

BRIARCLIFF MANOR Union Free School District

PROPOSAL FOR ARCHITECTURE AND ENGINEERING SERVICES

04.18.2019

SUBMITTED BY

Tina Mesiti-Céas, Executive Principal // tmesiticeas@csarchpc.com Daryl Mastracci, Managing Principal // dmastracci@csarchpc.com 445 Hamilton Ave, Suite 1200, White Plains, NY 914.997.2724 www.csarchpc.com



April 17, 2019

Briarcliff Manor Union Free School District 45 Ingham Road Briarcliff Manor, NY 10510

Subject: RFP for Architectural/Engineering Services

Dear Briarcliff Manor UFSD,

It is with great pleasure and excitement that we submit this proposal for architectural and engineering services, in hopes that this is the beginning of a long-term partnership with your district. We understand that your district is searching for a trusted advisor to immediately conduct a district-wide comprehensive facilities study and assessment that may lead to a Fall 2019 or Spring 2020 capital project referendum, along with a Building Condition Survey, development of a Five-Year Capital Facilities Plan, and professional A/E services for annual capital project work.

After meeting with you and touring your buildings, we have a deep understanding of your district's goals and objectives, facilities needs, and long-term vision. We are confident that we can quickly develop a project to address your district's current and future instructional and infrastructure needs, engage and garner support from your Board of Education and your community, and build an environment that inspires your students to learn, grow and achieve success.

Understanding Your Needs

Through our building tours and discussions with the district and the community in recent weeks, we realize the district has critical and immediate infrastructure needs such as new energy efficient boilers and heating systems, improved ventilation, variable frequency drives and fully-integrated digital HVAC controls, modernized lighting and lighting controls, building envelope improvements to decrease energy loss, new roofs, significant bathroom renovations, and curbing and pavement replacements. It will be most important for the district's A/E partner to find a tax-neutral balance in addressing the district's infrastructure needs with the desire to modernize instructional space, while continuing to retain students, attract new families and students to the district, and ensure that Briarcliff Manor is the preferred high school for Pocantico Hills CSD students.

We know the first priority is to conduct a comprehensive district-wide facility study and assessment that will inform a 2019/2020 capital project referendum, provide the framework for the next mandatory Building Condition Survey, and lay the foundation for the development of your Five-Year Plan. Based upon this evaluation and identification of the district's short and long-term needs, it will be imperative to engage the district administrators, the Board of Education, and the community in a collaborative and transparent planning process to develop the next capital project referendum(s) and potential additional projects through other funding mechanisms. Our goal is to ensure a successful referendum vote while addressing the district's critical needs.

CSArch as your Architect, Engineer, Partner

As K-12 experts and local to your district, we believe we are the best firm to implement your district's long-term vision. Summarized below are a few key reasons CSArch is best suited to work with Briarcliff Manor UFSD.

CSARCH

- Leadership in Pre K-12 Design: CSArch specializes in the design and construction of Pre K-12 public schools and has completed capital projects of all sizes for over 135 public school districts throughout New York State. Over 90% of our annual work is in Pre K-12 education, and we are currently ranked the #15 Top K-12 School Architecture + AE firm nationally, according to *Building Design* + *Construction* magazine. Though we've experienced great business success as recognized by our peers and professional trade organizations, we pride ourselves on personal engagement with our clients, dedicated client service, and the trusted partnerships we form. Our first public school district client from over 28 years ago is still our client today.
- Team Expertise, Integration, and Responsiveness: As you will see in our proposal, our proposed local team demonstrates our professional capabilities, experience, and stellar reputation in Pre K-12 planning and design. As a fully integrated Architecture/Engineering consultant, we know how to balance our clients' infrastructure and instructional needs to deliver successful and rewarding projects. In addition to our team's thought leadership, Briarcliff Manor UFSD will benefit from our exceptional responsiveness, thoroughness and attention to detail.
- Dedicated Local Team, Vast Resources: While we have an extensive resource of talented K-12 architects and engineers local to your district and ready to partner with you, we also have the support of our Albany office, which is located within walking distance to the New York State Education Department allowing us to hand deliver all submissions and meet face-to-face throughout project planning and design.

We welcome the opportunity to meet with you to further discuss our proposal and interest in partnering with Briarcliff Manor UFSD. Thank you very much for your consideration.

