crown Jewish Academy, Chicago, Illinois

- Feasibility study and architectural and engineering services for new 100,000 sf private high school

Evanston Township High School District 202, Evanston, Illinois

- Ongoing consultation, master planning services, miscellaneous remodeling including athletics, cafeteria and classroom renovations, and life safety implementation

The Chicago Academy for the Arts, Chicago, Illinois

- Test fits and space options for 84,000 sf facility

Montessori Academy of Chicago, Chicago, Illinois

- Planning for a Montessori school, including daycare program

Sacred Heart-Griffin High School, Springfield, Illinois

- Master planning for high school campus

Chicago International Charter School, Ralph Ellison High School, Chicago, Illinois

- Addition/renovation of previously unoccupied building to house offices, classrooms, labs, and a new gymnasium

Chicago Public Schools, Chicago, Illinois

- Managing and design architect for major capital improvement program for new construction, renovations and additions
- Westinghouse College Preparatory - a new 240,000 sf replacement school, LEED certification
- L-shaped elementary school prototype, implemented at:
  Claremont Academy, a new 960 student, 107,952 sf elementary school
  Oscar Depriest, a new 960 student, 106,890 sf elementary school
  Edward "Duke" Ellington, a new 1048 student, 113,980 sf elementary school
- Linear elementary school prototype, implemented at:
  Haugan Middle School, a new 912 student, 115,492 sf elementary school
  Tarkington Elementary School, a new 1024 student,132,000 sf school, including Chicago Park District field house and regional office facilities within the school, first CPS school to attain LEED certification
  Albany Park Middle School, a new 709 student, 104,284 sf middle school including LEED certification
- Miles Davis, elementary, a new 642 student, 100,264 sf school including LEED certification
- Lake Shore East K-8 School - including urban mixed-use residential development and park district partnership with school Skinner K-8 replacement school
- Waters Elementary School - remodeling and addition including cafeteria, library and classrooms

Adlai E. Stevenson High School District 125, Lincolnshire, Illinois

- High school serving 4,420 students which is divided into smaller "houses"
- New entry, upgrades to the career/college resource center and food services
- Addition/renovation to music department and dance studio
- 60,000 sf addition including 30 classrooms, new offices and commons expansion
- Master plan, major facility additions and renovation, life safety, roofing and energy retrofit to existing facility

Grant Community High School District 124, Fox Lake, Illinois
- Design of a new 13,400 sf library/learning center
- New fieldhouse and classroom addition

Chicagoland Jewish High School, Deerfield, Illinois
- New 72,000 sf, 250-student private high school with master planning for expansion to 400 students; FF&E selection, documentation, and procurement

Cleveland Municipal School District, Cleveland, Ohio
- New K-8 schools: Garfield, Patrick Henry and Harvey Rice Schools
- West Side Relief High School - new school to accommodate 1,600 students

Rochelle Township High School District No. 212, Rochelle, Illinois
- New 205,000 sf replacement high school designed for 1200 students

Woodland School District 50, Gurnee, Illinois
- Preliminary planning for new 240,000 sf, 4th-5th grade school for 1,880 students

Carbondale Community High School, Carbondale, Illinois
- New 160,000 sf addition and 65,000 sf renovation for 1200 students in grades 9-12

Skokie Fairview School District 72, Skokie, Illinois
- Renovations and additions to K-8 building

Lake Forest High School District 115, Lake Forest, Illinois
- Classrooms, natatorium and gymnasium

Niles Township High School District 219, Skokie, Illinois
- New fieldhouse and science classroom addition at Niles West High School and new gymnasium at Niles North High School

Loyola Academy, Chicago, Illinois
- Renovation of existing classroom

Carmel High School, Indianapolis, Indiana
- Renovation and existing classroom, new natatorium, gymnasium, learning center and entry

Arlington Heights School District 25, Arlington Heights, Illinois
- New school entry, administration offices, multipurpose, learning center and science classroom at Thomas Middle School

Morton Grove School District 70, Morton Grove, Illinois
- New learning center and computer science room, renovation of science and art room for Park View School; gymnasium addition and renovation

Evanston Community Consolidated School District 65, Evanston, Illinois
- Dewey Elementary addition to library and administration

Dominican Sisters Sacred Heart, Springfield, Illinois

- Design of new convent to include residential rooms as well as spaces for religious reflection, community and education use
- Master plan for a 150,000 sf renovation to Griffin High School

Timothy Christian Schools, Elmhurst, Illinois

- Master Plan for facility upgrades and campus expansion

School of the Art Institute,
Chicago, Illinois

- Master planning and conceptual design for 70,000 sf student union and fitness center to include faculty club, café, technology lab and school store and 42,000 sf library

University of Illinois in Downtown Chicago, Illinois

- Real estate planning, site/building selection, and programming for new signature graduate center building in collaboration with Jones Lang LaSalle

Adler School of Professional Psychology, Chicago, Illinois

- Programming, planning and interiors for 100,000 sf new urban campus that includes classrooms, office spaces, and a not-for-profit clinic

Beloit College, Beloit, Wisconsin

- 52,000 sf master plan and concept design for relocation of Beloit's Music and Dance Department into the Beloit Public Library

Northwestern University, Searle Hall, Evanston, Illinois

- 28,000 sf addition and 23,000 sf renovation to Student Health Services Center, including clinical medical office, psychological services, pharmacy, examination areas, reception, radiology and treatment areas; LEED Silver

College of DuPage, Carol Stream Regional Center, Carol Stream, Illinois

- Adaptive reuse of existing 12,000 sf fire station into the college's newest regional educational facility

College of DuPage, Naperville Regional Center, Naperville, Illinois

- 31,5000 sf addition/renovation of a full-service regional education center

College of DuPage/DuPage County Health Education Institute, Wheaton, Illinois

- Planning and design of 30,000 sf renovation/addition for hands-on classroom and clinical training spaces for nursing students and other healthcare-related occupations

University of Illinois, Champaign, Illinois

- Law School including seminar rooms, law library, courtroom, administrative offices, new student/public gathering space, new entry and plaza

Fleetwood-Jourdain Community Center, Evanston, Illinois,

- Conceptual design for community center

CANNONDESIGN

Christian Long

Educational Strategist

Total Years Experience: 16

Education

Master of Education
Harvard University, 2001

Bachelor of Arts in English
Indiana University, 1994

Certificate in Secondary Education
Indiana University, 1994

Additional Professional Development

Summer Design Institute
Harvard University, Graduate School of Design, 2003

Klingenstein Summer Institute
Columbia University, Teachers College, 1998

Professional Affiliations

Council of Educational Facilities Planners International (CEFPI)

Speaking Engagements

"Students as Change Agents", TEDxOverlake, Invited Speaker, Redmond, WA

"Re-Imagining the Relationship Between Space Planning and Technology", Invited Speaker, International Society of Technology in Education annual conference, Philadelphia, PA

"Inviting Failure Back into School", TEDxGreenville, Invited Speaker, Greenville, SC

Opening Keynote, Ohio School Facilities Commission statewide summit, Columbus, OH

Opening Keynote, Midwest Great Lakes Council of Educational Facilities Planners International annual conference, Chicago, IL

"Design Thinking as 21st Century Pedagogy", Keynote, Herman Miller Webinar

Opening Keynote, Southeast Council of Educational Facilities Planners annual conference, Savannah, GA

Christian Long is a classroom educator, designer, school planner, emerging technology expert, educational futurist, and passionate advocate for innovative learning communities. In addition to working closely with children through his national Prototype Design Camps, he has established himself as a global thought leader exploring the intersection of learning, technology, and design.

Relevant Experience

Academy for Global Citizenship, Chicago, Illinois

- New 60,000 sf carbon-neutral learning environment serving preK-8 grade.

Science Leadership Academy, Philadelphia, Pennsylvania

- Renovation of space to serve an internationally recognized inquiry-driven, progressive, 1-to-1 laptop urban high school.

Codman Academy Charter School, Boston, Massachusetts

- Launch of and renovation of dispersed community spaces to serve an internationally recognized inquiry-driven, progressive urban high school.

RE:ED / "Next Chapter" Summit, Lovett School, Atlanta, Georgia

- Launch and co-leadership of a national summit to explore the future of K-12 libraries.

Prototype Design Camps, varied national locations

- Launch and co-leadership of a national program of design camps for students and educators.

Dept. of Defense Education Agency (DoDEA), 21st Century Learning Environments global initiative, planning team, Washington DC

- Establish a prototype design model for $3 billion in construction projects for DoDEA schools world-wide.

Ohio School Facilities Commission, Columbus, Ohio

- Launch and co-leadership of a statewide program to connect 600+ school districts and their design partners around the theme of 21st Century learning models.

TEDxYouth@Columbus | "A Moment in Time", Columbus, Ohio

- Launch and co-leadership of a statewide event to celebrate young leaders.

TEDxBloomington | "The Wisdom of Play", Bloomington, Indiana

- Launch and co-leadership of a national event to focus on visionaries / creatives.

American Institute of Architects / Committee on Architecture in Education, national jury, Washington, DC

Council for Educational Facilities Planners International annual global summit, planning team, San Jose, CA

CANNONDESIGN

Total Years Experience: 2

Education

Bachelor of Arts, Anthropology
Northwestern University, 2010

Additional Professional Development

Design for America, Summer Studio
Northwestern University, 2010

Professional Affiliations

Design for America, Summer Coach
Northwestern University, 2011

Sarah Malin

Design Ethnographer

Sarah provides an attention to the implicit values that drive a community and a keen ability to synthesize and articulate findings. On projects, she drives the discovery and design evaluation phases and ensures that the goals of the users as well as the client shape the design. Sarah also applies an attention to audience to the management of The Third Teacher +, leading the group's communications and brand strategy.

Relevant Experience

Academy for Global Citizenship, Chicago, Illinois
- Curriculum activity tool kit

GameDesk Institute, Los Angeles, CA
- Design driver synthesis

Prototype Design Camp, Columbus, Ohio
- Mentor for three-day high school design camp.

RE:ED / "Next Chapter" Summit, Lovett School, Atlanta, Georgia
- Launch and co-leadership of a national summit to explore the future of K-12 libraries.

Science Leadership Academy, Philadelphia, Pennsylvania
- Renovation of space to serve an internationally recognized inquiry-driven, progressive, 1-to-1 laptop urban high school.

Global Engagement Summit, Northwestern University
- Content design for annual summit for young social entrepreneurs

Douglas Gould and Company, New Rochelle, New York
- New media coordinator at public-interest communications consulting firm

CANNONDESIGN

Peter J. McClive, PE, LEED AP

Engineering Coordinator

Education

BT/Electrical Engineering: Rochester Institute of Technology

Professional License

NY, PA

Affiliations

National Society of Professional Engineers

New York State Society of Professional Engineers

Illuminating Engineering Society

American Institute of Architects

National Council of Engineering Examiners

LEED® Accredited Professional, Building Design & Construction

With 28 years of experience, Mr. McClive provides leadership in engineering and project management for a variety of building types and projects. As a licensed professional engineer, he is responsible for design, estimating, and construction monitoring of electrical systems including medium- and low-voltage distribution; lighting; and telecommunication systems. Mr. McClive offers a wide range of knowledge and skills related to project delivery, including building assessments, program development, and contract specifications.

Major areas of concentration have included education, healthcare, commercial, industrial, and municipal government projects. Mr. McClive has been recognized for his work, including receiving the Edwin F. Guth Memorial Award for Excellence in Lighting Design from the Illuminating Engineering Society of North America.

Prior to joining Cannon Design, Mr. McClive served as a principal with a consulting mechanical and electrical engineering firm. As electrical partner-in-charge, his portfolio of work experience encompasses a variety of building types and projects.

Representative Experience

Yonkers Public Schools, Yonkers, NY

- Comprehensive Facility Assessment - Comprehensive facility assessment and development of five-year capital improvement plan for 40 buildings encompassing 4.5 million sf, including evaluation of classroom and lab spaces, indoor and outdoor athletic facilities, building envelope, code compliance, and mechanical, electrical, plumbing, telecommunications, and structural systems.

Buffalo Public Schools, Buffalo, NY

- District Wide Technology - Coordination and leadership of submission package from 11 A/E firms for technology improvements in eight reconstruction buildings; and project specifications.
- Survey & Evaluation - Complete assessment services for 13 district facilities per the RESCUE regulations.
- Technology Project - Engineering services for Phase 1 and 2 technology implementation projects to install power/LAN outlets, cables, data wire closets and computer classrooms in 15 buildings.

Niagara Falls City School District, Niagara Falls, NY

- Capital Project - Architectural, engineering, and construction management services for $16 million capital project.

Roosevelt Union Free School District, Roosevelt, NY

- Comprehensive A/E Services - Facility assessment and evaluation, educational planning, and capital project planning and implementation services for all new district facilities to replace aging existing facilities.

Cleveland Hill Union Free School District, Cheektowaga, NY

- Capital Improvement Project - Planning and design services for a $28 million capital project including a building-wide assessment and evaluation involving alterations and additions to an existing 300,000 sf school facility with phased construction.

Dunkirk City School District, Dunkirk, NY

- Performance Contract - Professional services for performance contract work with Johnson Controls for all schools.

Erie 1 BOCES, Buffalo, NY

- Facility Evaluations and Capital Improvement Implementation - Evaluation of architectural and engineering systems in three Career Development Centers to define the parameters of a major capital renovation program.

Holland Central School District, Holland, NY

- District-Wide Performance Contract - Engineering services for upgrading engineering systems.

Kenmore/Town of Tonawanda Union Free School District, Kenmore, NY

- Capital Improvement Project - Planning and design services for a $16 million capital improvement program including additions and renovations to district facilities.

Niagara Wheatfield Central School District, Sanborn, NY

- Additions and Alterations - Architectural, engineering, and construction management services for a $29 million project consisting of approximately 60,000 sf of additions and renovations at a high school, a middle school, and three elementary schools.

South Orangetown Central School District, Blauvelt, NY

- Master Plan - Programming, planning and design services as part of the development of a district-wide master plan and the resultant implementation projects.

The Hill School, Pottstown, PA

- Athletic Facility - Master planning and conceptual design of a new $28 million athletic complex at a venerable private school. Involving over 145,000 sf of new construction and renovation, major elements of the complex include a new field house, seven-court squash center, hockey arena with seating for 400, aquatic center, fitness center, and a 14-court outdoor sports pavilion with seating for 100.
- Field House & Squash -Planning and Design services for a new 45,000 sf field house and new 7 court squash center.

Finger Lakes Community College, Canandaigua, NY

- Master plan implementation projects and renovations to Enrollment Management.

State University of New York at Buffalo, Buffalo, NY

- School of Medicine and Biomedical Sciences Facilities Master Plan - Master planning services for the health sciences existing three-building, 450,000 sf complex, plus planning for a 150,000 sf research lab addition.

State University of New York College at Buffalo, Buffalo, NY

- Science Building - Architectural and engineering services for 200,000 sf multiphased renovation of four-story science building housing programs in biology, chemistry, physics, earth science, and science education. Project is LEED Gold certified.

CANNONDESIGN

Eric J. Lindstrom, PE, LEED AP

Mechanical Engineer

Education

BS/Architectural Engineering: Penn State University

Professional License

NY

Affiliations

LEED® Accredited Professional, Building Design & Construction

ASHRAE, Niagara Chapter, President-Elect, 2003-2004

ASHRAE, Niagara Chapter, President, 2004-2005

Former ASHRAE TEGA Committee Chairman

Mr. Lindstrom's skills include all aspects of the design of mechanical engineering systems - from central heating and cooling plants to distribution, control, and integrated systems analysis. He has applied these skills on projects of all types and in a wide variety of building types including primary/secondary schools, colleges and universities, corporate/commercial facilities, government and healthcare facilities.

As one of Cannon's leading authorities on sustainable design, he is knowledgeable in the design and function of mechanical systems for facilities that demand environmentally responsible solutions. He conducts in-house seminars in "green" education, facilitating Leadership in Energy Environmental Design LEED® standards, and coordinates firm activities with the U.S. Green Building Council, which administers the LEED® program.

Representative Experience

Albany City School District, Albany, NY

- Master Plan - Long-range master plan and subsequent implementation for a public school system serving over 10,000 students in New York State's capital city. Key elements of the plan focus on an evaluation of the district's 19 existing facilities, a survey of current versus needed equipment, and an analysis of how well facilities can support programmatic goals.

Rochester City School District, Rochester, NY

James Madison School of Excellence - New $24 million, 182,000 sq ft middle school for 1,000 students.

Roosevelt Union Free School District, Roosevelt, NY

- Centennial Elementary School - Planning and design services necessary to provide 65% completion of construction documents for the new Centennial Elementary School.
- Comprehensive A/E Services - Facility assessment and evaluation, educational planning, and capital project planning and implementation services for all new district facilities to replace aging existing facilities.
- High School Conversion/Pool Addition - $50 million reconstruction and additions project.
- Washington Rose Elementary School - Planning and design services for $30 million, 101,000 sf school featuring early-childhood house, library/media center, 230-seat cafeteria, faculty lunch room, and 350-seat gymatorium.

Chester Union Free School District, Chester, NY

- Master planning, architectural and engineering services for a $32 million district-wide capital improvement program including the construction of a new high school/middle school with associated sports fields and renovation of the existing elementary school.

Depew Union Free School District, Depew, NY

- Technology Program - $4.8 million Technology Implementation Program with equipment and infrastructure to update 500,000 sf of district space and including local area networks, multiple computer classrooms, and teacher workstations.

Erie 1 BOCES, Buffalo, NY

- Facility Evaluations and Capital Improvement Implementation - Evaluation of architectural and engineering systems in three Career Development Centers to define the parameters of a major capital renovation program.

Grand Island Central School District, Grand Island, NY

- Additions/Renovations - $1 million addition/renovation introducing new team teaching, commons and classroom spaces.

Addison Central School District, Addison, NY

- Capital Improvements - Planning and design services for the implementation of a $28 million capital project involving districtwide renovations and new construction.

Newfane Central School District, Newfane, NY

- Reconstruction - A/E and Construction Management services for the $7.2 million reconstruction of five District facilities, the Middle/Intermediate school building, Elementary, High School, Early Childhood Center, and the Central Services Building. The extensive renovations include major infrastructure upgrades involving new HVAC, Plumbing, Electrical, and Life Safety systems at all buildings.

St. Catherine of Siena Parish School, Albany, NY

- Building additions and renovations.

West Seneca Central School District, West Seneca, NY

- Renovations - Programming, planning, and design services for a $39 million renovation program.
- Facility & Technology Project - A/E design and installation services for a facilities and technology improvement project encompassing ten school buildings, bus garage, and buildings and grounds department facility.
- High School - Design services for minor repairs and renovations to high school.
- Vehicle Storage Building - Planning and design services for a new vehicle storage facility serving the West Seneca Central School District.

Boston University, Boston, MA

- Photonics Building - 280,000 sf, nine-story building featuring state-of-the-art laboratories, business incubator, specialized classrooms, lecture halls, seminar rooms, library, and full suite of clean-room and vibration-free facilities with telecommunications, teleconferencing, and interactive data-transmission systems.

Kean University, Union, NJ

- Center for Science, Technology & Mathematics Education - New $45 million, 110,000 sf science building to include teaching and research laboratories, computer facilities, training classrooms, conference center, auditorium, lecture halls, and restaurant. Registered to receive LEED Gold certification.

Sabanci University, Istanbul, Turkey

- Master Plan and Implementation - New 3,000-student university with over 1.5 million sf of buildings supporting academic, research, administrative, athletic, and residential functions. Awarded as a result of an international invitational design competition.

BOWEN
RICHARD L. BOWEN + ASSOCIATES INC.

GREGORY S. SUTYAK, PE
Electrical Engineer

Education

Bachelor of Science Electrical Engineering
Grove City College
Grove City, Pennsylvania, 1996

Masters of Business Administration
Cleveland State University,
Cleveland, Ohio, 1998

Registration

Professional Engineer – Ohio, Arizona, Delaware, Florida, Georgia, Indiana, Iowa, Kentucky, Massachusetts, Missouri, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Pennsylvania, Tennessee, Texas, Virginia, West Virginia

Memberships

Illuminating Engineering Society of America

National Fire Protection Agency

ACEC – Cleveland Region President

As Director of Engineering, Mr. Sutyak is responsible for overseeing and managing the activities and workload of all the firm's engineering departments, including civil, electrical, mechanical and structural. He also serves as head of the firm's electrical engineering department where he manages staff, performs quality assurance reviews and coordinates requirements with clients, other disciplines, utility companies and review agencies.

Mr. Sutyak is a licensed professional engineer in 33 states, including Ohio and has more than 10 years of electrical engineering experience. His design expertise includes lighting, power distribution and fire alarm system designs. His field experience consists of evaluating existing electrical installations and documenting life safety issues. Mr. Sutyak currently serves as contract manager for ongoing multi-task assignments with the Cleveland Airport Systems and for the Marathon Petroleum Company LLC.

Selected Projects

Academic

- Cuyahoga Community College Brunswick Higher Education Center, Project Manager for Electrical Engineering, Brunswick, Ohio
- Holy Trinity Parish Expansion, Cleveland, Ohio
- John Carroll University, Cafeteria Renovation, Project Manager/Engineer, Cleveland, Ohio
- Case Western Reserve University, Project Manager and Electrical Engineering Design, Cleveland, Ohio
  - Art Education/Art Studio Facility
  - Haydn Hall Fire Alarm System Replacement
  - Alumni House Renovation and Restoration
- Cleveland Municipal School District, Cleveland, Ohio
  - Warm, Safe, Dry Project
  - Hannah Gibbons Elementary School
  - Franklin D. Roosevelt School renovation
- Orrville High School Science Laboratories Renovation, Orrville, Ohio
- Bellefaire JCB – Monarch School, Shaker Hts, Ohio
- Leipsic PK-12 School, Review of Electrical and Security System Design and Integration, Leipsic, Ohio

Energy

- Cleveland Clinic Healthspace Solar Panels, Cleveland, Ohio
- CCF Solar Panel Installation, Electrical Engineer, Cleveland, Ohio
- CWRU Adelbert Gym Solar Panel Installation, Project Manager, Cleveland, Ohio
- University Hospitals Parking Garage 61 Solar Panels, Electrical Engineer, Cleveland, Ohio
- University Hospitals Ahuja Medical Center Solar Panels, Electrical Engineer, Cleveland, Ohio
- Euclid Public Library Solar Panels, Electrical Engineer, Euclid, Ohio
- Euclid City Hall Solar Panels, Electrical Engineer, Euclid, Ohio
- Vitamix Warehouse Solar Panels, Electrical Engineer, Olmsted Township, Ohio

- Long Beverage Company Warehouse Addition, Electrical Engineer, Cary, North Carolina

Governmental

- Canton Federal Center, Canton, Ohio
- Strongsville Police Station Addition/Renovation, Project Manager for Electrical Engineering, Strongsville, Ohio
- Tallmadge Municipal Building, Tallmadge, Ohio
- Lake County Human Services Renovations, Painesville, Ohio
- City of Cleveland Engineering Generator Additions at Various Fire Stations', Project Manager, Cleveland, Ohio
- Lake County Solid Waste Authority – Bailer Building Renovations, Project Manager for Engineering, Painesville, Ohio
- Immigration and Naturalization Services Building Renovation, Project Manager for Electrical Engineering, Miami, Florida
- Medina County Transit Facility, Electrical Engineer, Lafayette Township, Ohio
- Garden Valley Branch Library, Cleveland Public Library, Electrical Engineer, Cleveland, Ohio

Office

- Marathon Petroleum Company Main Office Building, Electrical Engineer and Engineering Manager, Canton, Ohio
- CT Consultants Office Building, Electrical Engineer, Mentor, Ohio
- Vitamix Expansion/Renovation, Electrical Engineer, Olmsted Falls, Ohio
- AAA Office Renovation, Electrical Engineer, Independence, Ohio
- 1717 East 9th St. Building Renovation, Electrical Engineer, Cleveland, Ohio
- Developer Diversified Realty Headquarters Expansion, Electrical Engineer, Beachwood, Ohio
- Associated Estates Corporate Headquarters, Electrical Engineer, Mayfield Heights, Ohio
- East Coast Square 2 Medical Office Building, Electrical Engineer, Morehead City, North Carolina

Recreation

- House of Blues Music Hall/Restaurant, Cleveland, Ohio
- HealthSpace, Cleveland, Ohio

Transportation

- Southwest Airlines Cargo Renovation, Project Engineer for Electrical Engineering, Cleveland, Ohio
- East 4th Streetscape, Civil Engineer, Cleveland, Ohio
- Greater Cleveland Regional Transit Authority Parmatown Facility, Parma, Ohio
- Ohio Turnpike Service Plaza 1 & 8, Electrical Engineer, Williams County, Ohio
- Cleveland Airport Systems Department of Port Control Operation and Maintenance General Engineering Services, Contract Manager, Cleveland, Ohio
- Cleveland Hopkins Airport A6 Sanitary Task Order, Project Manager, Cleveland, Ohio

CANNONDESIGN

Salvatore Bonetto, RCDD, EIT, CDT

Technology/Communications Engineer

Education

B/Electrical Engineering: University of Detroit

Affiliations

BICSI - Advancing Information Transport Systems

BICSI Standards Committee - K12 Working Group

Registered Communications Distribution Designer

Engineer in Training

Certified Document Technologist

An experienced electrical engineer, Mr. Bonetto brings a variety of skills to Cannon Design. His expertise in technology design includes local area networks, wide area networks, access control and video surveillance systems, and audio/video distribution systems. He has worked on such system designs as video distribution, closed circuit television, telephone (PBX and VoIP), auditorium sound, security systems and distance learning/multimedia centers. A Registered Communications Distribution Designer (RCDD) since 1997, Mr. Bonetto has been involved in projects with over 40 school districts, numerous universities and health care facilities.

Representative Experience

Albany City School District, Albany, NY

- Sheridan Preparatory Academy - Programming, planning, and design services for a new $9 million, three-story elementary school building for 500 students.

Buffalo Public Schools, Buffalo, NY

- Performing Arts Center - Planning and design services for the conversion of an existing high school into a $27 million, 225,000 sf performing arts center. Design and implementation of structured cabling, security and audio/visual systems including High Definition TV studio and multiple practice and performing spaces.
- Technology Project - Engineering services for Phase 1 and 2 technology implementation projects to install power/LAN outlets, cables, telecommunication rooms and computer classrooms in 15 buildings.

Roosevelt Union Free School District, Roosevelt, NY

- Technology, Comprehensive A/E Services - District wide revitalization project for 4 replacement school buildings and renovation of 225,000 sq ft High School. Technology design services for structured cabling, wireless network design, data electronics, video surveillance, access control and A/V systems including interactive classrooms, distance learning, video conferencing systems and digital signage.

Niagara Falls City School District, Niagara Falls, NY

- Technology, Capital Construction Projects - $15 million capital construction project including $6 million Technology implementation program encompassing 12 buildings including the retrofit of interactive classroom technology, and district wide video surveillance and access control systems.

Cornwall Central School District, Cornwall, NY

- District-wide master planning, electrical engineering and telecommunications design services for the construction of a new, 1200 student high school, renovation of the existing high school for a new middle school and renovation of the existing middle school for a new elementary school. Centralized Network Operation Center was created to deploy data, voice and video services to all District facilities.

Chester Union Free School District, Chester, NY

- Electrical engineering and telecommunication design services for a $32 million district-wide capital improvement program including the construction of a new middle/high school and renovation o fan existing elementary school.

- Wide Area Network (WAN) - Facilitated voice/data/Video distribution between buildings for new centrally located data center for the District enabling similar services for local and distant facility. Network electronics provide gigabit bandwidth to the desktop for every user. Wireless access points were located for coverage into assembly areas.

Erie 1 BOCES, Buffalo, NY

- Facility Evaluations and Capital Improvement Implementation - Evaluation of architectural and engineering systems in three Career Development Centers to define the parameters of a major capital renovation program.

Kenmore/Town of Tonawanda Union Free School District, Kenmore, NY

- Capital Improvement Project - Planning and design services for a $16 million capital improvement program including additions and renovations to district facilities.

Holland Central School District, Holland, NY

- Technology Upgrades - Engineering and telecommunications services for a $5 million renovation of technology infrastructure to accommodate computer systems and networks upgrades and address energy efficiency and code/safety issues.
- Wide Area Network (WAN) - installation included aerial distribution between buildings and centrally located data center to serve all district buildings.

Pelham Union Free School District, Pelham, NY

Planning services for district-wide facility assessment, educational planning, electrical engineering and telecommunications design including 65,000 sf addition and renovations to the existing 200,000 sf Collegiate Gothic high school / middle school building, plus district-wide telecommunications and local area network design at the four elementary school buildings.

St. Bonaventure University, St. Bonaventure, NY

- Master Planning for power distribution and infrastructure for voice/data/video campus area network.
- DeLaRoche Science Building - Programming and design services for addition encompassing biology, chemistry, physics, and computer science into a comprehensive center.
- Recreation Facility - Programming, planning, and design for a new 40,000 sf multipurpose recreational facility

Allegheny College, Meadville, PA

- Student Housing - Electrical engineering and telecommunication services for a new 279-bed student housing development which included high-efficiency lighting and control systems as well as telephone, data, and fire-alarm system design with interfaces to existing campus networks.

Ave Maria University, Naples, FL

- New University - Programming, planning, and telecommunications design services for a new 6,000-student university and associated town complex in southwestern Florida. Design included campus telecommunications master plan and infrastructure design with future expansion to 25,000 students. Design provided for multiple academic buildings, science/laboratory buildings, recreation center and student housing facilities. Structured telecommunications cabling design was implemented for multiple systems including voice, data, video, security and Building Automation Services. Network Operations Center provided a consolidated reporting location for network, maintenance and emergency services. Data center consisted of multi-location system with redundant UPS systems.

CANNONDESIGN

Michael Tillou, PE, LEED AP

Energy/Sustainability Engineer

Education

BS/Mechanical Engineering: Rensselaer Polytechnic Institute

Professional License

MA, VT

Affiliations

LEED® Accredited Professional

Building Design and Construction

AEE - Certified Building Commissioning Professional

ASHRAE

Northeast Sustainable Energy Association, US Green Building Council and Williamstown MA, MA Climate Action COOL Committee

An accomplished energy services engineer, Mr. Tillou brings to Cannon Design a wealth of knowledge and experience in energy modeling, analysis, and design - knowledge that is indispensable in the design of the high-performance buildings that are increasingly demanded by Cannon Design clients. In addition to providing integrated design and sustainability consulting services to support the LEED certification efforts of numerous university and corporate entities, he is an expert at HVAC and control system analysis, commissioning, optimization and troubleshooting, and specializes in energy auditing, benchmarking, and demand-side energy planning. His professional publications have focused on innovative applications of systems approaches and data analysis to the improvement of buildings' energy efficiency and performance.

Representative Experience

The Bullis School, Potomac, MD

- Sustainability Consulting - Sustainability consulting services for lower school.

State University of New York College at Oswego, Oswego, NY

- Laboratory Building - $110 million, 220,0000 sf of renovations and additions to science, engineering, and technologies building, including design of telecommunications, security, and audiovisual systems, environmental graphics design, and parking study.Owner will pursue LEED Gold certification.

State University of New York College at Buffalo, Buffalo, NY

- Student Housing - 500-bed apartment-style residence hall.

University of Maryland, College Park, Rockville, MD

- Camille Kendall Academic Center - Planning and design of LEED Gold certified, 195,000 sf educational center containing technology-enhanced classrooms, administrative and support spaces, bookstore, foodservice, lounge, and faculty offices.

George Mason University, Fairfax, VA

- Design-Build - Design-build for new 75,000 sf life sciences lab building.

University Hospitals, Cleveland, OH

- Seidman Cancer Center - Full architectural, structural, and MEP design for new $260 million cancer hospital featuring 150 inpatient beds and 300-car parking garage. Built to LEED standards.

Adelphi University, Garden City, NY

- Centers for Sport and Performing Arts - Planning, design, interior design, FF&E, and cost-control services for LEED certified, $89 million expansion and renovation of campus facilities supporting varsity athletics, student recreation and physical education, and academic programs in music, theater, and dance.

Kean University, Union, NJ

- Center for Science, Technology & Mathematics Education - New $45 million,

110,000 sf science building to include teaching and research laboratories, computer facilities, training classrooms, conference center, auditorium, lecture halls, and restaurant. Registered to receive LEED Gold certification.

Saint Louis University, St. Louis, MO

- Edward A. Doisy Research Center- Programming, planning, and design for LEED certified, 10-story, 206,000 sf biomedical research building for basic science and clinical research; and $11 million renovation of 75,000 sf of existing research facilities.

Department of Veterans Affairs, Bronx, Bronx, NY

- Spinal Cord Injury Center - Architectural, engineering, and LEED commissioning services for new 170,000 sf, $160 million, 92-bed spinal-cord injury center at Bronx VA hospital, with both acute and long-term spinal-cord injury inpatient treatment, outpatient clinics, research office suite, therapeutic pool, and 800-car parking garage.

Hospital for Special Surgery, New York, NY

- Expansion Program - Programming, planning, and design of major expansion and renovation program encompassing over 320,000 sf and providing enhancements to inpatient medical/surgical care, ambulatory surgery, physician office space, research, and patient and staff support.

Kaleida Health, Buffalo, NY

- Clinical and Medical Research Building: Global Heart and Vascular Institute (GVI) and UB Clinical Translational Research Center/Incubator (CTRC) - Architectural and engineering services for 475,000 sf building housing 275,000 sf cardiovascular institute, 200,000 sf clinical and translational research center, and $18 million biosciences incubator.

South Shore Hospital, South Weymouth, MA

- Vertical Expansion and Surgery Center -Architectural and engineering design services for a $32 million vertical bed expansion and $18 million freestanding surgery center, with option for commissioning, furniture selection, and LEED services.

St. John the Baptist Fruit Belt Community Development Corporation, Buffalo, NY

- Green Technologies Master Plan - Energy services for comprehensive campuswide master plan to reduce utility consumption.

University of Colorado Hospital, Denver, CO

- Anschutz Inpatient Pavilion - Programming, planning, and schematic design for $400 million, 600,000 sf expansion to Anschutz Inpatient Pavilion, including bed tower expansion of 250 beds, relocation of emergency department and expansion to level one trauma center, surgery expansion, and cardiovascular expansion.

Integrated Design & Energy Simulation Modeling

- Sands Expo Center (LEED): 2,500,000 sf
- Framingham Community Health: 30,000 sf
- Elmhurst Library (LEED): 32,000 sf
- Lasell College Woodland Residence (LEED): 50,000 sf

- Collegiate Dining & Academic Commons: 90,000 sf

Commissioning/Retro-Commissioning
Williams College B&L Building: 15,000 sf

- RCCC Technology Building (LEED): 65,000 sf
- RCCC Student Center: 18,000 sf
- Hopkins Building: 20,000 sf

High Performance Buildings & Energy Optimization *

- Town of Brattleboro Performance Contract - Energy auditing technical analysis of 13 buildings for Honeywell
- New York Mercantile Exchange (LEED EB)
- Williams College Jesup Hall
- Williams College Morley and North Campus Chilled Water Systems
- Williamstown Public Library (Solar PV, heating system optimization)

LEED & Sustainability Consulting *

- North Adams Public Library (LEED certified)
- Williams College North & South Academic Buildings
- Williams College Weston Field
- Hopkins Building, Williamstown MA

NYSERDA Linkages *

- Energy benchmarking project for 40,000,000 sf of Manhattan Class A retail office space

** Experience in prior practice.*

BOWEN
RICHARD L. BOWEN + ASSOCIATES INC.

DONALD E. THEISEN, PE

Structural Engineer

Education

Bachelor of Science in Civil Engineering
Ohio State University, Columbus, Ohio

Registration

Professional Engineer - Ohio (E-61711), Alabama, Arizona, Colorado, Connecticut, Delaware, District of Columbia, Florida, Georgia, Indiana, Iowa, Kentucky, Maine, Maryland, Michigan, Missouri, Nevada, New Hampshire, New Jersey, New York, North Carolina, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Vermont, Virginia and West Virginia

Mr. Theisen has wide-ranging experience in the coordination of projects from design through construction. He has over eighteen years of experience in structural design for additions, retrofits and new construction. His portfolio includes work in the civic, academic, retail, office, industrial, and housing sectors. Mr. Theisen also has hands-on experience designing bridges, roadways, and noise barriers for both public and private agencies.

Mr. Theisen has prepared engineering calculations and construction documents for foundations, floor framing, roof framing, wall design, and lateral load resisting systems, using cast-in-place concrete, precast concrete, masonry, structural steel, steel joist/joist girder, composite concrete and steel, light gauge metal framing, and wood.

Selected Projects

Academic

- Cleveland Municipal School District, Ohio
  West Side Relief High School, *Project Manager for Structural Engineering*
  Garfield School (K-8), *Structural Engineer*
  John Hay High School Renovation, *Structural Engineer*
- Parma City Schools Window & Door Replacement, Parma, Ohio
- Kirk Middle School, East Cleveland, Ohio
- Shiloh Middle School Addition, *Project Manager for Structural Engineering,* Parma, Ohio
- Case Western Reserve University Alumni House, Cleveland, Ohio
- Cuyahoga Community College, Regional Educational and Professional Development Center, *Complete Structural Design,* Brunswick, Ohio.
- Cuyahoga Community College, Student Services Renovation, Western Campus, Parma, Ohio

Civic

- Canton Federal Building, *Structural Engineer,* Canton, Ohio
- Lake County Courthouse Renovation and Expansion, *Structural Engineer,* Painesville, Ohio
- Internal Revenue Service, *Structural Engineer,* Springfield, Illinois
- Federal Bureau of Investigation, *Structural Engineer,* Springfield, Illinois
- Federal Bureau of Investigation Automotive Facility, *Structural Engineer,* Cleveland, Ohio
- SSA Building, *Structural Engineer,* West Palm Beach, Florida
- Bedford Fire Station No. 1, Bedford, Ohio
- City of Bedford Municipal Center, *Structural Engineer,* Bedford Ohio. New jail, firing range, police headquarters, municipal courts, city hall and fire station.
- Strongsville Police Station Renovation and Jail Addition including Free Standing Garage and Firing Range, *Structural Engineer,* Strongsville, Ohio
- Strongsville Fire Station 1, *Structural Engineer,* Strongsville, Ohio
- Parma Justice Center—Jail, Police Station, and a Two-Story Courts Complex, *Project Manager for Structural Engineering,* Parma Ohio

- United States Postal Service, *Structural Engineer,* various locations, Ohio
- Wickliffe Service Center, *Structural Engineer for schematic design,* Wickliffe, Ohio

Energy

- WindCube, *Structural engineer for design of support structure to place a wind turbine atop an existing building,* Port Clinton, Ohio.
- Healthspace Solar Panels, Cleveland Clinic Foundation, *Review of existing structure for support of proposed panels*
- Adelbert Gym Solar Panels, Case Western Reserve University, *Solar panel support design,* Cleveland, Ohio
- University Hospitals Garage Solar Panels, *Solar panel support design,* Cleveland, Ohio
- Euclid City Hall Solar Panels, *Review of existing structure for support of proposed panels* Euclid, Ohio
- Euclid Public Library Solar Panels, *Review of existing structure for support of proposed panels,* Euclid, Ohio

Healthcare/Senior Living

- Portage County Seniors Complex (Nursing Home, Adult Day Care, Senior Center, and Master Plan), *Project Manager for Structural Engineering,* Ravenna, Ohio

Office

- OfficeMax International Headquarters Addition, Cleveland, Ohio
- Weizer Building Restoration, Cleveland, Ohio
- NOSHOK World Headquarters, *Structural Engineer,* Berea, Ohio
- AAA Office Renovation, Independence, Ohio
- Marathon Petroleum Office Building, *Structural Engineer,* Canton, Ohio

Recreation

- Middleburg Heights Community Recreation Center, Middleburg Hts., Ohio
- Mentor Community Center and Ice Arena Expansion, Mentor, Ohio
- North Olmsted Playground and ADA Compliant Family Restroom, *Structural Engineer,* North Olmsted, Ohio

Transportation

- Ohio Turnpike Service Plaza 1, *Structural Engineer,* Williams County, Ohio
- Ohio Turnpike Service Plaza 8, *Structural Engineer,* Williams County, Ohio
- Norfolk Southern Rockport Yard Office Building, *Structural Engineer,* Cleveland, Ohio
- Norfolk Southern Bayview Yard Office Building, *Structural Engineer,* Baltimore, Maryland
- Laketran Bus Maintenance Facility Addition, Painesville, Ohio
- Altoona Railroad Museum, Altoona, Pennsylvania
- Medina County Transit Building, Medina, Ohio
- SARTA Gateway Facility Renovation, *Structural Engineer,* Canton, Ohio
- Akron Metro RTA, Bus Wash and Fueling Facility Reconstruction, *Structural Engineer,* Akron, Ohio

BOWEN
RICHARD L. BOWEN + ASSOCIATES INC.

KIRK A. FRY, PE, CEM, LEED AP
Mechanical Engineer

Education

Bachelor of Science
Mechanical Engineering
Cornell University
Ithaca, New York

Registration

Professional Engineer – Ohio, Alabama, Arizona, California, Colorado, Connecticut, Delaware, Florida, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, New Hampshire, New Jersey, New York, North Carolina, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin

LEED Accredited Professional

Certified Energy Manager

Memberships

American Society of Heating, Refrigeration and Air Conditioning Engineers

Association of Energy Engineers

As head of our mechanical engineering department, Mr. Fry is responsible for directing staff, assuring quality, estimating costs and preparing proposals. He coordinates mechanical system requirements with clients, other design team disciplines, plan reviewers and local utilities.

Mr. Fry has extensive experience in the application and design of HVAC systems, chilled water and boiler plants; mechanical systems operation and maintenance; energy auditing, modeling and conservation measures; and utility rate economic analysis. He is a registered professional engineer in 37 states.

Selected Projects:

Academic

- Cuyahoga Community College
  - Brunswick Higher Education Center, *Supervising Engineer, HVAC Specifications, Energy Simulation, and Construction Administration,* Brunswick, Ohio
  - Student Services Renovation (on hold), *Supervising Engineer,* Parma, Ohio
- Minerva (Ohio) Elementary School
- McKinley High School Renovation and Expansion, Canton, Ohio
- McKinley High School Chilled Water Plant Renovation, Canton, Ohio
- Timken High School Commons Building, Canton, Ohio
- Collinwood High School Laboratory Fire Renovation, Cleveland, Ohio
- Mapleleaf Elementary School Renovation, Garfield Heights, Ohio
- Powers Elementary School Addition, Amherst, Ohio
- Oberlin College Wright Physics Laboratory, Oberlin, Ohio
- Case Western Reserve University, Cleveland, Ohio
  - Wickenden Building 5th Floor Renovation
  - Glennan Building HVAC Upgrades
  - School of Dentistry Teaching Laboratory
  - West Campus Chilled Water System Study
  - School of Nursing Cyber Café
- Bellefaire JCB, Shaker Heights, Ohio
  - Facility-wide HVAC Systems Assessment
  - Boiler Replacement Projects

Governmental

- Strongsville Police Station Expansion and Renovation; *HVAC Project Manager and Supervising Engineer,* Strongsville, Ohio
- Cleveland Heights-University Heights (Ohio) Main Library
- CCPL Strongsville Branch, Strongsville, Ohio
- CCPL Beachwood Branch HVAC Renovation, Beachwood, OH
- CCPL Orange Branch HVAC Renovation, Orange Village, OH
- West Side Community House, Cleveland, Ohio
- Orange Village Municipal Center, Orange Village, Ohio
- Garden Valley Branch Library, *HVAC and Plumbing Design,* Cleveland, Ohio
- Mayfield Village Police, *LEED Compliance and Schematic Design Scope of Work,* Mayfield, Ohio

- City Kennel, *Supervising Engineer,* Cleveland, Ohio
- Juvenile Detention Center Assessment, *Facility Survey and Assessment,* Cleveland, Ohio

Maintenance Facilities

- Bay Village Schools Maintenance Building, Bay Village, Ohio

Office

- Marathon Oil Engineering Office Building, *HVAC Project Manager and Mechanical Supervising Engineer,* Canton, OH
- The Keith Building Cooling Tower Replacement, Cleveland, OH
- Cleveland Christian Home Administrative Offices, Cleveland, OH
- Avon Legal Law Offices, Avon, Ohio
- Lorain National Bank Headquarters, Lorain, Ohio
- Moen Corporation Headquarters, North Olmsted, Ohio
- Turner Construction Cleveland Region Offices, Cleveland, Ohio
- Zashin & Rich Corporate Offices, Cleveland, Ohio
- Legal Aid Society Office Renovation, Cleveland, Ohio
- AAA Office Renovation, *Supervising Engineer,* Independence, Ohio
- Associated Estates Corporate Headquarters, *Supervising Engineer,* Mayfield Heights, Ohio
- East Coast Square 2 Medical Office Building, *QA/QC on Construction Documents and Project Management,* Morehead City, North Carolina

Recreation

- Fawcett Stadium North Stands Restroom Renovation, Canton, Ohio
- Chagrin Falls (Ohio) High School Stadium Restrooms
- Byers Field Restroom Renovation, Parma, Ohio
- Canton (Ohio) McKinley High School Auxiliary Gymnasium

Transportation

- Altoona Railroaders Museum, *Supervising Engineer and HVAC Specs,* Altoona, Pennsylvania
- Cooperstown Center, *Supervising Engineer,* Somerdale, New Jersey

CANNONDESIGN

Brian Alesius, PE

Structural Engineer

Education

BS/Bachelor of Science Civil Engineering: State University of New York at Buffalo

MS/Structural Engineering: State University of New York at Buffalo

Professional License

NY, , MI, TX, VA

Mr. Alesius has over 10 years of experience as a structural engineer for a variety of client types including healthcare, education, government and commercial facilities having worked on both large and small projects. He works effectively with architects and other engineering disciplines to coordinate all aspects of design. He has led several fast track projects from schematic through construction.

Representative Experience

Buffalo Public Schools, Buffalo, NY

- Frank A. Sedita Academy - Architecture, engineering, and construction management services for a $7 million, 40,000 sf renovation and upgrade program at an urban elementary school comprised of a new 20-classroom building wing and significant renovations throughout the school. Completed on time and within budget.
- District Wide Technology - Coordination and leadership of submission package from 11 A/E firms for technology improvements in eight reconstruction buildings; and project specifications.

Rochester City School District, Rochester, NY

- James Madison School of Excellence - New $24 million, 182,000 sq ft middle school for 1,000 students.
- Roberto Clemente Elementary School (School 8) - Award-winning replacement designed for 800 students on a constricted, inner-city site.

Roosevelt Union Free School District, Roosevelt, NY

- Washington Rose Elementary School - Planning and design services for $30 million, 101,000 sf school featuring early-childhood house, library/media center, 230-seat cafeteria, faculty lunch room, and 350-seat gymatorium.

Addison Central School District, Addison, NY

- Capital Improvements - Planning and design services for the implementation of a $28 million capital project involving districtwide renovations and new construction.

Chester Union Free School District, Chester, NY

- Master planning, architectural and engineering services for a $32 million district-wide capital improvement program including the construction of a new high school/ middle school with associated sports fields and renovation of the existing elementary school.

Cleveland Hill Union Free School District, Cheektowaga, NY

- Capital Improvement Project - Planning and design services for a $28 million capital project including a building-wide assessment and evaluation involving alterations and additions to an existing 300,000 sf school facility with phased construction.

Cornwall Central School District, Cornwall, NY

- District Planning and Implementation - District-wide master planning and design services for the construction of a new, 1200 student high school with associated sports fields, renovation of the existing high school for a new middle school and

renovation of the existing middle school for a new elementary school.

Erie 1 BOCES, Buffalo, NY

Facility Evaluations and Capital Improvement Implementation - Evaluation of architectural and engineering systems in three Career Development Centers to define the parameters of a major capital renovation program.

Grand Island Central School District, Grand Island, NY

- Capital Projects - Architectural and engineering services for design and implementation of capital projects.

Hebrew Academy of the Five Towns & Rockaway, Cedarhurst, NY

- High School - Programming and extended A/E services for additions and renovations to high school campus, including gymnasium, lockers, classrooms, and administrative space.

The Hill School, Pottstown, PA

- Athletic Facility - Master planning and conceptual design of a new $28 million athletic complex at a venerable private school. Involving over 145,000 sf of new construction and renovation, major elements of the complex include a new field house, seven-court squash center, hockey arena with seating for 400, aquatic center, fitness center, and a 14-court outdoor sports pavilion with seating for 100.

West Seneca Central School District, West Seneca, NY

- Facility & Technology Project - A/E design and installation services for a facilities and technology improvement project encompassing ten school buildings, bus garage, and buildings and grounds department facility.

Allegheny College, Meadville, PA

- North Quad Student Village - Site planning, architectural, and engineering services for new LEED-certified, 279-bed student housing development located on 5.4-acre site adjacent to Allegheny College campus.

Ave Maria University, Ave Maria, FL

- New University - Programming, planning, design, and engineering services for new 5,000-student university and associated town complex in southwestern Florida. Phase 1 encompasses 12 buildings, 1 million sf, and construction cost of $300 million.