Sincerely,

Tina Mesiti-Céas AIA, LEED Green Associate Executive Principal

Daryl Mastracci, PE, LEED AP BD+C Managing Principal

Table of Contents

SECTION 1: PROFILE + EXPERTISE

- Profile
- Local Team
- Present Capacity
- Pre K-12 Expertise
- Firm History
- Relationship with SED
- Maximizing State Building Aid
- Passing Capital Project Referenda
- Community Engagement
- 21st Century Design
- School Safety
- Sustainable and High Performance Design
- Building Information Modeling
- In-House Disciplines
- K-12 Awards and Recognitions

SECTION 2: PROJECT UNDERSTANDING + APPROACH

- Understanding Your Needs
- Process
- Phase 1-4
- Quality Control
- Budget
- Schedule
- Energy Performance Contracting
- Approach to Energy Performance Contracts

SECTION 3: 21ST CENTURY CLASSROOMS

- Today's Classroom Environment
- 21st Century Design
- Elementary School Concepts
- Middle School Concepts
- High School Concepts
- High School Libraries
- Furniture Prototype Program



SECTION 4: RELATED EXPERIENCE + REFERENCES

- Client References
- Related Project Sheets
- Letters of Recommendation

SECTION 5: TEAM QUALIFICATIONS

- Organization Chart
- CSArch Resumes
- Sub-Consultant Qualifications

SECTION 6: FEE + ADDITIONAL INFORMATION

- Cost Estimating Record
- Conflict of Interest Statement
- Change Orders
- Litigation
- Financial Stability Statement
- Agreement on Terms of Discussion
- Request for Proposal Certification
- Reference Sheet
- Fee Schedule
- Non-Collusive Bidding Certification
- Enhancing Safety and Security at Your School
- Maximizing Value in an Energy Performance Contract

Profile + Expertise

PROFILE

A premier education design firm since 1991, CSArch provides integrated architecture, interior design, and engineering services to public schools across New York State. Driven to create exceptional, student-centric spaces, we are recognized for designing lasting facilities that stand the test of time, strategizing ways to maximize funding, and improving space utilization. Over 28 years later, we continue to work with our very first public school client, a testament to our value for longterm relationships.

LOCAL TEAM

Firm leaders Tina Mesiti-Céas and Daryl Mastracci will lead and oversee Briarcliff Manor UFSD's project(s) from beginning to end. Through their close partnerships with local school districts such as New Rochelle, Eastchester, the Public Schools of the Tarrytowns, Greenburgh, Valhalla and Mount Vernon, they and their team develop and implement capital improvements ranging from small scale infrastructure projects to large districtwide modernization projects and long-range comprehensive planning. Our A/E team's local presence and expertise is coupled with extensive firm-wide resources supported by our nearly 90 professionals across three offices. Our team has worked on a diverse range of school projects across the state, from small rural districts to complex urban school districts, with individual projects exceeding \$175 million. Our ability to complete projects on time and within budget is supported by our structure and size, which allows us to provide direct principal involvement and personal service to each of our clients. With licensed professionals making up nearly 50 percent of our design staff, every project team integrates senior-level architects and experienced engineers to maximize expertise, efficiency, and exceptional client service.

PRESENT CAPACITY

Our current and projected workload allows us to provide immediate attention and support to Briarcliff Manor USFD. We are committed to beginning work right away and getting your projects planned, designed, and built on budget and schedule.

The leadership team and project team identified in this proposal has the availability and capacity to successfully add Briarcliff Manor UFSD as a new long-term partner. Tina Mesiti-Céas and Daryl Mastracci have committed their time and energy to growing and strengthening our Westchester County partnerships.

PRE K-12 EXPERTISE

Our architects, engineers and interior designers work together to balance function and beauty, with fully integrated buildings and systems that are practical, efficient, robust, and longlasting. Accounting for more than 90 percent of CSArch's annual workload, our education work has helped more than





135 New York State public school districts create, improve, enhance and expand facilities across all chapters and channels of the student experience.

The pre-referendum planning process sets the groundwork for establishing a project budget, strategizing phasing methods, and developing a framework to deliver successful projects on time and on budget. Beginning with the analysis of existing conditions, historic significance, current needs, future projections, and pedagogical trends, CSArch's educational planning process emphasizes collaboration and discovery to achieve consensus, maximize the use of our clients' resources, and ultimately identify the most efficient use of space. By quantifying and qualifying space needs, we ensure the longevity of facilities that support both short-term and longterm spatial needs and educational programs. With an eye toward efficiency and an understanding of your district culture, we provide options and recommendations that serve as tools for data-driven decision making.