Boston University, Boston, MA

- Fitness and Recreation Center - Programming, planning, and design of 282,000 sf state-of-the-art fitness and recreation center with 25-meter stretch competition pool and leisure pool, wellness center, sports medicine, three- and four-court gyms, squash and racquetball courts, multipurpose rooms, dance studios, office space, elevated jogging track, and climbing wall.
- Agganis Arena - Programming, planning, and design of 6,200-seat arena for ice hockey, basketball, concerts, and lecture programs, with 29 private boxes, club room, 308,000 sf underground parking garage, and surface parking.

BOWEN
RICHARD L. BOWEN + ASSOCIATES INC.

CARL S. BAINER, RA, LEED AP

Project Architect

Education
Bachelor of Architecture,
Kent State University
Kent, Ohio

Certificate *"USGBC Commissioning for LEED Buildings"*

Registration
Architect – Ohio

LEED Accredited Professional

Mr. Bainer has a background in, and understanding of, the building process from project definition, programming, design, construction documents, engineering interfaces, and construction through project closeout. He is experienced in new construction, renovation and interiors projects for a variety of clients including government, corporate, academic, retail, and industrial. Projects range from renovating an old armory to a multi-purpose activity hall, to modifying an existing USDA food processing plant.

Selected Projects:

Academic

- Howe Mansion, Building Renovation, *Project Architect,* Cleveland, Ohio
- University of Akron, Polymer Science Building, Akron, Ohio
- Case Western Reserve University, School of Medicine, Renovation Projects, Cleveland, Ohio
- Cleveland Music School Settlement, Multiple Renovation Project Studies, Ohio
- Cleveland Metropolitan School District West Side Relief, *Construction Documents,* Cleveland, Ohio
- Cuyahoga Community College Regional Education and Professional Development Center, *LEED Coordinator and Construction Administration,* Brunswick, Ohio

Ecclesiastic

- Washington Avenue Christian Church, New Classroom Building and Sanctuary Renovation, *Project Manager,* Elyria, Ohio

Governmental

- GSA Canton Federal Center, *Project Architect,* Canton, Ohio
- GSA FBI Field Office, *Project Architect,* Springfield, Illinois
- GSA FBI Communications Processing Facility, *Project Architect,* Cleveland, Ohio
- GSA IRS Facility, *Project Architect,* Springfield, Illinois
- GSA SSA Building, West Palm Beach, Florida
- Russell Township Fire Station
- Laporte Public Library, Building Renovation and Reorganization

Office

- Developer's Diversified Realty Office Building, *Project Architect,* Beachwood Ohio
- Central Reserve Life Corporate Headquarters, *Project Architect,* Strongsville, Ohio
- National City Bank Operations Center, Interior Renovation, *Architect,* Cleveland, Ohio
- North Pointe Tower, *Architect,* Cleveland, Ohio
- CT Consultants Headquarters, *Construction Documents,* Mentor, Ohio

Recreation

- Beck Center Armory, Building Renovation, *Project Architect,* Lakewood, Ohio
- Brecksville Community Center, *Project Architect,* Ohio
- Rocky River Recreation Center Renovation, Rocky River, Ohio

BOWEN
RICHARD L. BOWEN + ASSOCIATES INC.

ANDREW C. CYGAN, RA
Project Architect

Education
Master of Architecture
Miami University
Oxford, Ohio

Bachelor of Architecture,
The Ohio State University
Columbus, Ohio

Registration
Architect – Ohio

Awards
AIA Certificate of Merit for Excellence in the Study of Architecture

Military Service
US Army Infantry
3 Years Active Duty Service
Rank of Sergeant

Mr. Cygan's professional experience includes project design, construction detailing and construction documentation. Aside from his professional experience, he has developed excellent communication, leadership and organizational abilities from his years in the military.

Selected Projects

Academic
- Cuyahoga Community College Brunswick University Center, *Construction Detailing and Documents,* Brunswick, Ohio

Governmental
- Mayfield Village Police Station, *Schematic Design and Design Development,* Mayfield Village, Ohio
- Strongsville Police Station Addition and Renovation, *Project Architect* for this 18,000 SF Renovation and 32,000 SF Addition to the Existing Police Station, Strongsville, Ohio
- Nord Center, *Project Architect,* Lorain, Ohio. Conducted programming and conceptual design for new children and family services building design development

Office
- National City Bank, *Staff Architect*, Highland Heights and Strongsville, Ohio. Participated in construction administration for new operation center facilities
- National City Bank, *Staff Architect,* Cleveland, Ohio. Participated in construction administration for interior renovations at Corporate Headquarters
- Consolidated Graphics Office, *Schematic Design,* Cleveland, Ohio
- Cuyahoga Metropolitan Housing Authority Administration Building Owner's Rep, *Construction Document Reviews,* Cleveland, Ohio

Maintenance
- Central Ohio Transit Authority McKinley Assessment, *Written Facility Assessment and Schematic Design,* Columbus, Ohio
- Wickliffe Service Center, *Schematic Design,* Wickliffe, Ohio

Recreation
- Pine Ridge County Club, *Project Designer,* Willoughby, Ohio. Participated in programming, conceptual design and design development for an addition and interior renovation to existing Clubhouse building.

Transportation
- GCRTA East 55th Street Station, *Construction Detailing and Construction Documents,* Cleveland, Ohio
- Ohio Turnpike Commission Twin Service Plazas, *Project Architect,* Williams County, Ohio
- Norfolk Southern Locomotive Service Building, *Project Architect,* Conway, Pennsylvania
- Norfolk Southern Welfare Facility, *Project Architect,* Chattanooga, Tennessee
- Norfolk Southern Tool Shop, *Project Architect,* Norfolk, Virginia






B3 Local Participation

Local Participation

Richard L. Bowen + Associates, Inc. (RLB+A), in association with Cannon Design, will be the prime consultant to Cleveland Heights – University Heights City School District. As outlined in the company overview section, RLB+A has been headquartered in Cleveland, Ohio for more than 50 years. The firm's offices are located on Shaker Square, less than 5 miles from the CHUH CSD Board of Education building.

The RLB+A/Cannon Design relationship is well established. Our firms have collaborated successfully for more than 10 years. On the following local projects, Cannon performed primarily on the front-end planning, conceptual and schematic design portion while RLB+A performed on design development, construction documents and construction administration:

- Historic John Hay High School Renovation
- Six all-new K-8 Schools for the Cleveland Metropolitan School District
- University Hospitals ER and Rainbow Baby & Children's Renovation and Expansion project designed by Cannon with Construction Administration provided by RLB+A

For the CHUH CSD Educational Facility Master Plan project, we envision our firms collaborating as follows:

- Richard L. Bowen + Associates will be the contract holder and Canon Design will be a subconsultant to RLB+A
- RLB+A will be the primary local point of contact throughout the planning process
- Cannon thought leaders and experienced school master planners will direct the planning and visioning process in close association with RLB+A which has broad local experience in master planning, Ohio building codes and Ohio construction practices.
- RLB+A architects and engineers will visit each school and field verify the OSFC facility assessments.
- RLB+A construction managers will serve in advisory role for cost/constructability issues as requested
- RLB+A and Cannon Design planners will interview all stakeholders designated by CHUH CSD
- RLB+A and Cannon will participate equally in the Community Engagement process
- An outgrowth of the Community Engagement process will result in identifying strategies for local Partnering. This process will be led by RLB+A.
- Conceptual designs will be developed primarily by Cannon Design architects and mechanical/electrical engineers with RLB+A providing primary support in structural design and civil/site design
- User Group meetings will be attended by representatives of both RLB+A and Cannon Design





B4 Sustainability

The failing and deteriorating infrastructure of schools directly affects education as a whole, from the safety and security of classrooms to the financial burden of constant repair to the air quality of the indoor environment. The U.S. Department of Education recognized the impact these structures had on students, teachers and natural resources and questioned whether major improvements to existing schools and new school construction met a high performance rating measured against modernization and sustainability.

As a result, the U.S. Department of Education adopted a forward-thinking overall approach to design, construction, and renovation of schools and recognized organizations that were aligned with this philosophy. One such organization is the U.S. Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED), which evaluates a buildings performance over its life cycle through design and construction, including building systems. The RLB+A/Cannon Planning approach to sustainability is tied closely to USGBC's LEED program.

A green school, as defined by www.greenschoolbuildings.org is *"…a school building or facility that creates a healthy environment that is conducive to learning while saving energy, resources, and money."*

The ***basic guidelines*** for designing a green school include:

- creating a structure and its systems to be comparable to the cost of a conventional school in terms of energy, resources and money;
- emphasing a healthy learning environment in terms of site selection, daylighting, indoor air quality, thermal comfort, acoustics and classroom design in coordination with the selection of durable building materials, reuse and recycle, reduction in energy and water use, and indoor air quality; and
- integrating high performance, energy efficient systems.

The ***process*** for creating a green school includes:

- registering the building with either the USGBC's LEED for Schools or LEED for Existing Buildings Operations & Maintenance rating systems, or an equivalent measurement system; and
- following and measuring the design and construction of the building with the LEED rating system.

The ***impact*** from creating a green school includes:

- reducing the amount of natural resources used such as water and energy;
- savings in operational costs per year which potentially translates to the hiring of more teachers and/or the purchase of new textbooks and computers;
- bettering the overall health of students and teachers with a reduction of absenteeism; and
- increasing teacher retention rates.

The *LEED 2009 for Schools New Construction and Major Renovations* rating system is defined by a series of categories that cover sustainable sites, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality, innovation in design, and regional priority. Each category is further identified with prerequisites and credits that state intent, requirements, and potential technologies and strategies.

RLB+A and Sustainable Design

With LEED Accredited Professionals across all design disciplines, RLB+A supports green building projects and sustainable practices. Our architects, engineers and construction professionals had participated in the design and/or construction of 38 buildings registered for LEED® Certification. Of these, 28 projects have achieved LEED® Certification, including LEED® Silver and LEED® Gold. Others are pending Certification or are still under construction.

Cannon Design and Sustainable Design

Cannon Design has extensive experience working with the USGBC and the Green Building Certification Institute (GBCI), the independent organization that now administers the LEED certification program. Cannon Design has played a leadership role in developing the LEED standards:

Cannon Design staff hold current positions on the USGBC board of directors, as a voting member of its LEED Market Advisory Committee, and as participants in multiple committees for developing green building standards, exams, and policies

Cannon Design was one of six organizations that coauthored the new three-volume LEED 2009 Reference Guides - the current standards for all new LEED certifications.

Cannon Design served as the manager of the LEED-CS pilot program and authored the original LEED standards for core and shell developments.






B5 Innovative Educational Planning

We are drawn to the challenge of re-imagining the design of learning environments to support CHUH CSD's full implementation of the K-12 Pathways Structure by 2015 while simultaneously crafting a plan for the efficient use of campus spaces district-wide to serve the educational community for the next 50 years.

Furthermore, we appreciate the District's and citizen's committee's belief that students who work collaboratively create their own learning, especially within an authentic 21st century teaching and learning model.

To that end, we believe 6 specific areas of Cannon's practice will be critical to successful project development in support of CHUH's long-term goals and needs:

1. Defining a 21st Century Teaching and Learning Mindset
2. *The Third Teacher* - research and book
3. Our The Third Teacher Plus global network
4. Our The Third Teacher Plus process
5. "Smart Planning" approach
6. "Test Fits"

Defining a 21st Century Teaching and Learning Mindset

The child starting kindergarten this fall will graduate in the third decade of the 21st century. All we can know about the world she will step into is that it will have challenges and opportunities beyond what we can imagine today, problems and possibilities that will demand creativity and ingenuity, responsibility and compassion.

-- forward to *The Third Teacher*

The current movement in transforming education to meet 21st century needs is on leader and community agendas across the world.

For many, the formula of "schools + (some quantity of) computers = 21st century learning" is a sufficient goal. To anyone deeply vested in the question of learning in at this point in our educational history, however, it has become clear that the digital tools becoming so readily at our disposal today are merely facilitators for something more important. And this is equally true of a school already actively engaged in a dynamic 1-to-1 laptop program or one that is creatively making use of whatever level of technological resources it can access.

What is most critical to an educational community's shift into effective 21st century strategies is the cultural adoption of a new mindset regarding teaching and learning.

Along with our The Third Teacher Plus network + partners (see below), we have observed an ongoing shift within innovative teaching and learning models around the world. We believe that a rigorous exploration of these dynamics will be central to developing an effective facility planning partnership with the CHUH community in order to develop agile learning environments relevant well beyond the next half century:

- Individual to **Collaborative/Community**
- Research-Based to **Knowledge-Based**
- Stability to **Agility**
- Quality-Controlled to **Quality-Assured**
- Subject-Based to **Project-Based**
- Delivered Wisdom to **User to Generated Content**

- One-Size-Fits-All to **Personalization**
- National to **Global**
- One-to-Many to **Peer-to-Peer**
- Interactive to **Participatory**
- Curriculum-Centered to **Learner-Centered**
- Retaining to **Critiquing**
- Teaching to **Co-Learning**

This ongoing shift forces us to ask very different questions as design partners in an effort to comprehensively innovate our experience within the public education arena going forward. In particular;

- First, what does it mean to redesign the very experience of learning for the 21st century?
- Second, and CHUH CSD reminds us in the invitation to design new schools: if new learning environments we know are possible were already online in your community today, how would the practice of teaching and learning be different from this point forward?

In addition to Cannon's traditional process -- "Smart Planning" and "Test Fit" (which helps to guide long-term facility planning (see below in section 6)) -- we believe that the CHUH opportunity presents the opportunity to integrate our The Third Teacher Plus process to develop strategic learning environments to support innovative 21st century teaching and learning solutions.

The Third Teacher - Research and Book

Our commitment to playing a role of change agent in the global discussion on the ideal 21st century learning and teaching experience brought our firm on a multi-year learning journey, which resulted in the publication of The Third Teacher.

Created by an international team of architects and designers who were concerned by the challenges that face our current educational system at the dawn of the 21st century, The Third Teacher explores the critical link between the school environment, the holistic experience, and how children learn.

We are inspired by the pioneer Italian teacher and psychologist, Loris Malaguzzi who founded the Reggio Emilia approach to learning. He believed that children develop through their interactions, first with the adults in their lives – parents and teachers – then with their peers, and ultimately with the environment around them. Environment, said, Malaguzzi, is the third teacher.

What was first a research project quickly sparked a dynamic global conversation between designers, classroom teachers, administrators, parents, community leaders, world-leading experts (including the likes of Sir Ken Robinson, Howard Gardner, David Orr, Raffi, David Suzuki, and others within our Third Teacher network), parents, administrators, policy makers, and anyone passionately concerned about the future of learning and our children's opportunities ahead.

The Third Teacher Plus

This international collaboration with educators, designers and teaching organizations

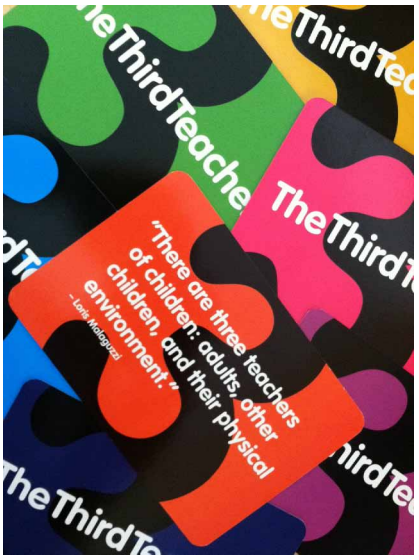
gave us new perspectives and critically changed our process of engagement and design.

Moving beyond a single book that inspires readers to ask bolder questions about learning environments, The Third Teacher Plus now operates as a defined design consultancy within Cannon Design's ideas based practice.

The group is powered by architect Trung Le, educator Christian Long and anthropologist Sarah Malin, and augmented by a robust, global network of education thought leaders and game changers who respond to the needs of each project on an ad hoc basis.

Some of these network members include:

- Stephanie Pace Marshall, founder - Illinois Math and Science Academy in Aurora, IL
- Bruce Mau, founder - Massive Change Network based in Chicago, IL
- Chris Lehmann, founder/CEO - Science Leadership Academy in Philadelphia, PA
- Stephen Heppell, CEO of Heppell.net in London, UK
- Kiran Bir Sethi, founder /director - Riverside School in Ahmedabad, India
- Sarah Elizabeth Ippel, founder/CEO - The Academy for Global Citizenship in Chicago, IL
- Lucien Vattel, founder and director of the GameDesk Institute in Los Angeles, CA



Together, this team works with our educational clients around the United States and internationally to develop innovative 21st century learning ecologies to better serve 21st century teachers and learners.

The Third Teacher Plus Process

We live and breathe our vision for learning. We approach the way we work the way we feel learning should happen as well.

-- The Third Teacher Plus motto

With an eye on the future of learning, the multidisciplinary team collaborates with educational communities to formulate systemic strategies for pedagogical, curricular, and environmental change. The Third Teacher Plus seeks to engage learning communities that are seeking to be innovative leaders anchored in the historical foundations of historical wisdom, on-going inquiry and future-oriented collaboration. These communities ask fundamental and game-changing questions regarding the nature of education. And ultimately they create more inspired learning environments in the process.

We shape our process based on the qualities we promote for the learning experience. Valuing the strength of diverse perspectives, we are a multi-disciplinary team that collaborates to develop a systemic and holistic strategy. We take an inquisitive, empathetic and reflective approach to every project to provide a deep involvement.

Within our process, we engage a wide array of offerings (see section 6 for more detail) that include:

- Ethnographic Research to identify Design Drivers for the on-going project scope
- Learning Summit to explore Learning in the 21st Century
- Vision Workshop to identify the big ideas between Learning and Space
- Design Charette to develop Spaces and Places
- *Optional* - Prototype Design Camp
- *Optional* - Additional Educational Services, such as workshops in emerging technology; curriculum development; project-based inquiry; teacher professional development; and design thinking methodology.

Each of these process elements allows us to work directly with the students, educators, administrators, district advocates, and portions of the community-at-large to develop design strategies to support the district's long-term education and facility vision. And at each stage of the process, we are able to engage our national and global The Third Teacher Plus network and partners to take advantage of cutting-edge research which allows us to craft the most innovative responses to the project's driving questions.

Together, we will design the physical environment - the third teacher as referred to by Malaguzi – to facilitate the educational community's evolving vision of learning, striving to help our young people inspire the local community and larger world to be better than how we found it.

"Smart Planning" Approach

As an ideas-based practice, Cannon Design has gained international stature for integrity and ingenuity that assures each client's overall interests are optimized.

The transformation of the Cleveland Heights-University Heights City School District into a 21st century ecology requires a blend of vision and willpower. Our breadth of experience shows that the magic of education remains primarily in the human interactions -- a teacher capable and willing to teach, along with a student prepared to learn. This remains true even in the most innovative teaching and learning models.

The CHUH schools face issues that range from daily operations to long-term structural and compelling academic reforms. Your RFQ requires an understanding of scope, extent and impact of the work, which goes to the heart of the high expectations surrounding the proposed reinvention/reconstruction of the District with a confident view towards effectiveness and inspiration in the 21st century. Thus, such a comprehensive 'Plan' is critical to tipping the public perception that new life and accountability are being created in your schools by virtue of smarter use of valuable resources to the highest and best purposes.

The CHUH CSD and its Citizens Facilities Committee is going about the necessary due diligence in a manner that is focused upon securing reliable information, validating your priorities, and understanding the alternatives. In fact, your process embodies the essence of informed decision-making which aligns with our Smart Planning process.

The purpose becomes to benchmark and build upon a 3-step process of:

- Where are you now?,
- Where do you want to be?, and
- How can we best help you get there?

We would propose an intense but detailed public engagement process (*detailed in section 6*) to kick-off your comprehensive Education Facilities Master Plan.

As a "team' -- i.e., the CHUH CSD, your Cost/Constructability consultant, The Third Teacher Plus network, and our RLB+A/Cannon Planners/Designers -- we would together reach a much greater confidence and ability to manage the expectations as well as results within a 'do-able' construction budget along with mutually identifying the contingencies needing closer analysis.

A 21st century, high performance school where every child has a place and a pathway to contribute to tomorrow's world requires facilities that encourage educators and students to 'connect' on seeking and applying knowledge. We refer to that quality as 'agile flex capacity' to accommodate the differing learning styles of students (and teachers) in differing situations within a dynamic 21st century learning ecology.

ark not just our own projects but also rigorously evaluate emergces across the country and globe. This speaks to the on-going ird Teacher Plus network which brings together the world's leaddesign, technology, and other areas key to our shared efforts. It owledge that we will assist you to manage the development of a ace core model program as the touchstone for the district-wide Plan.

uires creative pre-visualization and open-ended problem solvare dependent upon excellent communications, particularly rection projects. To that end, our design team envisions a series of ong with progress updates and final milestones. This approach within the user group function-by-function and then a multithe priorities and subsequent recommendations maximize the to succeed.

As experienced school design professionals, we bring the expertise and tools to facilitate and collaborate with educators in the reconciliation of expectations, best practices, and program scope. Accordingly, the user group representatives designated by the District and design partners bring to the table strategic insights towards each core model program that assure the essential attributes are incorporated for each school by type. This not only supports innovation across the project scope, but also we can assure that an equitable level of success is achieved within the context of each school.

Test Fits

The next challenge is to assure proper instructional program space, and how a solution optimizes the guiding principle of the highest and best use to be cost effective.

We will prepare and maintain a 'working biography' that tracks the major milestones in the evolution and possibilities for each school. The 'biography' becomes a 'reader-friendly' document for handy reference by CHUH CSD and community stakeholders that want to 'review' the backup materials. The goals and objectives are thus continually validated relative to the core model program as a reconciliation technique that systematically benchmarks the needs and priorities based upon the District's preferred grade configuration, class-size, and academic standards as a strategic touchstone.

The key to the process, however, is more detailed planning in terms of dialogue and regular work session 'design charettes' with your educators, administrators, parents, and key community members (*as seen in section 6*) to begin building the necessary feedback and consensus on each solution that aligns program, concept, and budget as the preferred 'Plan'.

Unquestionably, our experience has been that the earlier in the process that the scope/concept/budget can be reconciled, the better for everybody. The respective pro's and con's associated with each 'test fit' considered will then be evaluated. For example:

- Are the full range of 21st century teaching and learning spaces available?
- Are the teaching and learning spaces the proper size, adequate in quantity and diversity; located where needed, on the right floor level in terms of travel distances, hall monitoring (i.e. casual surveillance), etc.?
- Are any of the major shared functions -- library, science and computer labs, arts, music, cafeteria, auditorium, career technology education, gym, lockers, pupil services, special education, resource and support -- lacking in terms of safety, flexibility, accessibility, or 21st century standards?
- Just as important, do the floor-to-floor heights allow energy efficient mechanical / electrical / plumbing and information / communication technology systems networked in a cost-effective manner?

- Would all students have to vacate the school to temporary swing space during this multi-year process?

These are but a few of the host of pertinent questions that can only be properly answered by 'testing' the concepts for viable solutions in functional and financial terms building-by-building.

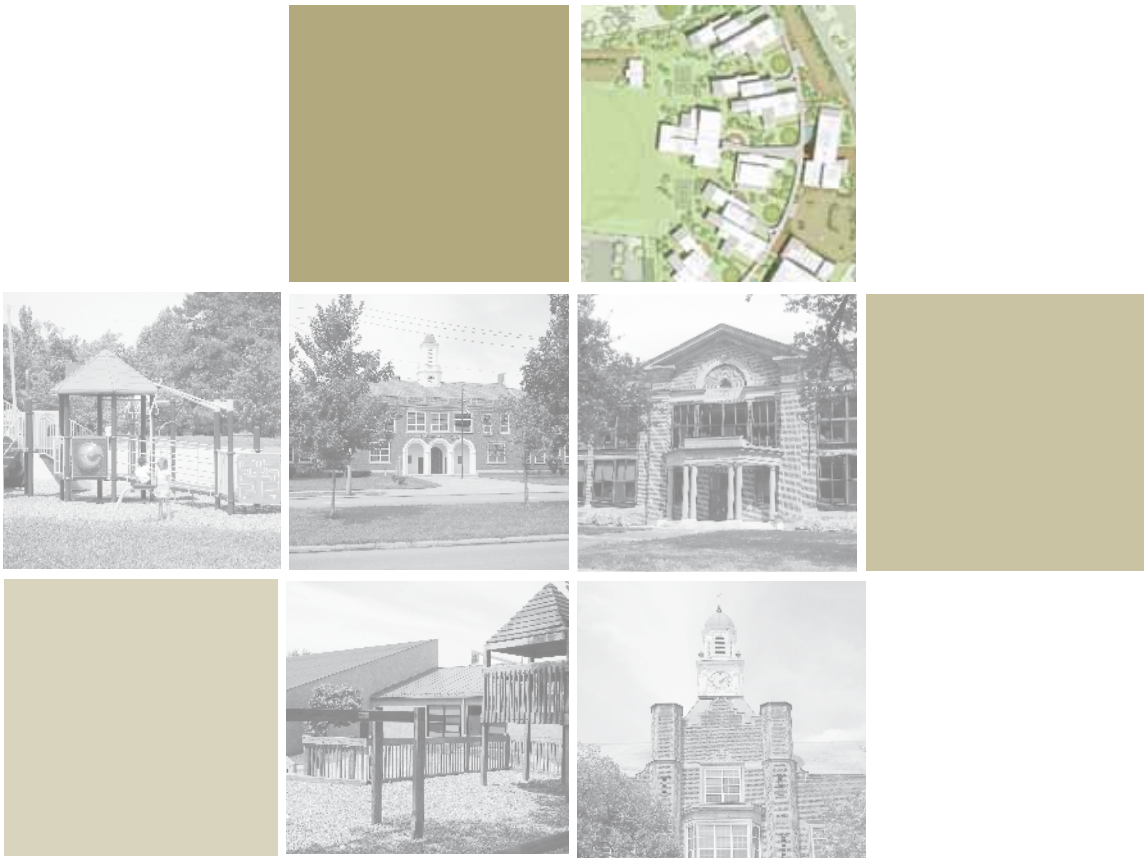
The scope of the work described by the RFQ requires our team to evaluate all of the existing CHUH CSD school buildings in terms of their ability to meet the long-term educational goals of the school district. RLB+A/Cannon Design will catalog relevant material and record documents / drawings (CAD) provided by the CHUH CSD that describe the district's philosophy, curriculum and overall existing conditions.

The first touchstone that our team must appreciate is the stated vision and mission of the school district, since the vision is the benchmark against which all elements must be evaluated for their organizational, programmatic and facilities fit.

Thus, we will look to your vision to determine whether the goals of the school district match. Similarly, the core model educational programs of the schools must also evolve from the vision, mission and goal statements to determine the evaluation matrix to objectively substantiate which 'test fit' concepts achieve the core model program in an equitable, yet cost effective manner.

Once the district's record documents have been reviewed, our team will discuss and work with the District designated stakeholders as part of the transparency process that assures our understanding of the mission of the district is clear. The Learning Summit, Vision and Charette meetings (*see section 6*) will also provide opportunities for discussion of the manner by which the respective core model programs were developed.

The RLB+A/Cannon Design team will visit each school, meet with the Principals, key faculty members, and selected parents; walk the building and observe the activities from an ethnographic point of view; and will develop a building-specific 'biography' for each school that summarizes the transformation from the existing conditions to the 21st century facilities the students and community deserve.



B6 Public Engagement

In order to arrive at a greater understanding of the CHUH CSD learning community and underlying curriculum vision, and generate a dynamic dialogue and exchange between your community and our team, we propose a customized version of our The Third Teacher Plus process made up of four critical parts at the beginning of the process. We also offer 3 additional ways of tying 21st century teacher and learner experiences to our on-going design process:

- Ethnographic Research to identify Design Drivers for the on-going project scope
- Learning Summit to explore Learning in the 21st Century
- Vision Workshop to identify the big ideas between Learning and Space
- Design Charette to develop Spaces and Places
- *Optional* - Prototype Design Camp
- *Optional* - Additional Educational Services such as workshops in emerging technology; curriculum development; project-based inquiry; teacher professional development; and design thinking methodology.
- *Optional* – Facility Planning Project website + social media support

This process will support the development of the design as well as capture the story of CHUH's future of learning. The Third Teacher Plus team will thoroughly record and synthesize the insights and findings generated during this proces and deliver them to CHUH in the form of an executive summary.

Ethnographic Research: Design Drivers

Our humanity rests upon a series of learned behaviors, woven together into patterns that are infinitely fragile and never directly inherited.

– Margaret Mead

A successful innovative design strikes a careful balance between facilitating new behaviors and respecting community values. We strive to create architecture that is purposeful on many levels: responsible to our clients' time and budget constraints, the natural environment, and the nuanced needs of each user community.

The Third Teacher Plus team spends one to two days using ethnographic methods to perform an objective inquiry and establish an understanding of the project's specific human context. As we embark on the ambitious mission to design an environment that will shape the learning experience, influence learning and teaching behaviors and ultimately impact the future of a child and her community, we must adequately **understand** those with which we are working. Through deep listening and observation, we want to **empower** the community to join us in the shaping of their children's reality and their **collective future**. The insights revealed through ethnography will be synthesized into values and goals that serve as **design drivers** and further create a series of metrics with which we can **evaluate** the final design.

The importance of ethnography is greatly increased in our work with the Koc Foundation in Istanbul as they seek to design a "model" school that will reshape the entire country's understanding of education. The Third Teacher Plus will perform an ethnography to determine current teaching and learning practices on both the individual school and district levels before diving into the design process that seeks to alter these approaches.

For instance, how does an entire community (or country, in the example of the Koc Foundation project) perceive education? What goals do they have for their future of learning across all levels and abilities? How will our model for 21st century learning apply to another school, community, or even country? What school-specific traditions and customs can we honor and respect to galvanize the larger district, community and beyond? How do we find the careful balance between facilitating new behaviors and respecting localized patterns to achieve success? All of these questions must be answered before we design and realize a building strategy that will shape their future for years to come.

Learning Summit: Explore Learning in the 21st Century

If I have seen farther it is bystanding on the shoulders of giants.

-- Sir Isaac Newton

Following the ethnographic stage in which we discover the current conditions of the community, we hold a one-day learning summit that facilitates the discovery of what the community might become. This is an "ideation" stage where the community can hear about cutting edge approaches to pedagogy and teaching and begin to discern how they could be translated to the local context.

Select members of The Third Teacher Plus international network with expertise most relevant to the project will lead this summit to facilitate thoughtful and engaging discussions with the CHUH community. Some of these expertises include: STEM (science, technology, engineering and math) education, digital literacy, game design, International Baccalaureate pedagogy, and Design Thinking pedagogy. This learning experience will allow the design team as well as CHUH to discover and learn from best practices in the cutting edge realm of 21st century pedagogical development.

Example: At North Shore Country Day, Cannon Design organized an international education summit to help the upper school rethink the learning and teaching environment as part of an overall master plan process. Co-led by internationally regarded designer Bruce Mau resulted in a dramatic re-imagination of the school's traditional high school learning spaces, a comprehensive shift towards collaborative learning and agile space use, and a commitment that every square foot in the building was 'learning enabled'.

Vision Workshop: Big Ideas Between Learning and Space

Out on the edge you see all kinds of things you can't see from the center.

-- Kurt Vonnegut

We believe in the exponential power of intellectual collisions. The diversity in experiences and perspectives will multiply our knowledge exponentially and will unleash a unique intellectual and social energy.

CHUH's wide range of thematic focuses, history of excellence, and on-going commitment to develop a student-empowered learning ecology for the 21st century represent

an opportunity to explore the edge of possibilities and arrive at guiding principles for the project together. These guiding principles are critical in allowing the entire community to make decisions including project cost.

Example: At Chicago's Academy for Global Citizenship where the school's pedagogy is anchored on the environmental studies, Cannon Design and The Third Teacher Plus team organized a visioning workshop with national experts in education and sustainability to explore strategies in the design process to meet the Living Building Challenge with urban agriculture as a critical component of the learning experience.

Design Charette: Spaces and Places

Manage and facilitate a public engagement process with the Cleveland Heights- University Heights school district community, including public citizens, parents, students, teachers, staff and administrators. The purpose of the engagement process is to obtain stakeholder input to assist the decision-makers in making decisions.

-- CHUH CSD invitation

We believe that by actively working together we will each become better at what we do best.

Our design charette (typically 2 days in duration, depending on the schedule constraints of the community) employs an intense human dynamic and consists of hands-on activities focusing on developing a strategic set of viable solutions. It engages multiple generations, letting the students take the lead in defining their future learning experience. Beginning with a more abstract exercise that invites small groups to rearrange and map out components of a campus and/or facility, the curriculum progresses to specifically align to the design team's concepts, asking groups to choose their favorite and present to the others their reasons and explanations. Multiple sessions can occur throughout the day(s) to accommodate parent's schedules and a forum can be held to keep a larger audience updated on the progress.

Example: At the International School of Indiana in Indianapolis, Cannon Design organized a series of design charettes to present design iterations to students, faculty, staff, parents and board members for feedback. The design team guided the multi-generational group of participants through multiple hands-on activities that determined the evolution from pedagogical goals to learning activities to spatial consequences to the relationships and flow between activities and finally, the overall campus composition.

Optional - **Prototype Design Camp**

The Third Teacher Plus team also offers the potential of developing a customized Prototype Design Camp to invite CHUH students (of all ages) to engage in The Third Teacher Plus' understanding of 21st century learning. The camp invites participants to use Design Thinking methodologies to solve real challenges their community is facing. In addition to empowering youth and giving them a more active role in their community's vision for the future, the design camp also serves multiple functions within the facility design process. The design camp allows the design team and school leadership to observe and learn what is of most value to the "end users" or those they ultimately serve. Additionally, the design camps provide a mechanism for continued connection between the design team and the students, outside of the vision workshops and design charettes. The camps typically run for three to five days and communities can decide how much support they would like to give to realize the student's resulting concepts. Finally, the camp can also be valuable in the post-occupancy stage to demonstrate what 21st century teaching and learning looks like in the new facility and space.

Prototype Design Camp believes:

- Students should be challenged to solve authentic, real-world problems.
- 'Design Thinking' is 21st Century pedagogy for solving real problems.
- Problems should be discovered by research in the real world.
- Students should be on teams with diverse skills and points of view.
- Brainstorming should be taught and highly valued.
- Proposed solutions should be tested over and over.
- Failure should be embraced as a valid part of the process.
- Prototypes should be presented to and reviewed by a professional jury.
- The curriculum should be made available to others to further develop.

Prototype camps can run for a single day or several in a row depending on the scope and availability of participants. Likewise, it can open up the opportunity for a longer mentoring relationship with various events being connected over an entire school year based on community interest.

Examples: Past Prototype programs have included a multi-day camp at the 2010 Ohio Educational Technology Conference where 45 high school students tackled a wide range of 'future of learning' problems with a bias towards emerging technology and a week-long camp in Dallas, TX where 20 high school students worked directly with a community development team to redesign a city park. Future Prototype camps will be taking place at Microsoft outside of Seattle (week-long), throughout Columbus, OH (supporting a team of young people for an entire year as they incubate new community projects after participating in the first-ever TEDx event in Columbus dedicated to the voices and ideas of young 'change agents'), and in the San Francisco area (for a variety of session lengths).

Optional - Additional Educational Services.

Beyond the design of this project and the production of Design Guidelines suitable to guide the design of future projects, we are in a position to offer a number of other consulting educational services to support CHUH's development of a systemic 21st century learning ecology to anchor the design of innovative learning environments,

Utilizing the skills of our own thought leaders, and accessing the resources of The Third Teacher Plus national / global network of educational experts, we are prepared to assist CH-UH in the following areas which we believe can be of great value implementing the districts vision for the future of teaching and learning.

1. Emerging Technology + 21st Century Learning
   Focus: While much of the academic world is focused on simply 'how' to add computers to traditional schools, it is vital that this process look at developing the proper mindset for integrating 21st century technologies into innovative learning processes. A true 21st century school is not just a school plus technology. Rather, it is a merger of digitally-enhanced collaborative learning experiences with just-in-time access to global thought leaders and the most up-to-date expertise / data.

2. Science, Technology, Engineering, Arts, Math Curriculum development
   Focus: As the global learning community continues to validate the necessity of students being grounded in a comprehensive academic experience balanced between subjects that unify creative right and analytical left brain thinking qualities, we recommend the development of a customized curriculum including science, technology, engineering, arts, and math.

3. Project-based / Inquiry-based learning process
   Focus: To support an authentic commitment to a true 21st century pedagogical process, it is widely understood that effective long-term student development in project-based / inquiry-based learning experiences mirror real-world problem-solving.

4. Teacher / Professional Development (to support all of the above)
   Focus: The next generation of academic leaders will need to be not merely subject-area experts passionate about working with young people. Instead, the best teachers of the future will be equally agile in emerging technologies, a wide array of learning styles and pedagogies, and able to be both the instructional leader and a complementary learning agent connecting students to experts around the world in real time.

5. Design Thinking methodology to support Project-based / Inquiry-based learning
   Focus: In terms of authentic 21st century learning, it is important that school is no longer just "preparation for the real world" but that it is "the real world" already. Blending the best curriculum and project-based / inquiry-based constructs, design thinking anchors a student's learning in a methodology that solves real problems in the real world in real time. Furthermore, it is a globally accepted process utilized in companies and not-for-profit organizations across all sectors to foster innovative solutions to human-centered problems found in an increasingly complex world.

Optional - Facility Planning Project website + social media support

To increase transparency and accessibility to the design process, we can create a simple web site. Visitors can comment and converse and see the latest developments. The site can be stand alone or integrated into an existing site. Social media will similarly help democratize the process and give the design team a deeper understanding of the community's wishes.

Chicago, Illinois

60,000 sf

2011

Space Planning and Programming, Sustainable Services

Living Building Challenge (targeted)

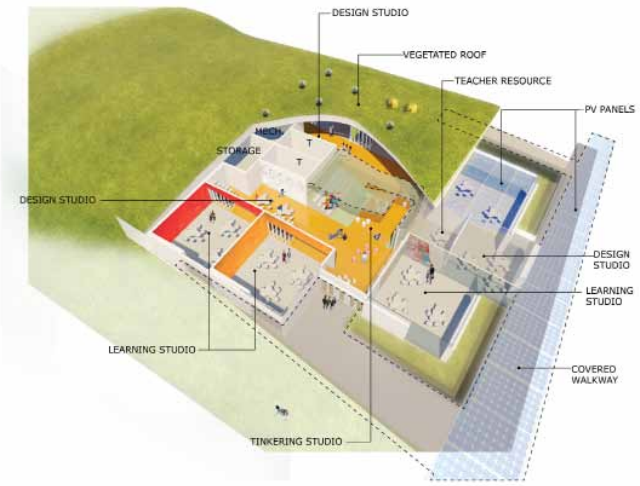
ACADEMY FOR GLOBAL CITIZENSHIP

Designing Beyond Net-Zero— A First In Kind "Living" School

The Academy for Global Citizenship (AGC) is an International Baccalaureate charter school ardently committed to sustainability. AGC is internationally recognized for its green initiatives, which include daily organic meals, a solar installation, a schoolyard habitat and vegetable garden, rain barrels, composting, yoga, nutrition education, a faculty wellness program and sustainability curriculum. Cannon Design is designing a school for AGC that produces more energy than it uses. This "living school" goes beyond a net-zero building and will be the first of its kind. The project is targeted to meet the requirements of the Living Building Challenge. A ground-source heat-pump system, energy recovery AHU's, chilled beams, LED lighting, a super-insulated building envelope, and a photovoltaic array will be incorporated to achieve the net-zero energy operation of the building.

Many educators, engineers, environmentalists and thought leaders have volunteered to work on this remarkable project. Together, we will create a vibrant place for learning that sets a new model for environmental stewardship.

Our work to date for AGC includes developing a visual space program to define their needs, breaking down their learning studios by grade level and also including faculty and administration spaces.



The project is targeted to meet the requirements of the Living Building Challenge. A ground-source pump system, energy recovery AHU's, LED lighting, a super-insulated building envelope, and a photovoltaic array will be incorporated to achieve the net-zero energy operation of the building.

Indianapolis, Indiana

160,000 sf

2014

Planning, Architecture, Engineering, Interiors

LEED-Silver (Target)

INTERNATIONAL SCHOOL OF INDIANA

Designing a Space to Reflect the School's Core Values

Cannon Design partnered with the International School of Indiana to create a space that would support and facilitate the core values of the institution. With the International Baccalaureate (IB) curriculum as the school's backbone, the space's intent was to create physical collisions of disciplines. To further define a collection of design drivers, the design team led a series of workshops with ISI students, faculty, staff and parents. The 79 ideas of The Third Teacher provided a common language that enabled collaboration between the learning community and the architectural team. The workshop groups selected the following Third Teacher principles as their focus: "do no harm," "let the sunshine in," "imagine like a child," "build a nest," "dream big and be brave," "make it feel good," and "put theory into practice." These ideas became the key elements that guided the design of ISI's ideal learning space.


46. LET STUDENTS LEAD
11. MAKE IT NEW. LOOK AT YOUR SPACE WITH 21ST CENTURY EYES.
34. IMAGINE LIKE A CHILD.
78. BE BRAVE. DON'T LET TODAY'S REALITIES LIMIT TOMORROW'S POSSIBILITIES.
MAKE PEACE WITH FIDGETING.

Winnetka, Illinois

16 acres

2008

Planning, Architecture, Engineering, Interiors

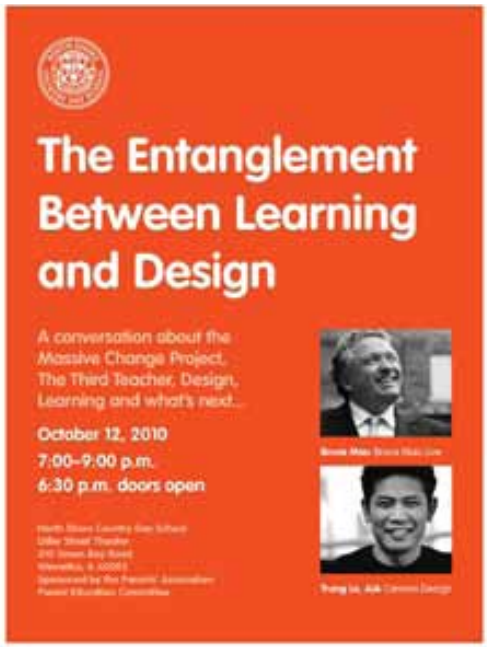
LEED Silver (Registered)

NORTH SHORE COUNTRY DAY SCHOOL

Re-Inventing Education for the Third Millennium

North Shore Country Day School (North Shore) is a JK-12 community rooted in a tradition that challenges each member to develop a passion for active, life-long learning and respect for others. Cannon Design prepared a master plan for North Shore, a campus comprised of 12 lower-, middle- and upper-school buildings on a 16-acre site. One year after completing a master plan for North Shore, Cannon Design began work on conceptual planning for a renovation of the Upper School. The renovation will provide spaces that reflect the unique teaching and learning model that is specific to North Shore. The process consisted of interviews with the faculty, administration, and students as well as a workshop organized by the design team to explore various teaching and learning models. The workshop informed a design that aligns the North Shore pedagogy with a 21st-century learning environment. The project is pursuing LEED-Silver certification.

As a critical component of the master planning process, Cannon Design held a summit at North Shore that brought together design and education experts. The design solutions, driven by a balance between tradition and progressive education, addressed North Shore's educational goals and site development and building needs.



"Faculty, staff and students are participating in the process. The end result will be classrooms of the future that better leverage the educational dynamic that currently distinguishes North Shore—highly interactive environments that facilitate personal connections, thoughtful analysis, discussion and debate."

TOM DOAR III, HEAD OF SCHOOL





B7 Partnerships

The RLB+A/Cannon team will participate in strategic planning exercises with CHUH CSD to investigate Partnership options that may be incorporated into the District's Educational Facility Master Plan. RLB+A personnel are very active in local education initiatives. Richard L. Bowen is currently a Trustee of Cleveland State University and Gail Bowen is a board member of Cuyahoga Community College. David Bowen has participated in numerous local initiatives in support of the Cleveland Metropolitan School District.

Educational Partnerships:

Cleveland Heights and University Heights communities are in close proximity to several local colleges and universities. These include John Carroll University, Ursuline College, Case Western Reserve University, Cleveland State University and Cuyahoga Community College. Dual enrollment opportunities can help CHUH CSD students get a head start on earning college credits or help students explore earlier the type of a college education or career goals they might wish to pursue. Such partnerships might also include programs to enhance continuing education opportunities for CHUH teachers and staff.

Enrichment Partnerships:

Nearby arts and cultural institutions include The Cleveland Museum of Art, Cleveland Museum of Natural History, the Cleveland Orchestra, Cain Park, the Cleveland Institute of Art, the Cleveland Playhouse and The Cleveland Music Settlement and Young Audiences. These institutions may already have experience in partnering with local school districts and may be a rich resource for enrichment programming.

Funding Partnerships

With active community engagement and outreach the RLB+A/Cannon Team was able to aid the Cleveland Metropolitan School District to obtain additional funding for several school projects on which they provided design services. For the John Hay High School renovation project alone, approximately $750,000 was raised through grants from foundations, businesses, community development corporations and private citizens.

Similar supplemental funding initiatives can be explored with CHUH CSD to include local business and alumni initiatives as well as foundation, state and federal funding opportunities.

Facility Sharing:

As individual school building sizes and operating costs are assessed, cost-saving community facility sharing opportunities for auditoriums, meeting rooms, athletic and exercise facilities can be evaluated.






B8 Cost and Constructability

Cost and Constructability

The RLB+A/Cannon Planning/Design Team understands that Cleveland Heights-University Heights City School District will engage the services of a separate cost and constructability consultant. It is not unusual for these services to be contracted separately by a School District. Richard L. Bowen + Associates and Cannon Design are very experienced in performing services within this type of collaborative arrangement.

In the following table of Ohio school projects, for instance, RLB+A and Cannon teamed to provide design services on six schools. These projects required close synchronization with a separate construction management firm which oversaw cost and constructability issues. Alternately as a multi-disciplined that offers in-house construction services, 24 school facility projects listed below were managed by the RLB+A Construction Management Group which required their close collaboration with outside design firms. Many of these projects were part of larger multi-school programs.

Because the RLB+A/Cannon team has in-house expertise in cost estimating and constructability review, and maintains a large database of Ohio construction costs, we can offer the CHUH CSD the value added benefit of peer review of cost estimates during the planning process.