RELATIONSHIP WITH SED

CSArch has close working relationships with the New York State Education Department (SED) Office of Facilities Planning and its personnel. Our Albany office is within walking distance to their building, allowing us to meet face-to-face with their project managers and reviewers and hand deliver all project submissions. We regularly advise SED on the latest codes, rules and regulations, and are a preferred third-party reviewer of capital project submissions from other firms (for both architecture and engineering).

MAXIMIZING STATE BUILDING AID

From decades of experience in completing complex public education building projects of all sizes, CSArch is a recognized expert in maximizing state building aid and successfully developing capital projects. In addition to guiding our client superintendents to fully understand all of the variables affecting building aid, our firm often serves as an advisor to other A/E firms and to the New York State Education Department.

PASSING CAPITAL PROJECT REFERENDA

We build consensus among school leaders and the community to move projects forward, delivering design solutions that maximize space while respecting project budget and schedule. With a 93 percent success rate of passing votes the first time and a 100 percent success rate the second time, our team guides districts through the pre-referendum planning process using an open and collaborative process.

COMMUNITY ENGAGEMENT

To plan and implement a successful communications strategy, we begin by meeting with the Board of Education and Facilities Committee to identify public relations strategies and tactics. We prepare support materials, such as presentations, drawings, and renderings to incorporate into informational materials. We attend school board meetings and public information sessions to engage the community and ensure the accurate and clear project communication with community members.

21ST CENTURY DESIGN

As thought leaders in 21st Century learning, we understand the evolving nature of education and how to create spaces for students to succeed in today's world. Our work embraces the "4Cs" of the Partnership for 21st Century Skills:

Collaboration: Flexible environments where students work with diverse groups to achieve common goals.

Creativity: Facilities that enhance students' ability to explore ideas and work creatively with others.

Communication: Learning spaces that foster communication across multiple media for various purposes.

Critical Thinking: Buildings that enhance students' ability to understand complex systems and apply strategies to solve problems.

To promote 21st century learning, CSArch has been using a classroom furniture pilot program that allows districts to "test drive" a variety of furniture solutions on a trial basis before making a significant financial investment as part of a capital project. *More information on this pilot program can be found in Section 3 of this proposal.*



Firm leaders Tina Mesiti-Céas and Daryl Mastracci engaging with members of the community during a school district public presentation.

SCHOOL SAFETY

Enhancing school safety and security is a top priority for our districts and communities. As education planners, architects and engineers, it is our responsibility to incorporate the principles and practices of crime prevention through environmental design (CPTED) in every school project to ensure we are reducing risks. We organize our security assessment and planning into three principles – Security Through Architecture, Situational Awareness, and Technology and Active Security Measures. With a strategic approach to each assessment, we are able to work with our school district clients to provide:

- An environment where students feel safe and comfortable, and where communities are welcome
- Modern, flexible and scaleable technology-based security solutions

For more information on our approach to school safety and security, please refer to our published article, "Enhancing Safety and Security at Your School" in section 6 of this proposal.

SUSTAINABLE AND HIGH PERFORMANCE DESIGN

We believe that sustainable solutions are always possible when you bring a creative, open-minded approach to the project. High performance buildings are healthier for both the occupants and the environment and provide a more productive learning and working atmosphere.

CSArch provides comprehensive analysis and design services to each of our clients to deliver facilities that use less energy, cost less to maintain, and ultimately put money back into facility's budgets through reductions in operating expenses. We routinely integrate sustainable strategies to design buildings that minimize the environmental impact and maximize health and well-being. Our solutions have included geothermal heating and cooling; PV solar systems; biomass boilers; thermal solar systems; and ice storage systems. Early in the design process, we will set sustainable and high performance design goals to serve as criteria for all decisions.



Secure School Entrance

BUILDING INFORMATION MODELING

Collaboration between the client and design team is critical. CSArch uses the latest BIM (Building Information Modeling) technology to enable better collaboration between the owner, architect, and design team. BIM is an intelligent model-based process that gives design professionals the insight and tools to efficiently plan, design, and construct buildings. BIM can also facilitate better management of buildings and infrastructure.