School District	Description	Cost	Status	Role
Cleveland Municipal	Garfield New 62,000 SF K-8 School	$14.9 Million	Complete/Occupied	A/E
Cleveland Municipal	Harvey Rice New 64,000 SF K-8 School	$15.1 Million	Complete/Occupied	A/E
Cleveland Municipal	Patrick Henry New 64,000 SF K-8 School	$8.9 Million	Complete/Occupied	A/E
Cleveland Municipal	Robert Jamison New 64,000 SF K-8 School	$10.5 Million	Complete/Occupied	A/E
Cleveland Municipal	Adlai Stevenson New 60,000 SF K-8 School	$12.8 Million	Complete/Occupied	A/E
Cleveland Municipal	John Hay HS 260,000 SF School Renovation	$32.5 Million	Complete/Occupied	A/E
Lincolnview Local	PK-12 Addition/Renovation 150,000 SF	$21 Million	Complete/Occupied	CM
Ada Exempted Village	New 129,000 SF K-12 School	$24 Million	Complete/Occupied	CM
Montpelier Local	New 174,000 SF PK-12 School	$27 Million	Complete/Occupied	CM
Patrick Henry Local	Patrick Henry New 55,000 SF Middle School	$8 Million	Complete/Occupied	CM
Evergreen Local	New Elementary and Renovated Middle School	$14 Million	Complete/Occupied	CM
Waynesfield-Goshen Local	PK-12 Addition/Renovation 114,000 SF	$19 Million	Complete/Occupied	CM
Jefferson Local	New 57,000 SF Rock Creek K-6 School	$10 Million	Complete/Occupied	CM
Jefferson Local	New 163,000 SF JR/SR High School	$31.5 Million	Complete/Occupied	CM
Jefferson Local	New 80,000 SF K-6 School	$13 Million	Complete/Occupied	CM
Brookfield Local	New 155,000 SF PK-12 School	$26 Million	In Construction	CM
Rittman Exempted Village	New 87,000 SF JR/SR High School	$19 Million	In Construction	CM
Indian Creek Local	New 92,000 SF Middle School	$16 Million	Design Phase (CD)	CM
Columbus Grove Local	New 144,000 SF K-12 School	$28 Million	Design Phase (DD)	CM
Ottawa-Glandorf Local	New Glandorf 65,000 SF K-8 School	$13 Million	Complete	CM
Ottawa-Glandorf Local	New Ottawa 69,000 SF K-8 School	$14 Million	In Construction	CM
Leipsic Local	New PK-12 Addition 79,000 SF	$18 Million	Design Phase (CD)	CM

Cory-Rawson Local	Segment #1 New PK-8	$13 Million	Design Phase (POR)	CM
Van Wert Local	Convert Existing Elementary to PK-K	$4 Million	Design Phase (POR)	CM
Van Wert Local	New 99,000 SF Elementary	$20 Million	Design Phase (POR)	CM
Barberton City	New 160,000 SF Middle School 5-8	$28 Million	In Construction	CM
Barberton City	New 87,000 SF Elementary School	$15 Million	Design Phase (CD)	CM
Barberton City	PK-4 Addition/Renovation 94,000 SF	$15 Million	Design Phase (CD)	CM
Barberton City	Renovate existing concrete stadium; construct new 10,000 SF field house.	$4.5 Million	Complete/Occupied	CM
Barberton City	Replace existing roof & upgrade HVAC, Electrical & controls of existing HS	$5.5 Million	Design Phase (CD)	CM
New Knoxville	PK-12 Renovation/ Addition	$9 Million	Complete/Occupied	CM






B9 Owner's Schedule

BOWEN RICHARD L. BOWEN + ASSOCIATES INC. CANNONDESIGN

Cleveland Heights University City School District

Name: CLEVELAND HEIGHTS / UNIVERSITY HEIGHTS CITY SCHOOL DISTRICT (CH - UH)

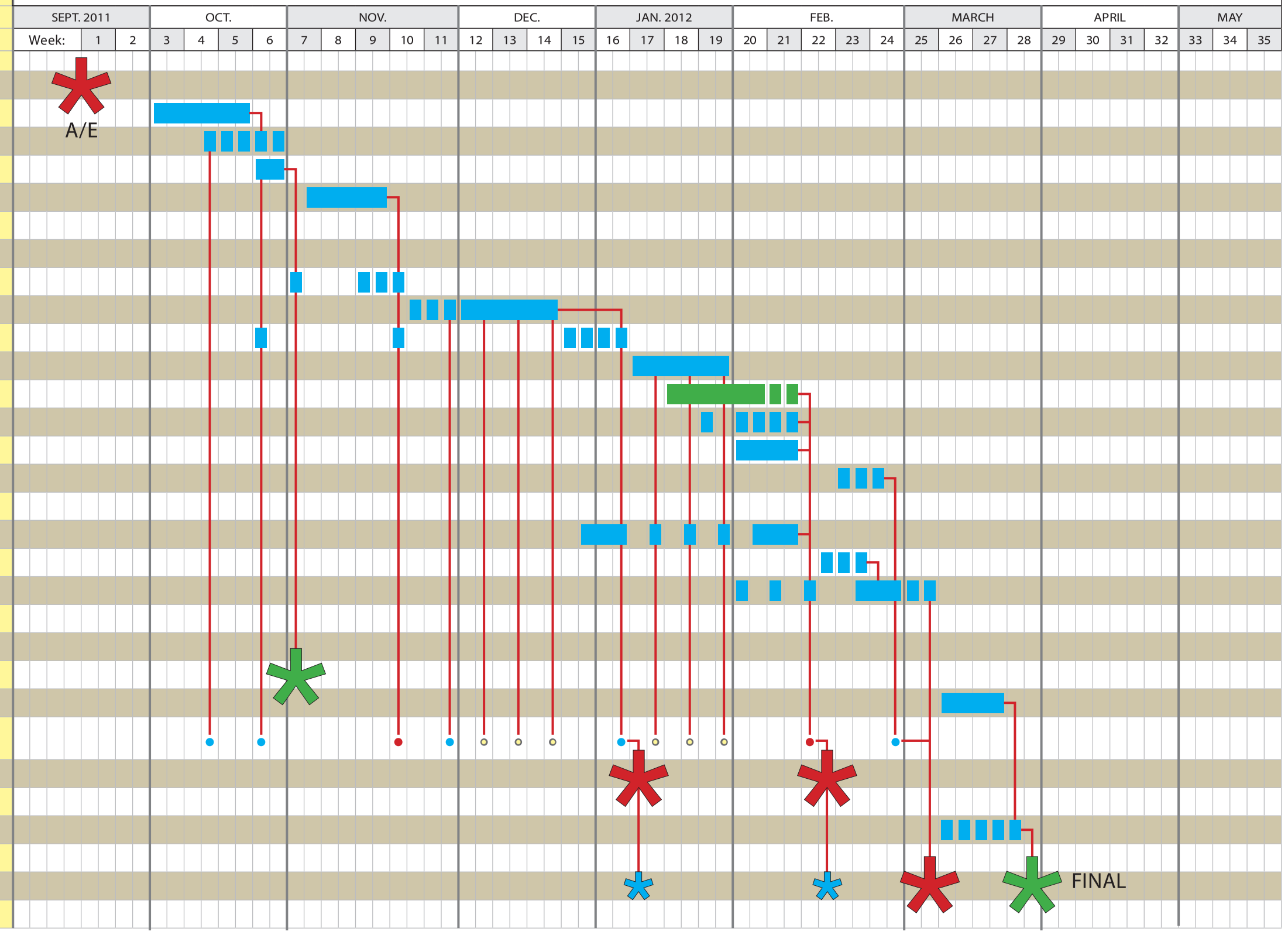
Initial Challenges:
1. Building for the Future...21st Century Schools
2. Equitable Core Model Program Standards
3. Comprehensive and Reliable "Test Fit" Concepts
4. Proactive Stakeholder Participation & Transparency

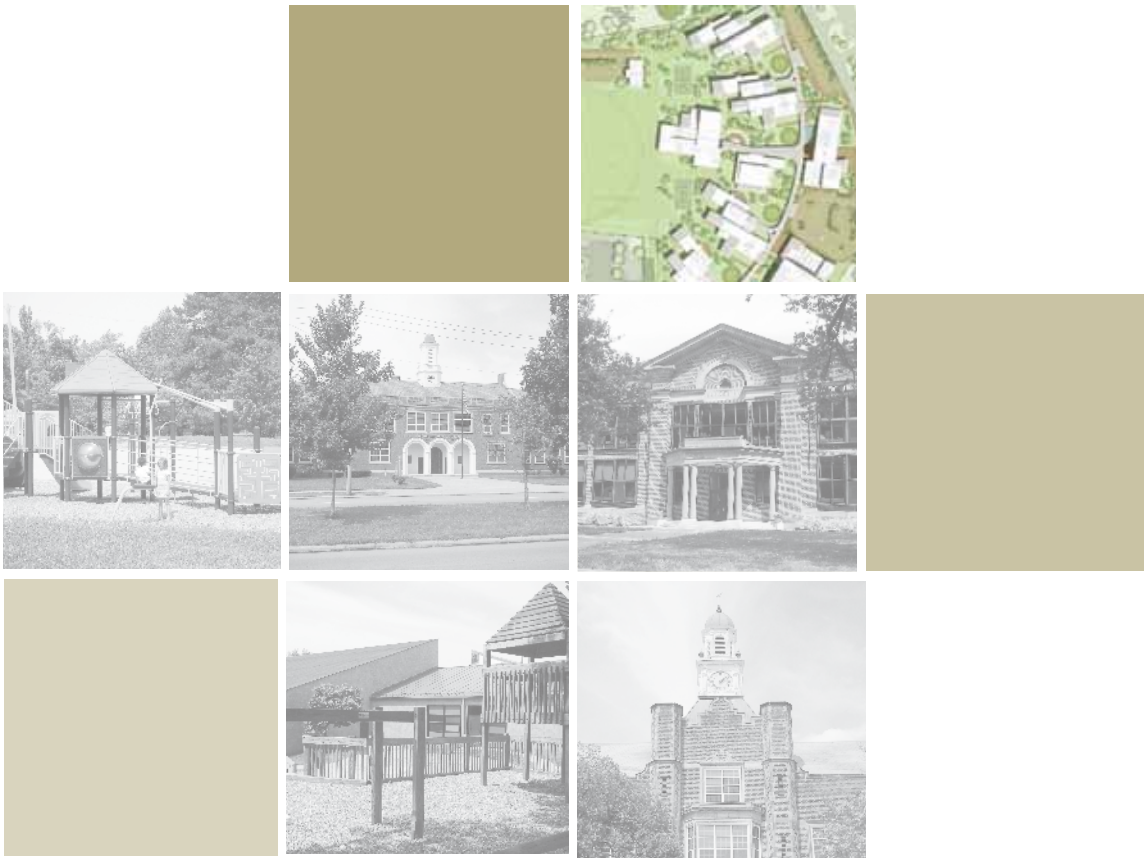
Master Work Plan

PROPOSED SCHEDULE

Date: 18 August 2011

Item #	Phase / Descriptions	Milestones Target	Milestones Actual
1.0	PROJECT ASSESSMENTS		
1.1	Catalog / Summarize Relevant Documents		
1.2	Clarify CH-UH Expectations / Program Issues		
1.3	Initiate Evaluation Matrix Criteria		
1.4	Benchmark Existing Conditions		
2.0	EDUCATION SPECIFICATIONS & CONCEPTS		
2.1	Visioning Follow-Up Summary: Goals & Priorities		
2.2	Concept Charettes: Big Picture Ideas		
2.3	Land Acquisition Considerations		
2.4	Initial Test Fit Concepts (by school)		
2.5	Scope / Staging / Cost Aspects		
2.6	Swing Schools: Feasibility (up to 3 schools)		
2.7	Refined Test Fits (by school)		
2.8	Scope / Cost Aspects - Finalize Total Costs		
2.9	Draft Report Submission		
2.10	Final Feedback / Revisions (see Town Meetings)		
2.11	Final Report & Phasing Possibilities		
3.0	MEETINGS & PRESENTATIONS		
3.1	Visioning: Kickoff & Priorities		
3.2	Final Draft Confirmation		
3.3	Scheduled Progress & User Meetings: ● Steering Committee ○ School Based ● Full User Group		N/A
3.4	Town Meetings		
4.0	CONTINGENCY/SCOPE ADJUSTMENTS	As Agreed	N/A
5.0	APPROVALS: Interim & Final	Multiple	Critical





APPENDIX: Additional Relevant Experience

Additional Relevant Projects

Appendix: Additional Project Experience

A portfolio of innovative as well as a range of other projects that our team has also implemented from the district-wide plans presented earlier in Section B.1.

- John Hay High School Renovation...the district's first school undertaken with OSFC funding. .. RLB+A and Cannon Design Partnership Project
- Harvey Rice School... RLB+A and Cannon Design Partnership Project
- Garfield K-8 School .. RLB+A and Cannon Design Partnership Project
- Patrick Henry School... .. RLB+A and Cannon Design Partnership Project

The Third Teacher….a definitive compendium of 79 best practices worldwide.

- Cayman Island ministry of Education….project-based learning prototype schools.
- Stevenson High School….one of the first LEED Certified for existing and new construction categories.
- Academy for Visual and Performing Arts….conversion of a traditional school into the city's only school of the arts.
- South Park High School….reconstruction/expansion of a historic legacy.
- Harvey Austin Middle School….conversion/expansion of a pre-depression era vocational school.
- Community School 53….saving and expanding a community landmark.
- McKinley High School….convert/expand a traditional vocational school into an academic/career school.
- Booker T. Washington STEM Academy….a new "agile/flexible" prototype.
- Mt. Lebanon High School….balancing iconic with LEED Silver Certification.
- New Centennial Elementary School….first -ever fast track public school project in New York State.
- New Washington-Rose Elementary School ….small learning communities.
- New Ulysses Byas Elementary School ….small learning communities /small site.
- Roosevelt New Middle School ….strategic centerpiece to grade restructuring.
- Roosevelt Comprehensive High School ….reconstruction/expansion to create a 9th grade academy.
- Academy for Global Citizenship ….one of the first "net positive" energy schools.
- Ralph Ellison Campus ….an inner city conversion with a simply "cool" story.
- Sheridan Preparatory Academy….setting the tone for a district-wide program.
- Meyers Middle School ….facing and surpassing very high expectations.

Additional Relevant Project

JOHN HAY HIGH SCHOOL RENOVATION

Cleveland, Ohio

The renovation of this historic school built in 1929 preserved its architectural beauty and respected its proximity to such notable Cleveland landmarks as the Cleveland Art Museum, Severance Hall, Case Western Reserve University and The Cleveland Clinic. Exposing historic elements that had once been hidden, the structure underwent an extensive interior renovation and exterior restoration, while complying with the Ohio School Facilities Commission Design Manual. Special attention was given to several significant interior spaces slated for full restoration, such as the auditorium, cafeteria and main lobby. One of the most significant improvements entailed relocating the main entrance of the high school to its original historic front entrance.

The design objectives included creating a safe, welcoming environment for the community, students and staff, developing a state-of-the-art educational environment, and updating the building to meet new technological standards. The overall goal in renovating the school, however, was the preserve the historic character of the building.

The captivating 1,612 seat auditorium is one of the largest assembly halls in the City of Cleveland. The Bowen team restored the striking neoclassical interior to its original beauty. Wooden seats, which refracted sound, were replaced with inviting cloth seats. The most impressive find, windows in the side walls of the chamber which had been covered during World War II as a precaution against potential enemy bombs, were replaced with triple pane windows.

Completion
July 2006

Project Cost
$32.5 million

Project Size
260,000 s.f.

Owner
Cleveland Metropolitan School District

Contact
Gary Sautter
216-574-6379

Awards
AIA Merit Award for Restoration
Cleveland Restoration Society Preservation Award
Ohio Historic Society Preservation Award

JOHN HAY HIGH SCHOOL RENOVATION

Page 2

BEFORE AND AFTER PHOTOS
Lunchroom

BEFORE AND AFTER PHOTOS
Ceiling

BEFORE AND AFTER PHOTOS
Hallway

HARVEY RICE SCHOOL K-8

Cleveland, Ohio

Completion
2009

Project Cost
$15.1 Million

Project Size
64,000 s.f.

Owner
Cleveland Metropolitan
School District
Cleveland, Ohio

Contact
Gary Sautter
216-574-6379

Certificate of Achievement
2007 Energy-Star Challenge
for Sustainable Design

Harvey Rice School was programmed to accommodate 450 pre-K through 8th grade students and staff. The school's program spaces were arranged to separate the pre-K through 5th grade classrooms from those of the 6th through 8th grades. Common areas including the cafeteria, gymnasium, art and music facilities, and media center are shared by all grades.

The site's topography affords spectacular views of downtown Cleveland. Art and reading rooms on the second floor enjoy tall ceilings and full-height glazing that capitalize on the views. Colorful green and blue metal panels on the exterior accentuate the building's massing. Locally funded initiatives for the project helped enhance the campus with green spaces, a public muse and a number of public art pieces.

RLBA's team used Building Information Modeling (BIM) through design and to produce the construction documents for the new building.

HARVEY RICE SCHOOL K-8

Page 2

Additional Relevant Project

GARFIELD K-8 SCHOOL

Cleveland, Ohio

As part of an ongoing, district-wide reconstruction program, the Cleveland Metropolitan School District sought to replace its existing Garfield Elementary School. The school had been closed for several years, its students and staff displaced to other schools in the district. The new neighborhood school would accommodate 425 pre-kindergarten through eighth grade students and renew a sense of community and identity that the neighborhood so needed.

Completion
2009

Project Cost
$14.9 Million

Project Size
61,771 s.f.

Owner
Cleveland Metropolitan
School District
Cleveland, Ohio

Contact
Gary Sautter
216-574-6379

Certificate of Achievement
2007 Energy-Star Challenge
for Sustainable Design

The building's predominantly east-west configuration captures daylight with minimal glare, resulting in well-lit, energy efficient spaces within. The geometry of the building is striking, its curved roofline, completed by an arch feature over the courtyard, is reminiscent of the airplane hangars at nearby Hopkins Airport. Inside, the massing creates atypical ceiling geometries and inspires bold patterns and colors on the floors and walls. Bright, warm spaces are outfitted with acoustic panels to control echoing and noise. The panels serve a second purpose as dropped ceilings, giving the rooms' volumes a more human scale and softening the typically institutional appearance of a school.

Additional Relevant Projects

PATRICK HENRY SCHOOL K-8

Cleveland, Ohio

Patrick Henry School was designed to accommodate 450 students from kindergarden to 8th grade and associated staff. The building design groups the classrooms for kindergarden through 5th grade on a floor separate from the 6th-8th grades. The building program's common spaces were located to afford easy sharing among all the students.

The building was designed as a 21st Century School with a focus on technology, robotics and engineering. Play areas were designed to work in tandem with a competition football and track stadium on the existing school site. These recreation amenities are shared with a number of other schools in the vicinity.

Completion
2009

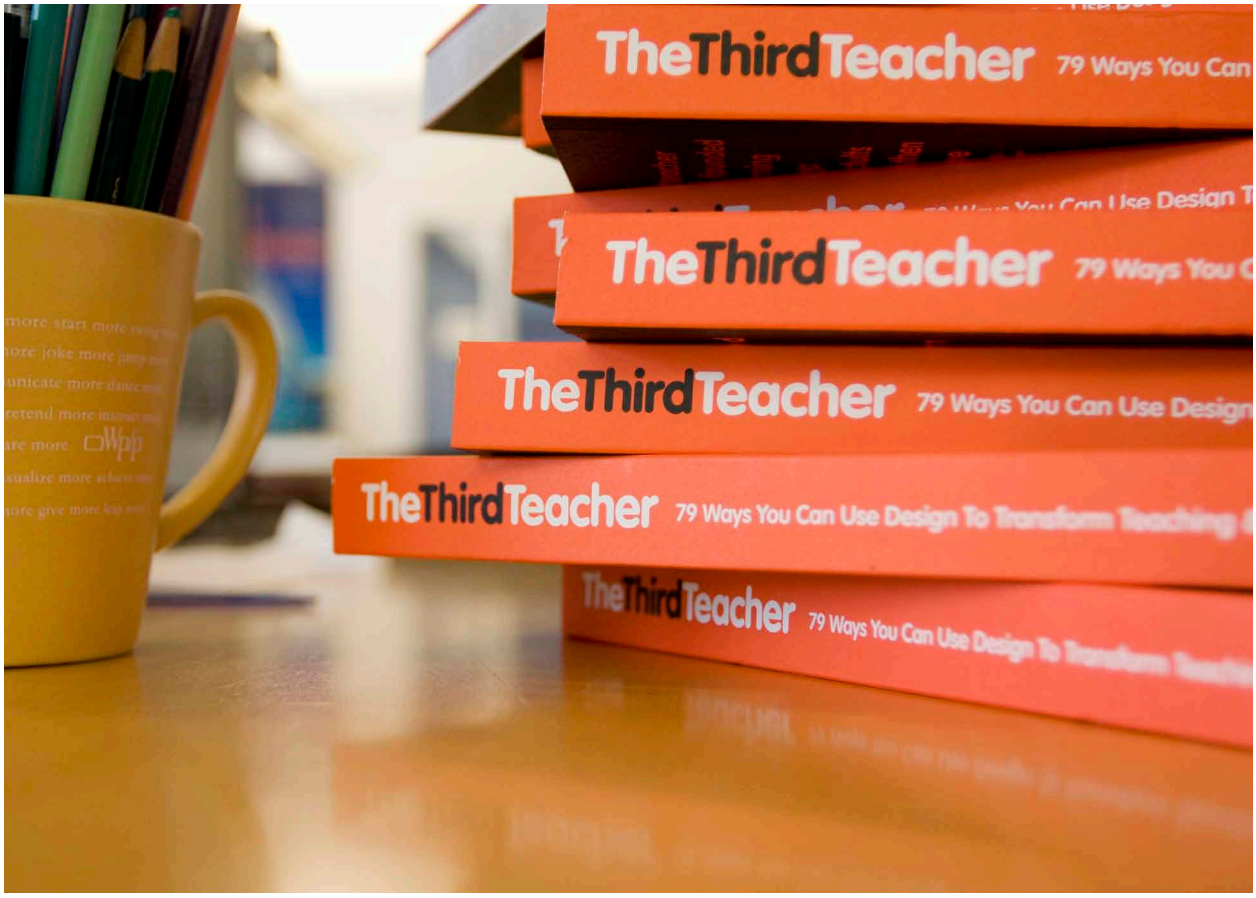
Project Cost
$15 Million

Project Size
64,298 s.f.

Owner
Cleveland Metropolitan
School District
Cleveland, Ohio

Contact
Gary Sautter
216-574-6379

The Third Teacher
Publication and Website
Chicago, Illinois



"There are three teachers of children: adults, other children, and their physical environment."

– Loris Malaguzzi, Educational Pedagogue and Pioneer of the Reggio Emilia Preschools

Cannon Design, Bruce Mau Design and V/S collaborated on a book publication called The Third Teacher, designed to be a cabinet of wonders on the subject of the environment's impact on teaching and learning. Written and designed by Cannon Design, BMD (a Canadian design firm with extensive experience designing book publications) and V/S (a German design manufacturer with a long tradition of furnishing schools), the truths, prompts, and provocations in this book are intended as sparks that will ignite a blaze of discussion and initiative about environment as an essential element of learning.

The book's emphasis is on an essential but often overlooked element of learning: the physical environment. The book is a mine of information and insight; a collection of stories and anecdotes, quotes and facts offering a multifaceted guide to the way we learn. Individual chapters, case studies, design ideas and interviews cover a wide variety of ways in which place influences learning. Cannon Design also developed the website, www.thethirdteacher.com, an online global forum where anyone can post comments to further the dialogue and concepts put forth in The Third Teacher.

Additional Relevant Projects

"I believe that the book is more innovative than many can imagine, especially for those outside the 'design' realm. Curriculum, as ill defined and understood as it is, has always been at the forefront of education. In The Third Teacher, design has become a vehicle to enhance curriculum. Cannon Design and VS are onto this in a way that no one else is."

– Helen Hirsh Spence,
Education Consultant and Former Principal

Additional Relevant Project

Cayman Islands, Ministry of Education
New High School Campuses

Grand Cayman, Cayman Islands

The objective for the Cayman Islands new high school campuses is to provide framework of opportunities for everybody on the Islands. In an effort to equip Caymanian students to compete on the international stage, the Ministry of Education is in the process of updating their current educational program.

Taking an innovative approach to learning in the 21st century, Cannon Design developed a concept plan for Cayman's three high school campuses that emphasizes project-based learning and breakout spaces, rather than classrooms. Project-based learning enables creativity and flexibility while helping to develop skills for living in a knowledge-based, highly technological society.

Students participate in projects and practice interdisciplinary subjects from math, language arts, fine arts, geography, science and technology. Each of the three high school campuses features four autonomous academy buildings serving grades 6-11. The academies share a Global Learning Center, Performance Building, and Design and Technology Building with each other and the community.

Connection with the culture and community are paramount to the design concept. For example, each campus will focus on a particular sport important to their culture, such as cricket and net ball. Images of nature, art and local industry on the Island will also be highlighted.

Additional Relevant Projects

Cayman Islands, Ministry of Education

Page 2

Additional Relevant Project

A.E. Stevenson High School

Lincolnshire, Illinois

Cannon Design has helped A. E. Stevenson High School manage explosive population growth through several facility expansions and remodeling projects since 1983. Not only have we maintained a 30-year partnership with the District, Stevenson High School was one of the first in the country to achieve LEED Certification for its existing buildings and new additions.

The main building, originally designed for 800 students, was expanded to accommodate 2,800 students with major additions designed by Cannon Design throughout the years. With enrollment increasing to 4,500 in 2000, the district built another major addition on its 71-acre campus to accommodate 1,200 students. In 2004, the school added a prominent new entry and student commons areas. The commons addition solved the congestion and circulation of five levels converging into one area.

Specialty teaching areas include a large computer facility with separate areas for student studies and a fully equipped chemistry lab. In addition to classroom facilities, a key feature of the addition is an innovative 1,200 seat auditorium that uses turntables to divide the space for a variety of simultaneous educational uses. Cannon also analyzed and replaced mechanical systems for the entire campus through phased upgrades.

The athletic facilities designed by Cannon Design house an 8-lane, 50-meter swimming pool, a 40,000 sf field house, locker rooms and tennis courts.

Cannon is currently renovating the school's library to create a 21,000 sf student learning center.

Additional Relevant Projects

A.E. Stevenson High School

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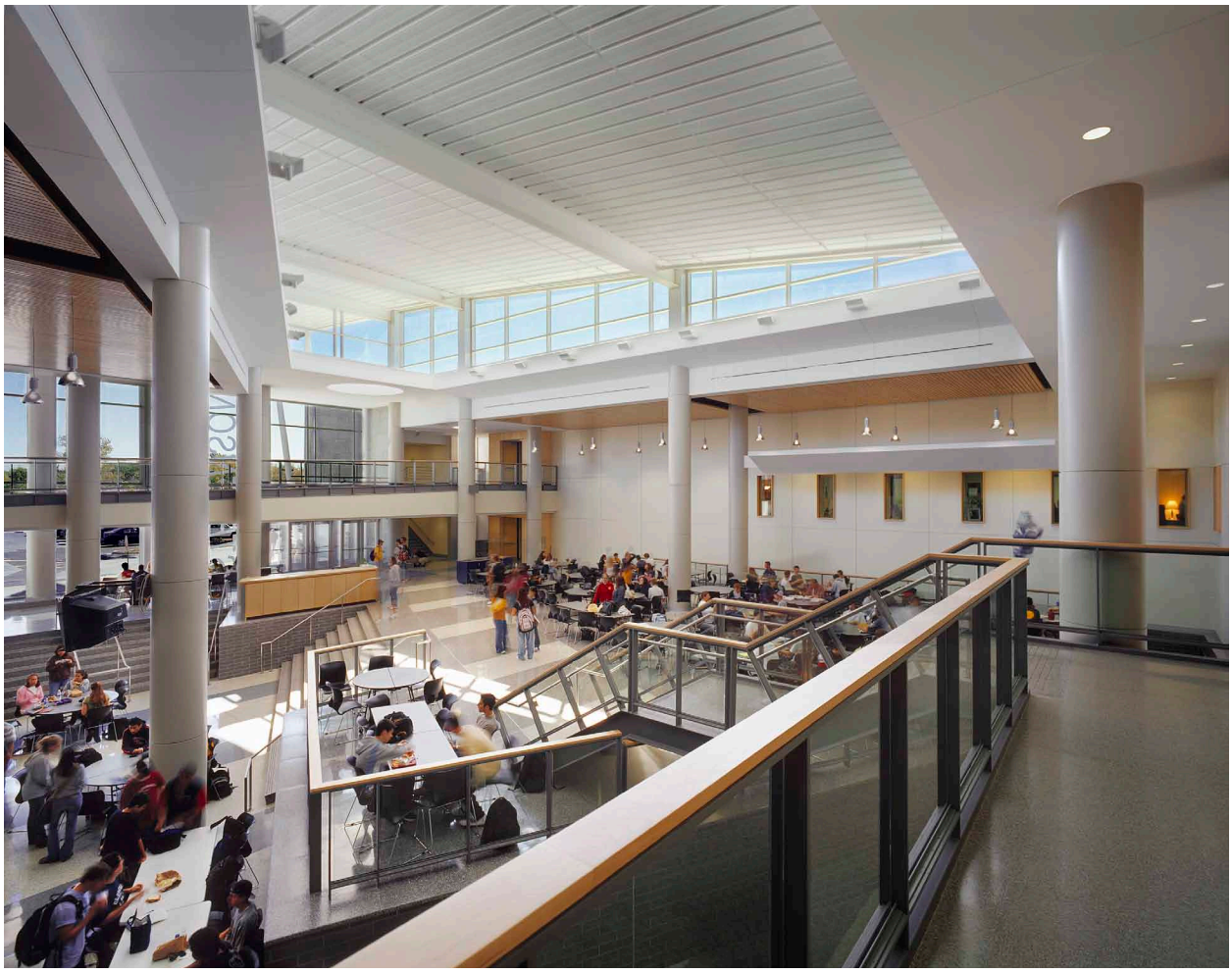

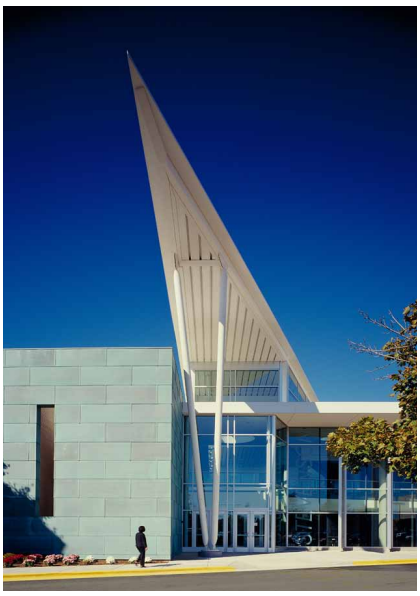

Additional Relevant Project

Buffalo Public Schools
Academy for Visual & Performing Arts

Buffalo, New York

One of the most ambitious reconstruction programs currently underway is the Buffalo Schools Reconstruction, which as a 10-year plan will involve over 65 existing buildings and additions. Cannon Design has been involved from the outset, establishing the prototype used for the initial assessment, design standards and budgeting for the existing schools in the District.

One of the unique 'jewels' of the District is the Buffalo Academy for the Visual and Performing Arts for grades 5 to 12. Admission is by audition, but the program had been poorly located in a former vocational educational school that even had a turn-of-the-century foundry. The plan is to relocate the 'Arts' program into a traditional high school with additions as necessary for the specialized range of programs. The solution (178,300 sf renovations, and 40,750 sf of new) includes a second level bridge over a new fully enclosed courtyard, that will also be used for outdoor displays, performances, and as an open air café. The major additions provide new space for:

- Main entry lobby
- Black box theatre
- Stage fly house (900 seat auditorium)
- Band room
- Dance studios (3)
- Display gallery / courtyard
- Art studios (3 total)
- CAD / Advertising Lab
- Business Education Lab
- Science Labs (2)
- Preparation / Computer Room
- Special Education Classrooms (four on different floor levels)
- Home careers lab (residential / apartment / restaurant modular teaching kitchens)
- Second level bridge
- "House" Administration (assistant principals for the grades 5 to 8, and 9 to 12)

True to the challenge, the show will start at the front door curb of this impressive facility, with construction scheduled for completion in the fall 2008.

Additional Relevant Projects

Academy for Visual & Performing Arts

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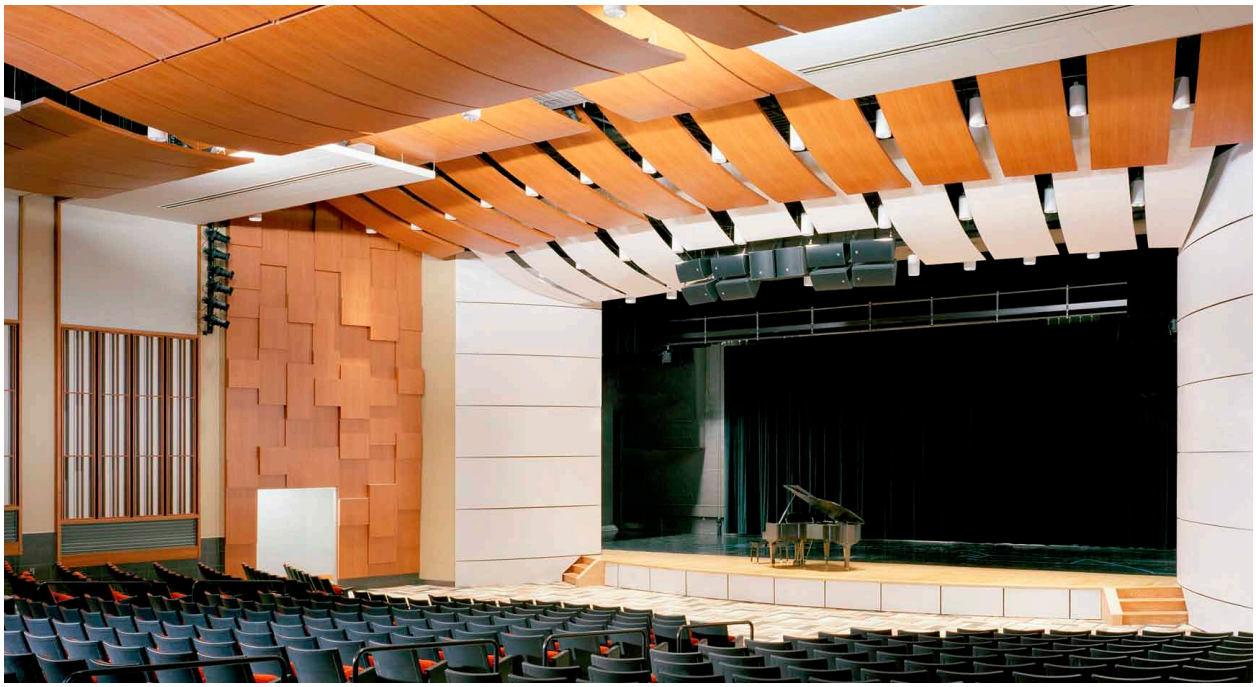
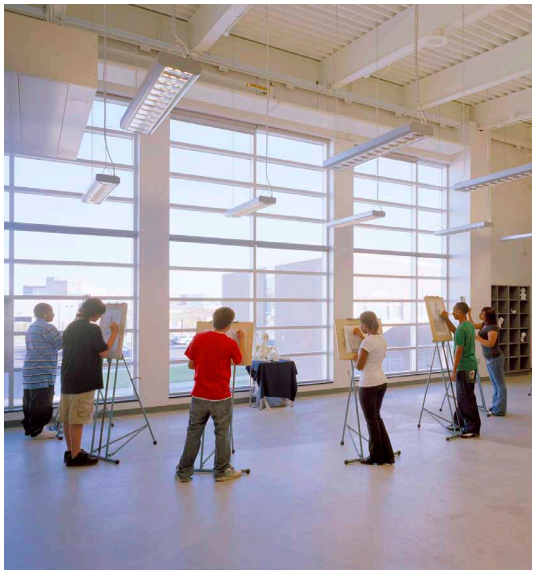




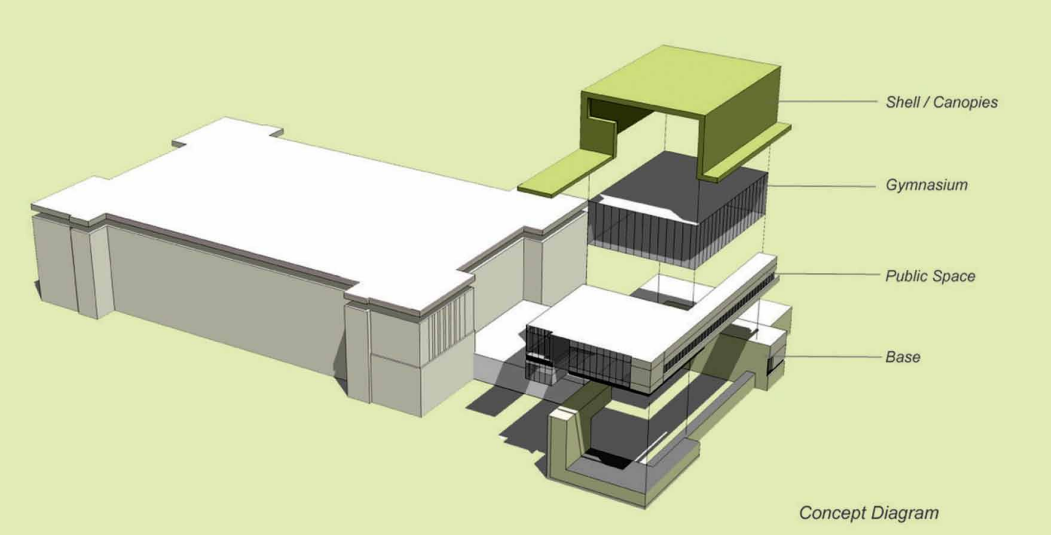
Buffalo Public Schools
South Park High School
Buffalo, New York

South Park is the only high school in South Buffalo and as such has a highly revered community and historic legacy. The goal was to reconstruct and expand this 100-year old landmark into a vibrant 21st century comprehensive school featuring small learning communities each having fully dedicated support features.

The traditional school was down-sized to a planned enrollment of 900 students. The small, antiquated "match box" classrooms could then be right-sized to allow differentiated learning stations or project break-out areas. In a floor-by-floor manner, each grade level houses its own dedicated facilities that include:

- Four (4) "agile/flex" science labs with full utilities and digital technology to allow any science discipline to be taught.
- Two (2) computer labs, each with project break-out areas.
- Special Education classrooms (2), and pull-out resource areas.
- Group toilets for students (4 total).
- A Faculty Development "suite" with computer training, reference library and faculty toilets.
- An Administrative "hub" for the respective assistant principal, secretary/reception, copy/mail, files, conference and unisex toilet.

All of the major shared functions were reconstructed, expanded and centralized. A true library/media center and enlarged cafeteria were provided. An entirely new Physical Education Wing--gym, fitness and health classrooms, team rooms and lockers were added. The highlight of the project, however, is the complete restoration of the semi-circular auditorium, which includes state-of-the-art sound and lighting systems.



South Park High School

Page 2

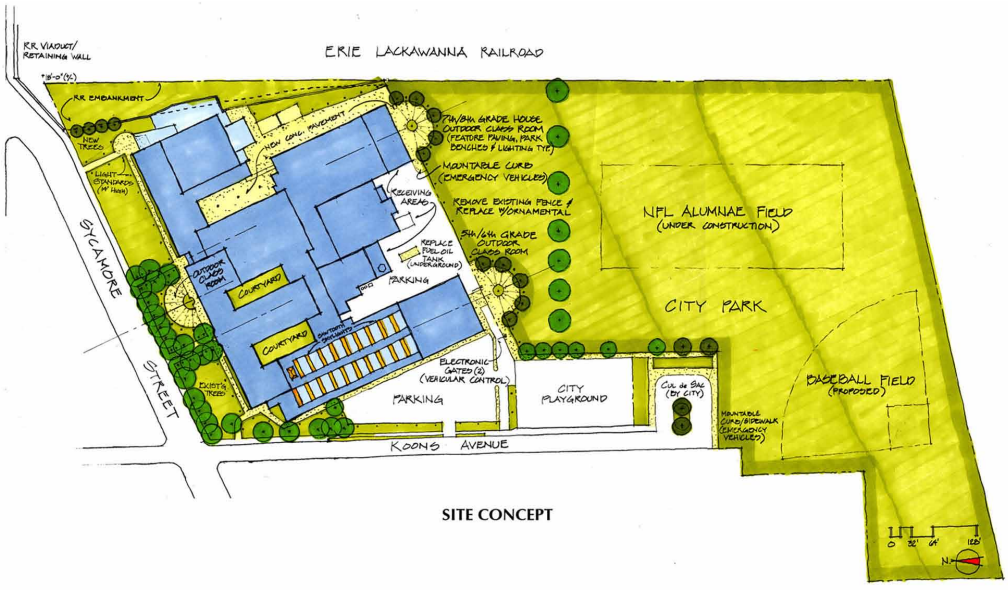
Buffalo Public Schools
Harvey Austin Middle School
Buffalo, New York

Cannon Design was initially retained to assist the District with developing design standards for the second largest public school system in the State of New York. When the Buffalo City School District decided to convert Emerson Vocational High School to a middle school as a Phase I Project, it called upon Cannon Design. The $17 million project "had to be a success", as the Governor set up a Joint Schools Construction Board comprised of representatives from all levels of government, public, community, and private business leaders to monitor and evaluate the process phase by phase.

To create the Harvey Austin Middle School (141,000 sf) required the complete reconstruction of the original Emerson Vocational facilities, built in 1926 and expanded in 1960. Because it is one of the few remaining "industrial based vocational high schools" largely intact, the State Historic Preservation Office required a historically sensitive design approach. We brought all of the stakeholders to the table, and by consensus agreed upon the strategic restorations along with the building addition necessary to accommodate today's educational programs and technologies.

The project includes a state-of-the-art media center, computer classrooms, science room and laboratory facilities for each 'house' of the four grades (fifth to eighth) planned for the facility. Existing technology education classrooms with period industrial glazing and saw tooth skylights are being converted to science labs and classrooms. Because of the historical nature of the structure, wood windows are being restored, steel industrial sash is being replaced in kind, and exterior masonry is being restored. Classroom spaces have been designed with a considerable amount of flexibility to incorporate today's team-teaching techniques and tomorrow's as-yet-unknown educational philosophies.

The Harvey Austin Middle School has a planned enrollment of 800 students. The demand and anticipation for this 'seemingly new facility' were so high that the District chose to open the school after the Christmas vacation with the paint barely dry. The feat was truly amazing, considering that the students were drawn from several neighborhoods, on relatively short notice via the District's open admission policy that gives residents a choice on a citywide basis.



SITE CONCEPT

Additional Relevant Projects

Harvey Austin Middle School

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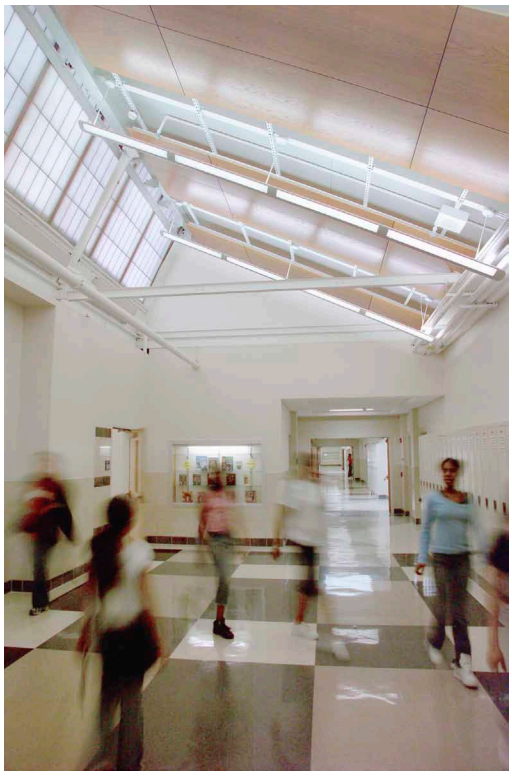

Additional Relevant Project

Buffalo Public Schools
Community School 53
Buffalo, New York

This school was slated for 'retirement' until community activist successfully insisted that it be more closely studied for Phase IV of Buffalo's $1.3 billion redevelopment. The school had previously undergone four additions with the last occurring in 1960. However, some of those wings were poorly planned with the pretense of being temporary, and resulted in six (6) different floor levels in a three story building.

The 'test fit' concept we are now implementing is highlighted by a new seven classroom addition, community 'fusion' lobby and a main circulation loop that also creates a central courtyard. In the process, the loop creatively integrates two new ramps and a much needed elevator to make the school barrier-free. The completely reconstructed/reorganized floor plan creates small learning communities for early childhood, intermediate and the middle grades (in the new wing). The shared supports -- science and computer labs, library, special education and resource rooms -- have been centralized. The original 1928 structure's gambrel-roofed auditorium will be restored, along with conversions to create art, music, home/careers, and the technology classrooms.

The Community School 53 occupies an entire city block, which presented both challenges and opportunities... The new addition is also the after-hours event entry, and age appropriate play areas will reclaim what had been a 'sea of underutilized parking'! The result is the School projects a positive image to the surrounding neighborhood with every side of the school having the feel of an accessible and inviting 'front door'.

Community School 53

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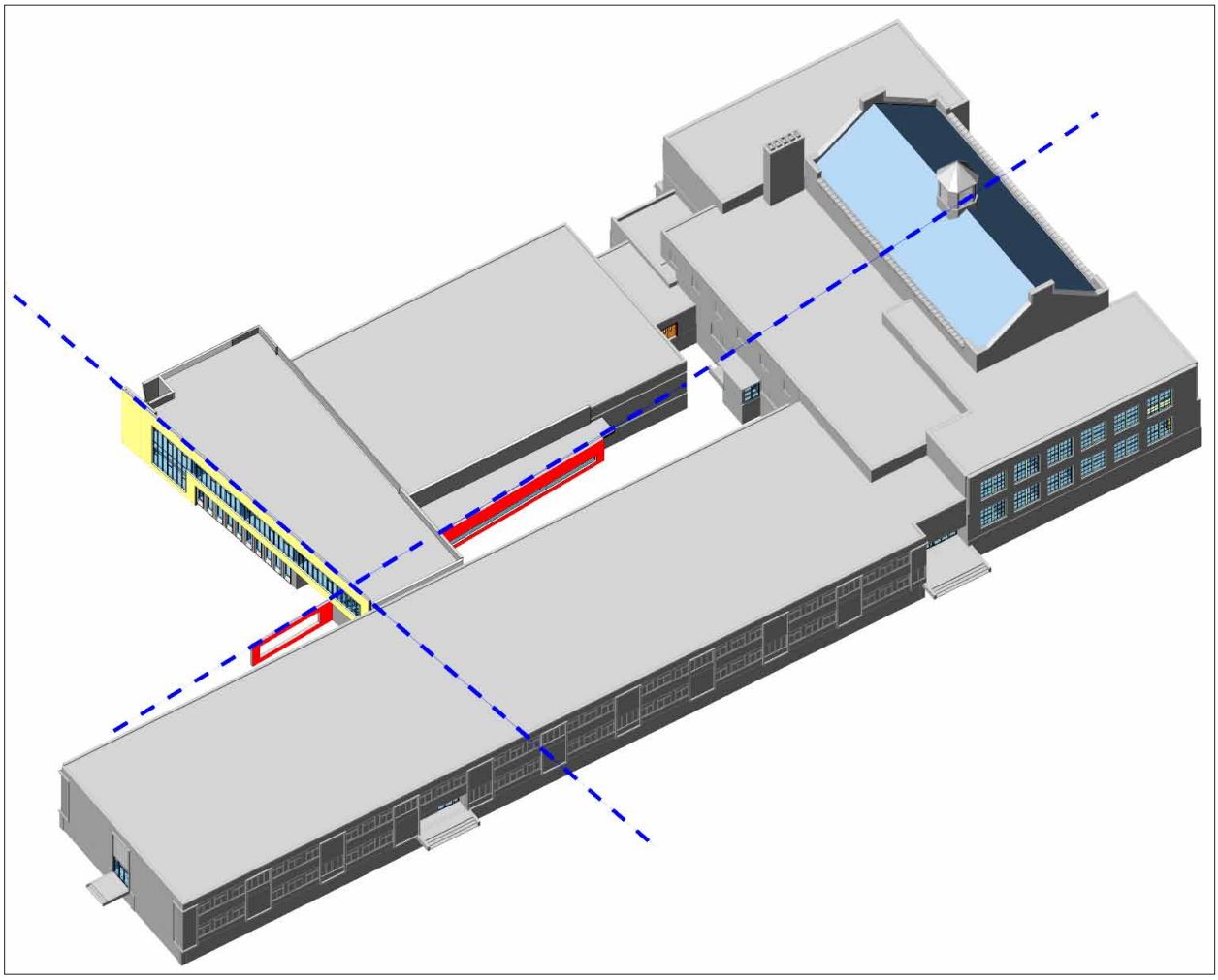

Additional Relevant Project

Buffalo Public Schools
McKinley High School Renovation
Buffalo, New York

The Cannon Design team is completing documents for this project, which will be the largest in Phase 4 of the $1 billion Buffalo Public Schools Reconstruction Program. We have had the distinction of essentially serving as the district's executive architects by virtue of preparing the Strategic Plan and phase by phase updates to maximize opportunities and equity.

Built in the early 1960's, McKinley was a city-wide trades and vocational school with up to 1,600 students. The plan being realized is to reorganize/reconstruct the school to align with the higher academic standards of the NY State Regents for high school graduation. Accordingly, a new 20-classroom addition will completely re-image both the program and the school with a new 'front door'. The project in that respect plays the strategic role as the northern gateway to Buffalo's emerging cultural and arts district immediately to the south, which centers around the world renown Albright-Knox Art Gallery and the State University of New York College at Buffalo.

The reconstruction also involves creating small learning communities on each floor of the 4-story academic wings. In the process, general classrooms (6), special education (2), science labs (2), computer labs (1) and an administrative 'hub' are dedicated to each house planned for 225 students. The horticultural program (3 commercial greenhouses), aquatic biology, and ten (10) career technical education learning suite (i.e. shop and glass enclosed classrooms) conversions complete the program.