Through this process we convey the design intent to the owner in a fluid way, allowing us to communicate beyond 2D floor plans and drawings. We immerse the owner in the future of their building before it is built. BIM also builds an environment of collaboration in which the owner and the design team connect in real time to efficiently review and adjust design changes. With readily available information, the design team can react to building challenges quickly and efficiently. Additional benefits of this technology include analyzing building performance and energy efficiency throughout the building life cycle, as well as reducing potential errors and overall project cost.

In summary, BIM enables us to:

- Use real-time connection and review with all parties
- Strengthen communication and collaboration across all team members
- Establish early confirmation of design intent and improve accuracy of constructed project
- Our multi-disciplined design teams actively share information, imagine new ways to solve challenges, and fully engage our clients in all stages of design of the built environment



Without reservation, I fully endorse CSArch to school districts interested in floating a bond or undertaking all phases of construction work within their district"

Dr. Peter Giarrizzo, Superintendent, North Shore Schools

CSARCH

ARCHITECTURE // ENGINEERING

We bring together creative and technical design professionals who share a single commitment to the success of each project.

- Architectural Design
- Interior Design

66

- Master Planning
- Building Condition Surveys
- Feasibility Studies
- Programming and Concept Design
- Security Assessments
- Post-Occupancy Evaluation

We apply our multi-discipline engineering expertise to create spaces uniquely integrated with the architecture and surrounding environment.

- Mechanical, Plumbing Engineering
- Electrical Engineering
- Lighting Design
- Fire Protection and Life Safety Engineering
- Telecommunications and Technology Engineering
- Sustainability and Resiliency Consulting
- Security Planning and Consulting
- Energy Performance Contracting













INDUSTRY RECOGNITION

2018 #15 Firm on Top 150 K-12 School Architecture + AE Firms, *Building Design* + *Construction Magazine*

2018 Top 110 AE Firms, Building Design + Construction Magazine

2017 Top 50 Firm in Business, Architect Magazine

2018 Top 300 U.S. Architecture Firm, Architectural Record

2018 Best Places to Work, Albany Business Review

2018 Circle of Excellence, PSMJ

K12 PROJECT AWARDS

Merit Award, American Institute of Architects

Coxsackie-Athens Central School District, New Library/Media Center 2019, Eastern NY Design Awards

Citation Design Award, American Institute of Architects Albany High School Redesign, 2017, Eastern NY Design Awards

Merit Award, American Institute of Architects Mohonasen Central School District Center for Advanced Technology, 2017, Eastern New York Design Awards

Merit Award, American Institute of Architects

University at Albany Service Building Administration Complex, 2015, Eastern NY Design Awards

Honor Award, American Institute of Architects Malone Central School District Additions and Renovations, 2014, Eastern NY Design Awards

Honor Award, American Institute of Architects Cohoes City School District Additions and Renovations 2013, Eastern NY Design Awards

Outstanding Design Award, American School & University Watervliet City School District, High School Gymnasium Complex 2012, Architectural Portfolio, Athletic Facilities Category

Outstanding Project, Learning by Design 2012, Watervliet City School District, High School Gymnasium Complex

Outstanding Project, Learning by Design Long Beach City School District, Veteran's Field 2012, Specialized Educational Facility Category

Outstanding Design Award, American School & University SUNY Morrisville, College Athletic Stadium 2011, Athletic Facilities Category

Outstanding Design Award, American School & University Newburgh Enlarged City School District, Auditorium Renovation 2010, Architectural Portfolio, Renovation Category

Solar Thermal Innovation Award, NY Solar Energy Industries Association 2010, The W!ld Center, Natural Museum of the Adirondacks

Outstanding Project, Learning by Design Bethlehem Central School District, Eagle Elementary School 2010 Early Childhood & Elementary School Category

Outstanding Project, Learning by Design 2010, Hartford Central School District, Alternative Energy Plant



Project Understanding + Approach

UNDERSTANDING YOUR NEEDS

Through our building tours and discussions with your staff, we know the district has critical and immediate infrastructure needs to bring Todd Elementary School and the Briarcliff Manor MS/HS up to current code and to 21st century standards. Many components are original and beyond their useful life. Improvements include but are not limited to:

- New energy efficient boilers and heating systems
- Improved ventilation
- Variable frequency drives and fully-integrated digital HVAC controls
- Modernized lighting and lighting controls
- Building envelope improvements to decrease energy loss
 and improve occupant comfort
- New roofs
- Significant bathroom renovations
- Kitchen and cafeteria upgrades
- Curbing and pavement replacements

Additionally, modernization to specific areas including the High School boys and girls locker rooms, library/maker space, student guidance and support services, and science classrooms are needed.