Additional Relevant Projects

McKinley High School Renovation

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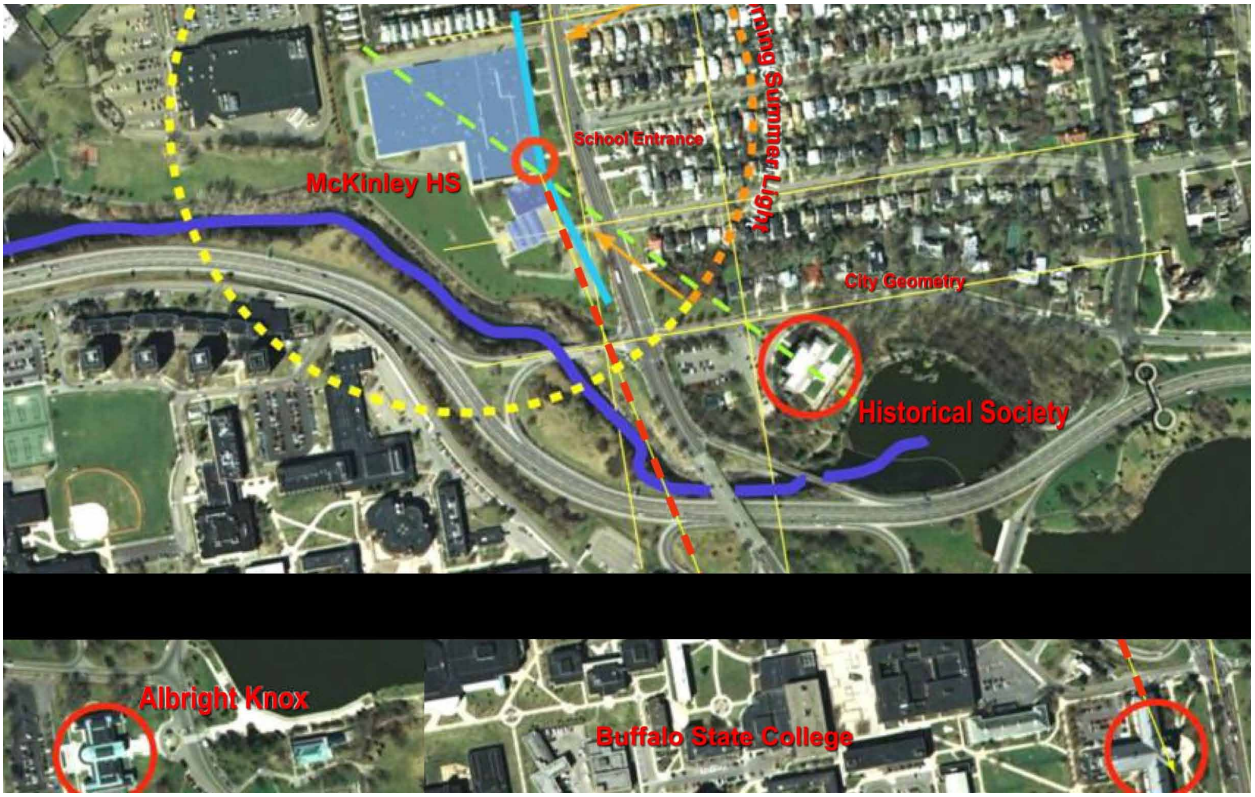

Additional Relevant Project

Champaign Unit 4 School District
Booker T. Washington STEM Academy
Champaign, Illinois

Booker T. Washington Elementary School is a K-5 2-strand (2 classrooms per grade level) school in a northeastern neighborhood of Champaign, Illinois. The 225-student school accommodates an underserved African American neighborhood. The new Science, Technology, Engineering and Mathematics (STEM) Academy will replace the existing building with a 58,500 sf, 3-strand per grade magnet school serving 425 students.

The design process was heavily community focused in that workshops were held for end users and the community to inform the design. The architectural concept strengthens the school's academic communities and creates a STEM-centric, project-based learning environment. Each academy is inwardly focused forming a cluster of three learning studios that open onto a communal gathering and project workspace for discussion and collaboration. The core of the building is the STEM lab where students connect with professionals retained through programs such as I-STEM at the University of Illinois. Here, students discover concepts and create projects that express their understanding of STEM. Flanking this central lab are offices for academic coaches and STEM coordinators.

Additional Relevant Projects

Booker T. Washington STEM Academy

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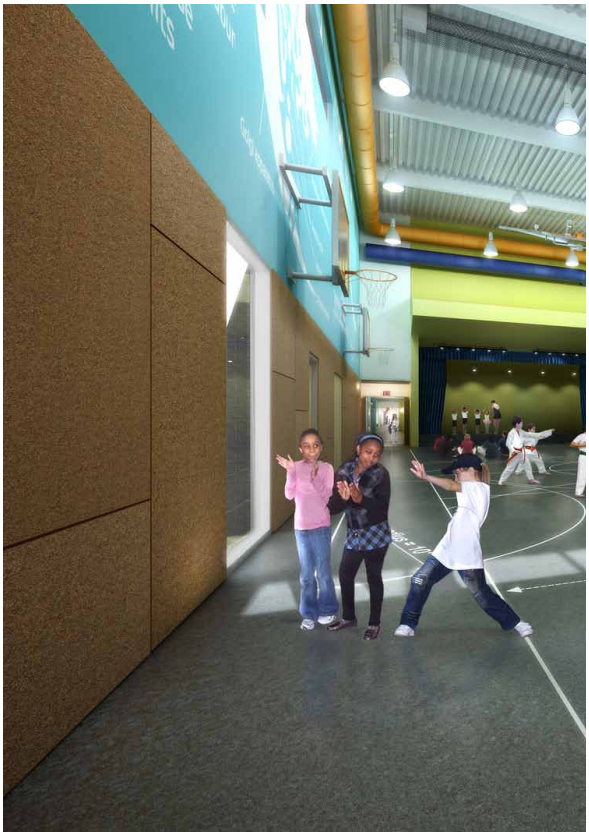

Additional Relevant Project

Mt. Lebanon School District
Mt. Lebanon High School
Mt. Lebanon, Pennsylvania

After a nationwide search, Mt. Lebanon School District, a high-achieving district in a first-ring suburb of Pittsburgh, commissioned Cannon Design, with local partner firm CFB Architects, to assist in bringing its high school facility up to current building and educational standards. A major design priority was to retain the character of the high school and the buildings within the community. The design meets this challenge by retaining the original 1920s section of the building as an iconic beacon. Additionally, the need to balance high academic achievements with the athletic and performing-arts programs required a holistic solution that addressed core academic areas, public and community spaces, and maintenance of a 1,500-seat auditorium and 350-seat theater.

In contrast to the current school, the new design uses glass, some of it in the school color of blue, to make learning spaces more open to the natural environment and transparent to the community. The glass is also used to reflect heat and provide natural daylighting throughout much of the school day, reducing artificial lighting needs and overall energy consumption-important factors in pursuing the building's LEED Silver rating.

Additional Relevant Projects

Mt. Lebanon High School

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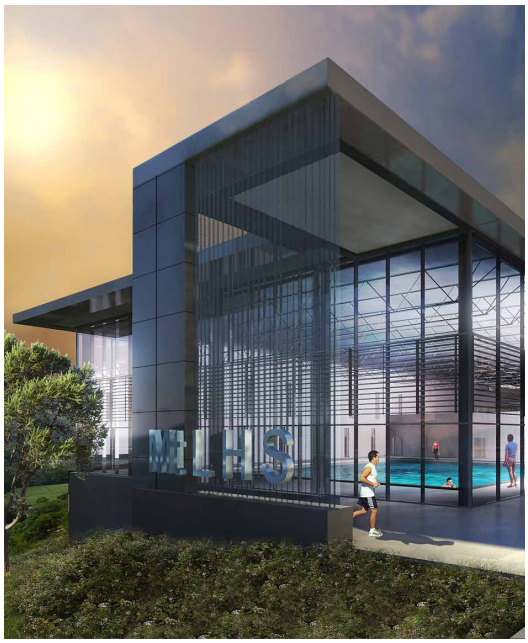

Additional Relevant Project

Roosevelt Union Free School District
Centennial Elementary School

Roosevelt, New York

Located just over ten miles from New York City, the Roosevelt public school system serves approximately 4,000 students. The District has had a troubled history for over a decade, including administrative changes, excessive teacher turnover, and the resulting abysmally poor student performance.

Cannon Design was retained by the SED-appointed School Board of Trustees in June 2002, and presented the comprehensive Educational Facilities Plan in January 2004, with referendum approval six months later. While a New Middle School was the single-most strategic facility (because it would separate students in the existing, historically dysfunctional Junior / Senior High School), the keystone to the plan was a new Centennial Elementary School. That school currently occupied the largest elementary school site of a mere three acres, upon which the new elementary administration and classroom wing would be built in the existing playfield.

The original Centennial School, built in 1929 would continue in service for 31/2 years as the 'swing school' host facility, while the other two new, replacement elementary schools are built. The resulting domino-strategy requires the sharing of the cafeteria, library and gym spaces between two schools: the New Centennial students (planned for 660), and the temporary swing school students (approximately 400 students). The wide range in student enrollments reflects the consolidation from five facilities that varied from PreK to 6, into three replacement schools for grades pre-K / five under the approved plan. It is important to note the new schools will each be the same size (660 students) and provide the full range of services currently missing in the District for self-contained special education and resource rooms, science room, computer classroom (distinct from the library media center), art room, music room, staff development, as well as related faculties for OT/PT, speech, psychologist, and social workers.

The new school has a 'house' concept, and the building embodies a confident yet sustainable design that has become an intensively utilized and valued landmark as a source of community pride. Very careful attention was given to low maintenance / high durability materials, the functionality and flexibility of instructional spaces, along with universal access to technology with a hub and cabling backbone covering the entire school. The New Centennial Elementary was occupied for the start of school year in September 2005, with SED Commissioner Mills cutting the grand opening ribbon....only 14 months after the voter approval of the District-Wide Capital Referendum.

Additional Relevant Projects

Centennial Elementary School

Page 2

Phase I

Phase II

Additional Relevant Project

Roosevelt Union Free School District
Washington Rose Elementary School

Roosevelt, New York

The third of the new schools awarded by the District to Cannon Design was a replacement facility for the oldest school in the District, built in 1913. The existing site is irregularly shaped, and the District has an option to acquire the neighboring five houses, which would give the District control over the entire block for future age-appropriate play areas/fields. The new school is planned for 660 students consistent with the district-wide standards to assure equity.

- An early childhood house comprised of pre-K, kindergarten, and first grades.
- Five-classroom clusters in each of the early childhood grades, with dedicated student toilets and a coat "cubby" alcove in each classroom.
- Student computer stations (five, plus printer / scanner), teacher's master computer stations*, and, in the spirit of inclusion, a separate island desk / computer station for the teacher's aid or special education instructor, in all classes, pre K to 5th.
- All computers and telephones are wired to the school's network hub, and antenna coverage in all areas allow for wireless, as that technology is the wave of the future.
- Special education self-contained classrooms (three total, plus resource rooms, speech, OT/PT, and related services offices / interview rooms), as well as dedicated classrooms for computer, science, art, music, Title I, and staff development rooms distributed throughout the building to minimize travel distances.
- As a 'community school', a parent room is provided to encourage the continued high level of interest by all of the critical stakeholders, in the spirit of life-long, multi-generational learning.
- Similarly, the major shared functions – library / media center including an early childhood "reading nook", cafeteria / kitchen seating 232, faculty lunch / conference, and gymatorium seating 350 facilitate after school-hour use by the community.

Additional Relevant Projects

Washington Rose Elementary School

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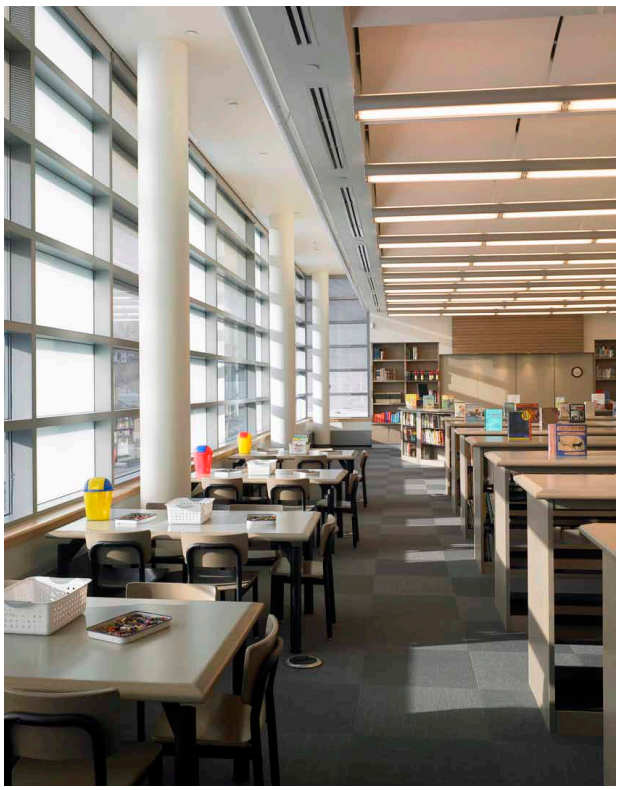

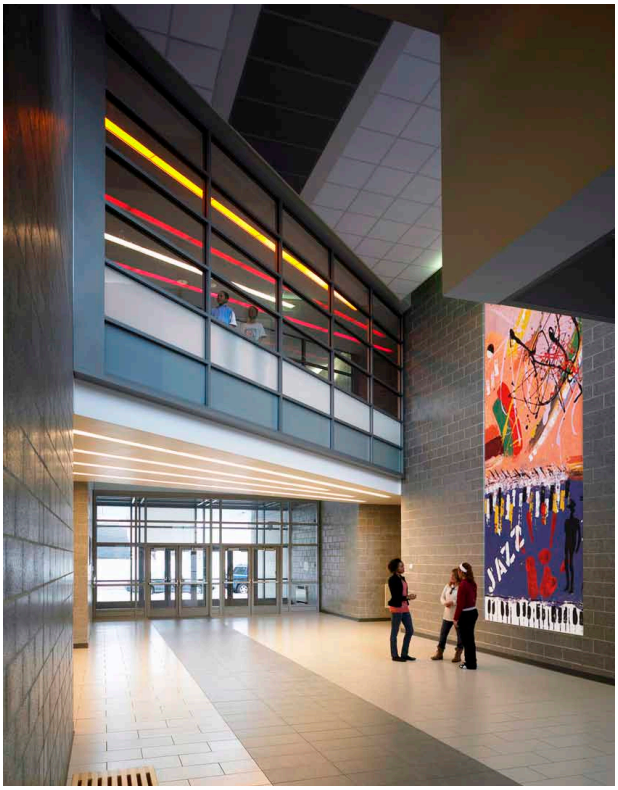

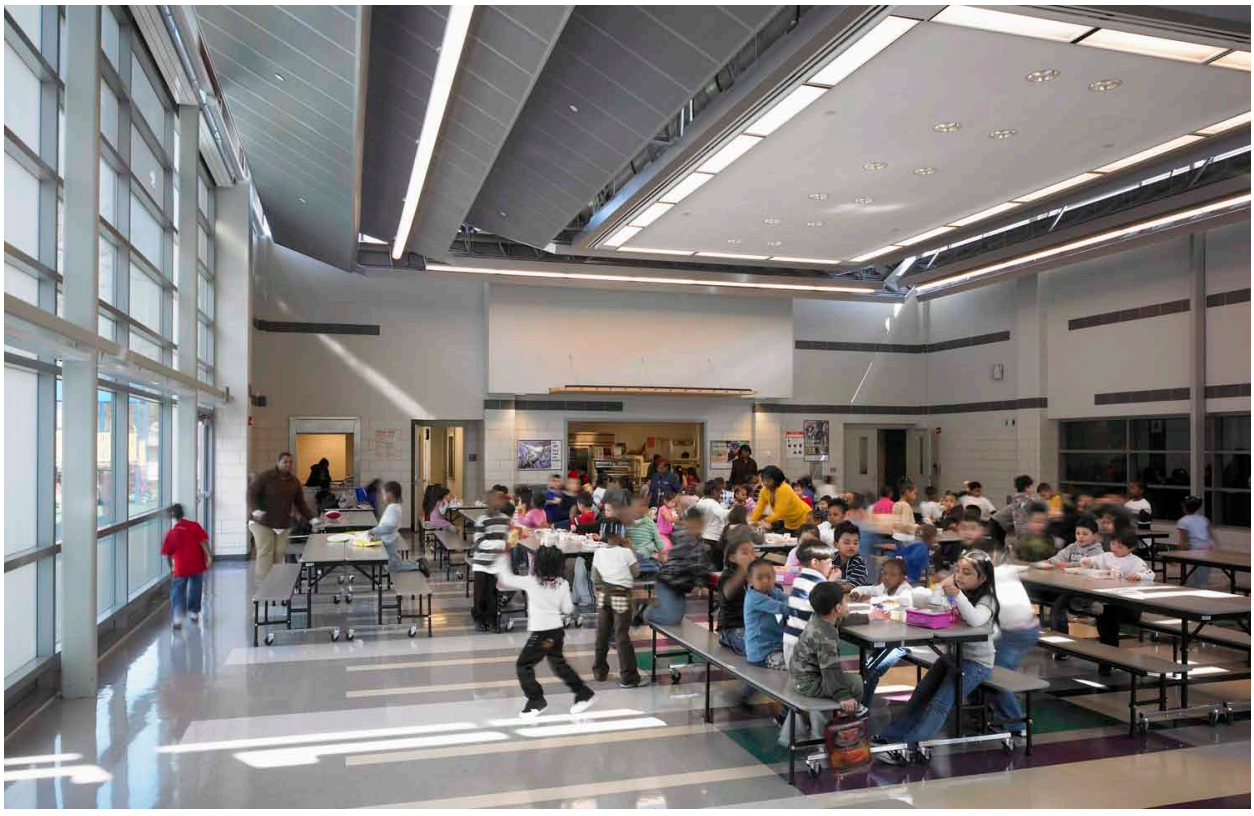

Additional Relevant Project

Roosevelt Union Free School District
Ulysses Byas Elementary School

Roosevelt, New York

The fourth and final replacement school that Cannon Design was selected to implement under the $208.5 million educational facilities plan was Ulysses Byass Elementary. Although the existing school to be demolished occupied an entire city block, it still was the smallest site of the remaining schools.

A very compact floor plan was developed to maximize the flexibility and usability of the outdoor, age appropriate play areas from a playground, to a multi-use field. Accordingly, the linear building plan reinforces the philosophy that the 'show' starts at the entry curb:

- The school has a mid-block, main entry plaza extending from the street-side on the north (where it separates bus loading from parking), right thru the entry lobby, and to the southside (where it separates the various age-appropriate play areas/fields).
- The main office, cafeteria, and two story library are strategically located right at the center of the building to optimize visibility and control.
- The gymatorium forms its own 'house' with a dedicated event lobby to facilitate ease of community use after hours.
- Overall, the design creates distinct zones where each small learning community of classroom clusters has a full range of dedicated resource supports.

The project re-establishes the importance of education and pride in schools as important and sustainable civic architecture.

Additional Relevant Projects

Ulysses Byas Elementary School

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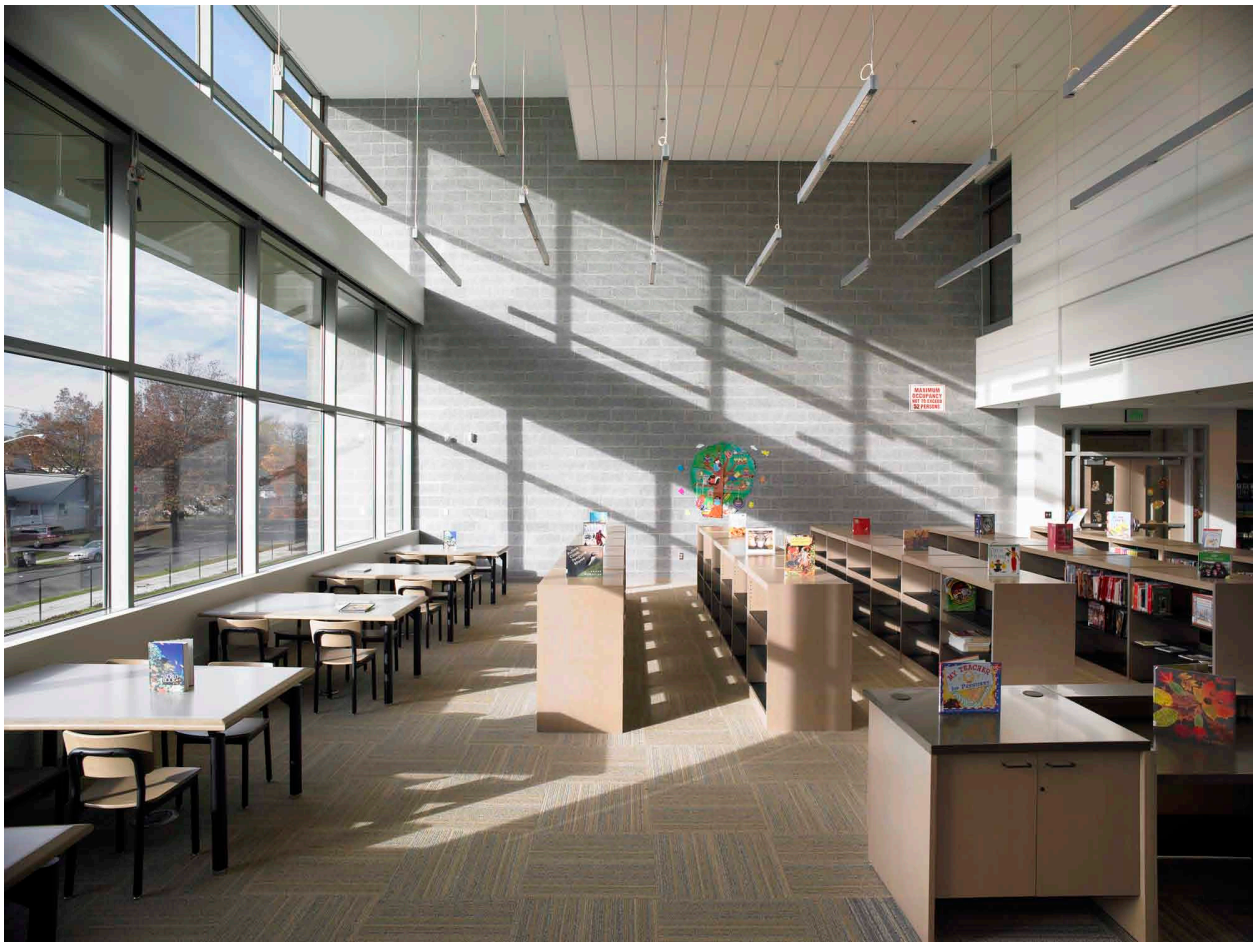
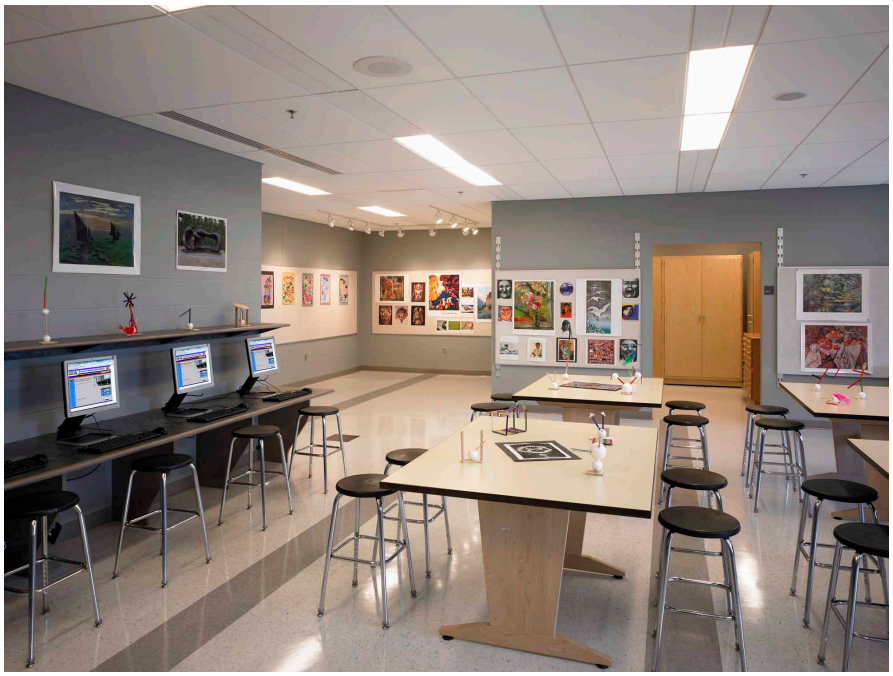




Additional Relevant Project

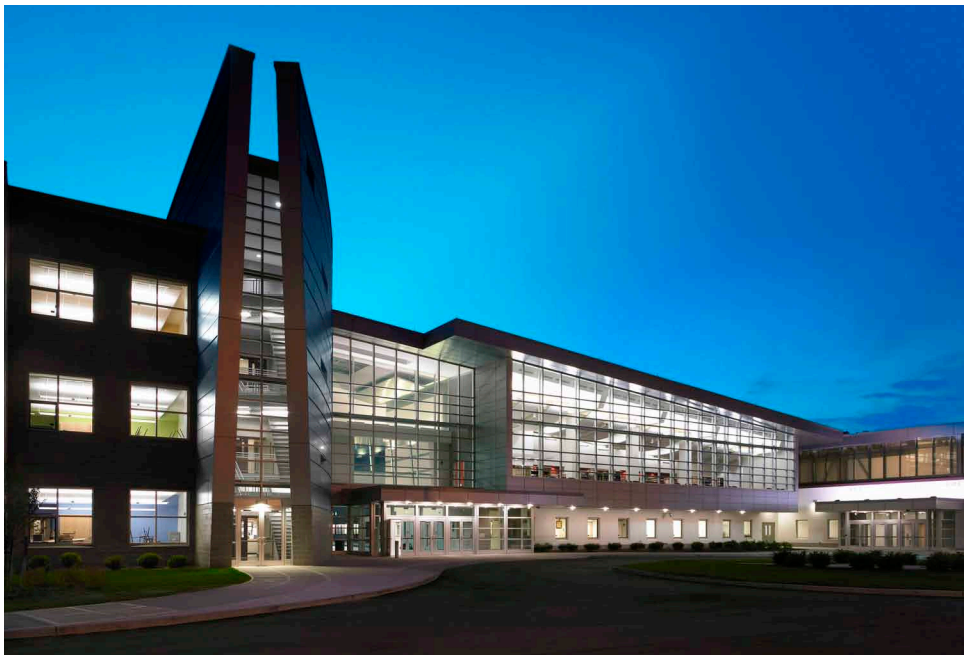
Roosevelt Union Free School District
New Middle School

Roosevelt, New York

A peculiar phenomenon occurred in Roosevelt: at the elementary level, the students were consistently performing at or above the State average in achievement tests; yet those same students once at the District's combined Junior / Senior High School barely registered on the chart for the secondary level state-wide achievement tests. The community was absolutely resolved that the students had to be age-appropriately separated, because otherwise young adolescents were forced to mingle with and be influenced by "over-aged students", and even gangs if the status quo continued.

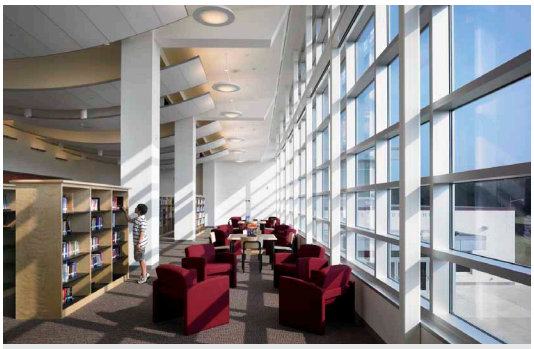
The New Middle School planned for 900 students was the second project the District commissioned to Cannon Design. The project presented difficult challenges from educational philosophy, to land assembly, and schedule. The approved plan's grade restructuring creates a New Middle School for grades six to eight to better foster the transition to adolescence, as well as the more rigorous academic subjects. This program called for a clear 'house' structure of approximately 300 students each, where each grade has its own house administration including guidance and other interchangeable / assignable offices that bring the related support services to the students almost as needed. The grade level administrator and counselor, however, would be a team that year-by-year move up with their students. The goal is to directly reinforce the familiarity and accountability of a small school setting, while providing all the resources and shared functions of a comprehensive Middle School featuring a "student street" that provides after hour usages.

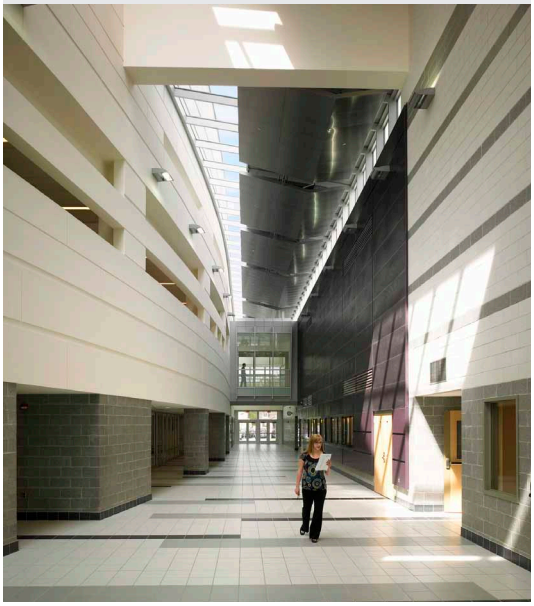
Each of the grade level houses has two teams of teachers in a cluster of five interchangeable classrooms (i.e., ten per grade). Each house has two dedicated science labs, a computer lab, two self-contained special education classrooms sharing a resource room, flexible career/tech, and a faculty professional development suite.

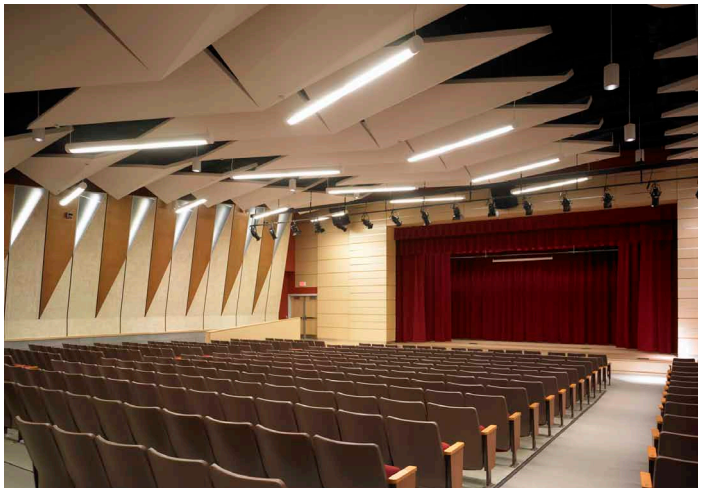


Additional Relevant Projects

Roosevelt Union Free School District
New Middle School
Page 2







Additional Relevant Project

Roosevelt Union Free School District
New High School
Roosevelt, New York

The project now under construction is the final "chapter" in the re-invention of Roosevelt by transforming the facility into a comprehensive high school. The net result is an urban campus with the adjacent New Middle School, where the full array of new outdoor athletic venues are efficiently shared. The High School for most practical purposes will be a new facility considering:

- The school will be fully air conditioned, along with new mechanical, electrical, plumbing building infrastructure and controls.
- Nearly 75% of the classrooms are being enlarged, and all will have full computer resources that optimize the "agile/flex" capabilities for students and educators.
- A 9th grade house is created, including science and computer labs (2 each), Special Education, resource rooms, an administration "hub" with the assistant principal, counselors, conference, files and unisex toilet.
- A centralized science/technology wing (2 fusion/flexible labs, 6 traditional labs, 2 computer labs, 4 classrooms), along with a faculty professional development center.
- A new library/media center addition with a broadcast classroom and studio.
- Enlarged visual, musical and dance studios, as well as complete reconstruction of the 750 seat auditorium.
- A new cafeteria/kitchen "infill" addition, courtyard, as well as "main street".
- New career vocational initiatives in medical technology, and culinary arts featuring a student operated "market deli".
- A new gymnasium, lockers, fitness and team rooms.

Roosevelt Union Free School District
New High School
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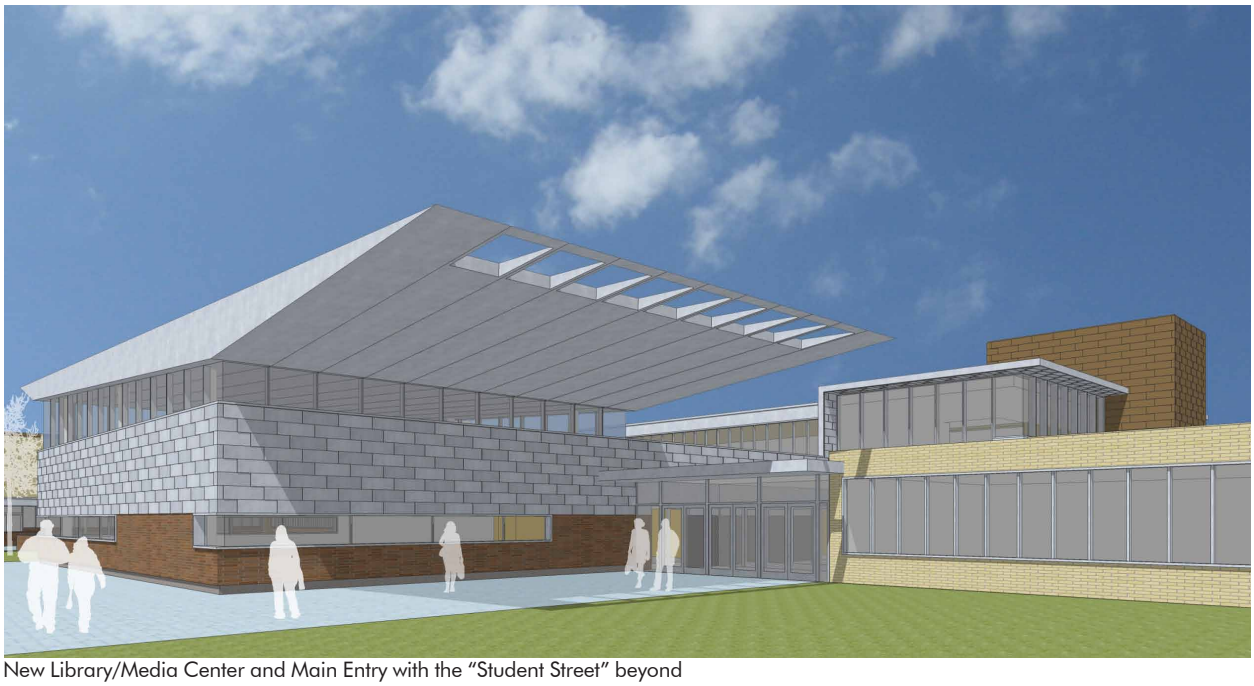
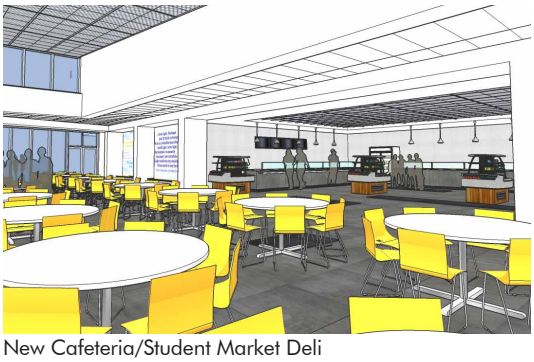
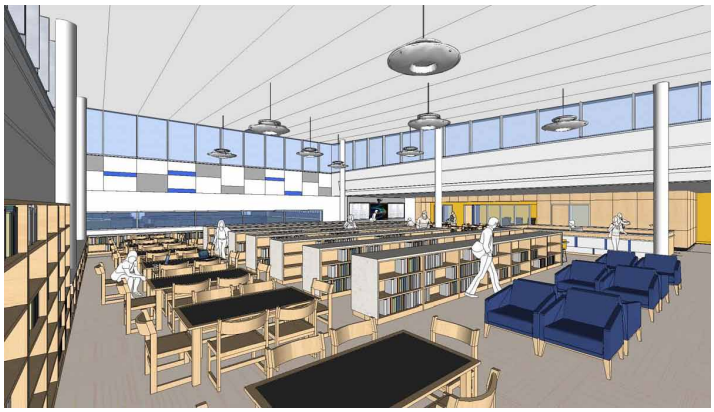


New Library/Media Center and Main Entry with the "Student Street" beyond



New Cafeteria/Student Market Deli

Lobby/Student Street



Library/Media Center interior

Additional Relevant Project

Chicago International Charter School
Ralph Ellison Campus
Chicago, Illinois

Ralph Ellison High School is named for the African-American writer whose novels and essays were transformative in the realms of literature, history and the African-American identity. Cannon Design sought to reflect Ellison's legacy in the design. The front elevation of the addition is a glass curtain wall sandblasted with a quote from Ralph Ellison's novel The Invisible Man. The text is visible both from the interior library and science spaces and from the exterior to passersby and the community.

The original limestone building was built by the Archdiocese of Chicago in 1926 but was closed in 1994 as part of its consolidation efforts. It remained abandoned until the CICS Foundation purchased it shortly after 2002, after receiving a $4 million grant from the Bill and Melinda Gates Foundation.

The design of the academic building involved converting the elementary school into a high school by slightly modifying the classrooms and creating an addition to house administrative offices, a cafeteria, a library and science classrooms. Many of the existing walls, the wood trim and terrazzo were retained. The classrooms were designed with breakout areas to allow for independent learning or special attention. The art, music and gymnasium spaces provide areas for students to explore non-academic interests.

Additional Relevant Projects

Chicago International Charter School
Ralph Ellison Campus

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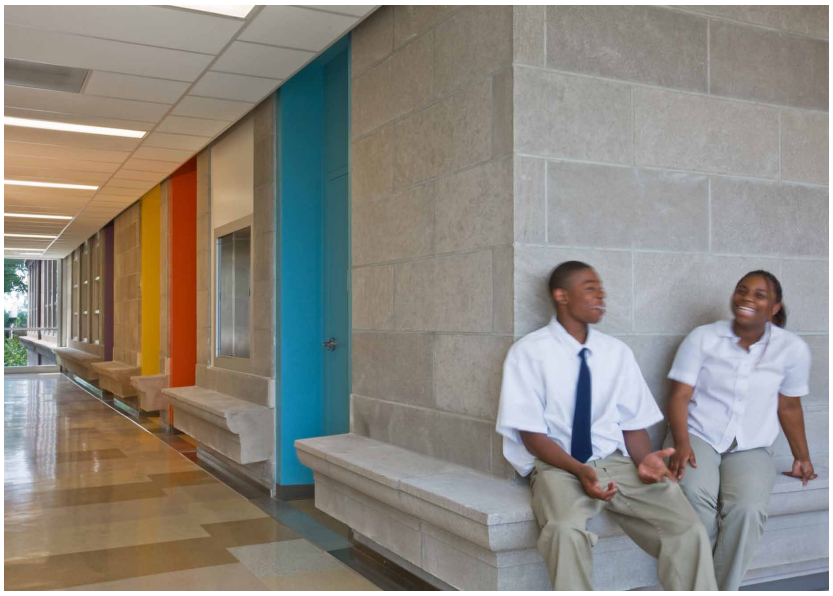
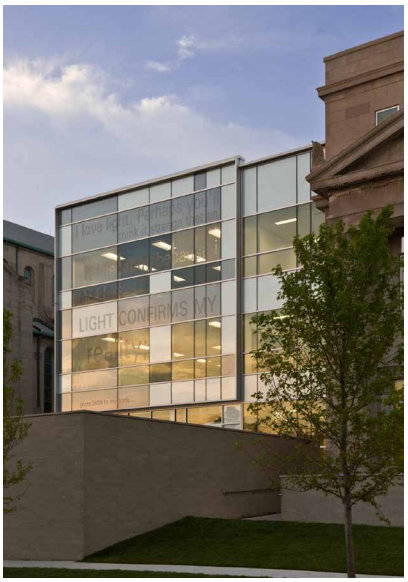
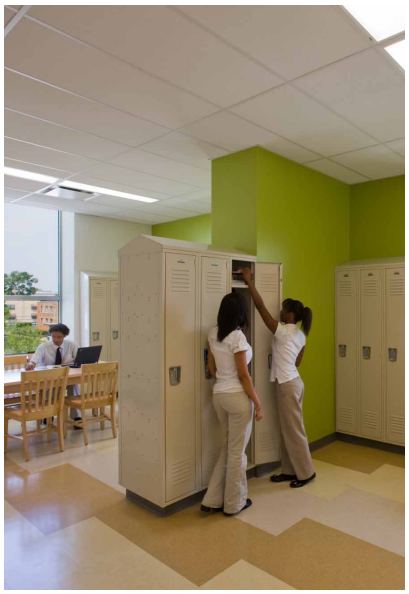
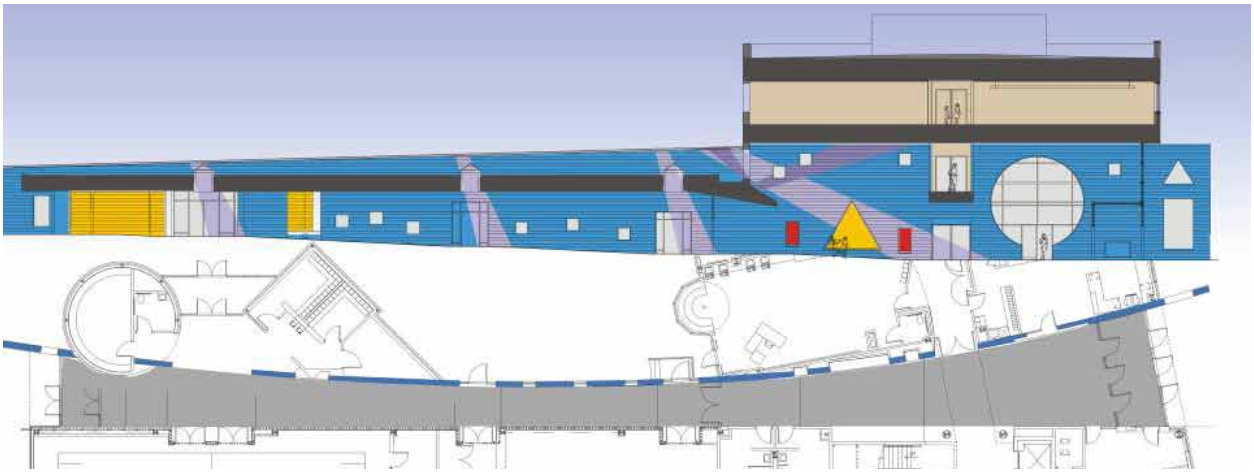






Additional Relevant Project

Albany City School District
Sheridan Preparatory Academy
Albany, New York



Sheridan Preparatory Academy was the first new school to be built as part of an eight-year master plan program to reorganize the City School District of Albany. The building houses an urban elementary school consisting of three classes at each of the grade levels, and the enrollment was 450 students (out of a total capacity of 500) for the opening date of September 2004.

The 57,000 sf school is located on a 1.4-acre site in a densely populated section of the city that extends one city block wide, between Sheridan and Sherman Streets. With open available property within the city very limited, the new school was built on the former site of the Harriet Gibbons Elementary School, built in the 1920s. The site was selected primarily for its location and ability to serve as a true "neighborhood school." The resulting design solution is a three-story scheme fronting on Sheridan Street, which addressed issues such as scale of surrounding neighborhood and maximizing the site for the development of outdoor play areas. A main circulation spine acts as an indoor street to link the two street entrances with both sides of the neighborhood. The spine also connects the three-story classroom section with the gymnasium, cafetorium, and outdoor play area. The final design fully utilizes the site's potential and gives the neighborhood much-needed "green" play space for children.

In addition to needed outdoor play areas, Sheridan Preparatory Academy provides a community gymnasium, run by the area YMCA, for use after normal school hours; spaces to help young inner-city parents cope with the education process; and social workers, a school psychologist, and special-education classrooms. Over the years, the demands on urban schools have greatly increased. The Academy, like many other inner-city schools, must incorporate many new programs and deal with the rigors of higher mandated education standards while at the same time providing a quality environment to encourage learning as a lifelong process.

Additional Relevant Projects

Albany City School District
Sheridan Preparatory Academy
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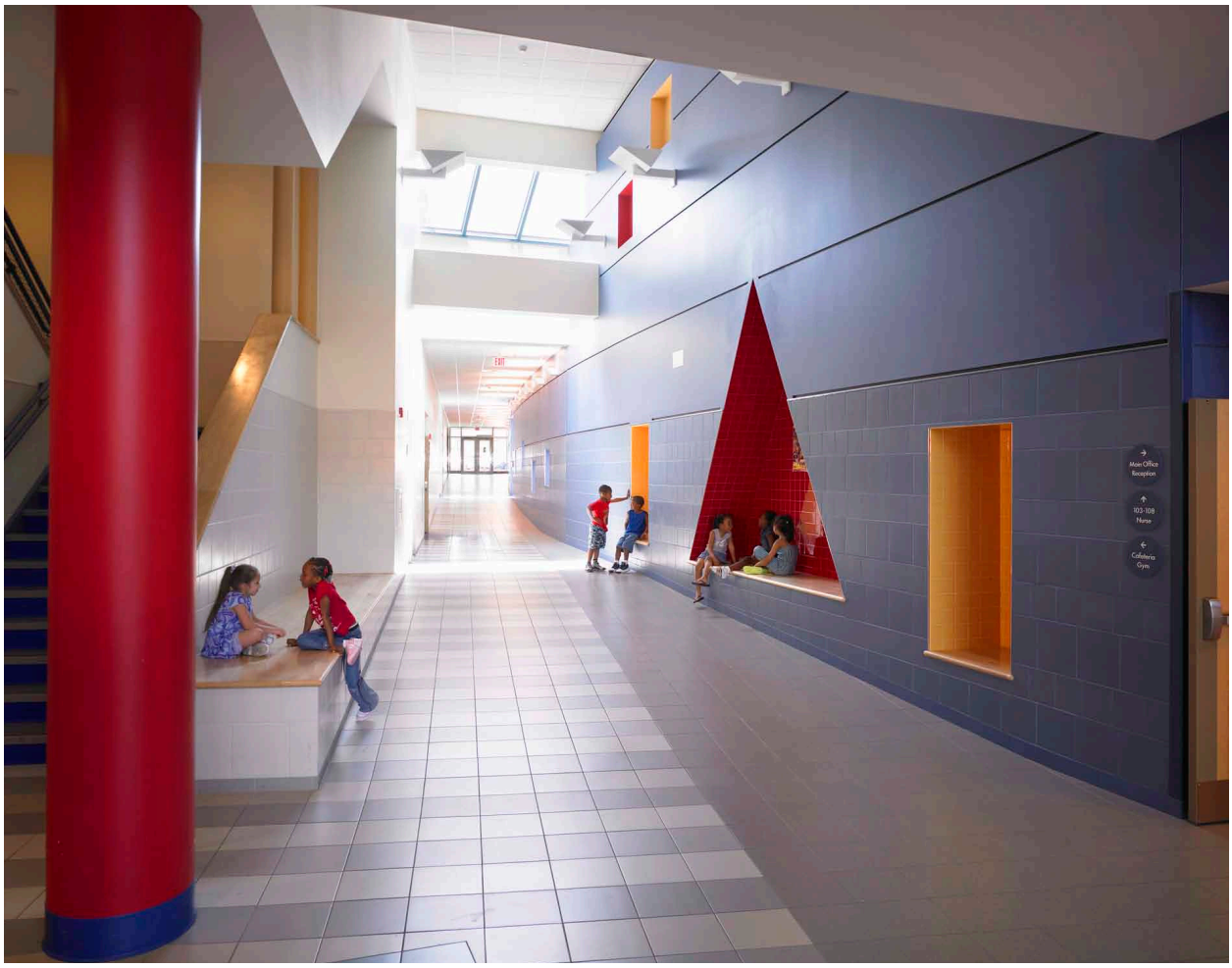

Additional Relevant Project

Albany City School District
Stephen & Harriet Myers Middle School
Albany, New York

While many of the capital district's schools were stately, historic buildings, they were also obsolete educationally, maintenance deprived, and situated on sites that were very small. The strategic need for a new middle school serving the southern portion of the city was critical to stopping the vicious cycle of parental disillusionment and "out migration".

The new middle school was the first entirely new facility in over 30 years. Our Educational Facilities Plan identified and reached consensus on the new middle school site within a district-wide plan for the reconstruction, additions, and replacement schools to align this overall public system with expectations of a 21st century education. The new middle school's challenging program highlights include:

- A planned enrollment for 650 students in grades 6-8, organized in a floor-by-floor house model, each with a dedicated administrative hub, science labs, and supports.
- An atrium student street that links the academic houses to the major shared functions, and allow easy after hour usages.
- A 650-seat auditorium, a full size gymnasium with bleachers, a 25-meter pool, along with a career-technology wing adjacent to the library/media center, visual and performing arts studios.

As the District's executive architect providing peer-review to assure equity in the approved standards, programs, and test fit concepts for the introduction of universal pre-K in the elementary schools, Cannon Design was awarded the projects for the replacement of two neighborhood schools, which are now also occupied.

Albany City School District
Stephen & Harriet Myers Middle School
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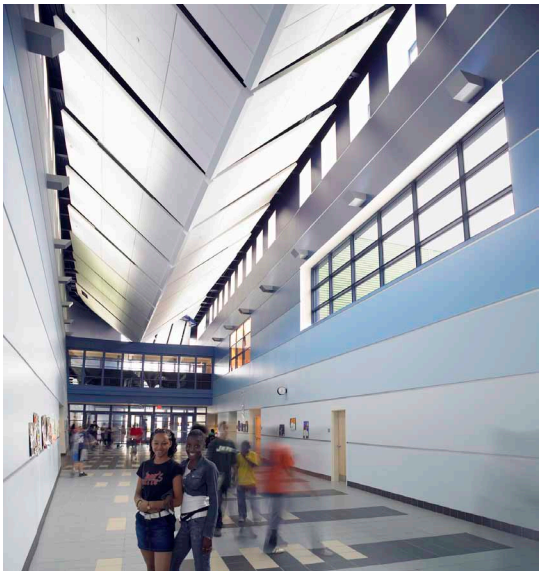

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