It will be most important for the district's A/E partner to find a tax-neutral solution that balances the District's infrastructure needs with the District's desire to modernize instructional space to support student retention, attract new families and ensure that Briarcliff Manor UFSD is the preferred high school for Pocantico Hills CSD students.

We have recently been informed by NYSED that BCS reports may not be due on the traditional 5 year schedule (a 2020 report due by January 2021), and that NYSED will assign district BCS due dates starting in 2022 and spread out over 5 years. Districts, however, will be required to complete an Annual Visual Inspection in 2020 and perhaps in subsequent years until the district's next BCS due date. Knowing this, our plan for your Phase 1 task is to conduct a holistic and comprehensive examination of each facility; infrastructure, building systems and space, while considering District educational programs and long term goals, well beyond the standard infrastructure-focused BCS process.

We understand your first priority is to conduct a comprehensive district-wide facility study and assessment that will inform a 2019/2020 capital project referendum, provide the framework for your next mandatory Building Condition Survey, and lay the foundation for the development of your Five-Year Plan. Based upon this evaluation and identification of the district's short and long-term needs, it will be imperative to engage the district administrators, the Board of Education, and the community in a collaborative and transparent planning process to develop the next capital project referendum(s). Our goal is to ensure a successful referendum vote(s), while addressing the district's critical needs.

We plan to begin our survey of your facilities immediately upon authorization, quickly assess your needs, and report our findings in a thoughtful and thorough manner.



Project Approach

PROCESS

Collaboration is at the core of our practice. We emphasize inclusive, direct communication, listening, exploration, and the exchange of ideas to form partnerships with our clients. We begin each project with a clear understanding of project goals that align with the available resources. We bring in specialized consultants as needed to ensure we compose the most strategic team possible, tailored to support project goals.

PHASE 1 //

Building Condition Surveys

Once a final determination of SED's submission process and time-line is established, we will prepare the Building Condition Survey in a format prescribed by SED using a well established set of protocols to evaluate current building structures and systems. However, since SED has not yet publicized a final determination, CSArch assumes that we will proceed with a Building Conditions Survey as per the RFP.

Following a kick-off meeting with Briarcliff Manor UFSD, our team will perform a facility walk-through to observe all buildings, site conditions, systems, and materials. We will also meet and interview key stakeholders such as building principals, district administrators, facility directors and maintenance staff.

Upon reviewing/operating building systems to analyze condition and estimated expected remaining useful life, we will present our findings to district representatives. CSArch will work with an independent estimator and/or construction manager to prepare cost estimates for unsatisfactory items requiring replacement within the next five years.

Should additional, more detailed, and exhaustive inspections be beneficial, we will identify and discuss with the district administration. Examples of these enhanced service offerings may include roof scans, structural evaluations and hazardous material testing. These enhanced services will be aidable at the districts aid ratio.

Upon completion of the building assessments and any requested enhanced services offerings, CSArch will generate a report to present to the district administration for comment. We will record and incorporate feedback into the survey and develop a final draft BCS for presentation. With any required amendments, we will submit the BCS to the State Education Department.

Five-Year Capital Facilities Planning

The following demonstrates our process for completing a Five-Year Capital Facilities Plan for Briarcliff Manor UFSD:

- Review goals with the district's Board of Education and administrative team
- Establish a district facilities planning committee and identify decision makers
- Review the previous Five-Year Facilities Plan and Briarcliff Manor's previous bond proposal to determine what has been completed and what should be considered in the new plan
- Coordinate BCS needs
- Update existing plans of buildings and sites and use photography extensively to describe conditions
- Determine remaining useful life of various building and site components as determined by the BCS
- Identify building code and functional deficiencies
- Assess building safety and security procedures and consider additional techniques and studies for a comprehensive district-wide system
- Prepare a broad assessment with input from key staff for how the facilities may restrict the delivery of educational services. Coordinate with facilities planner to address long term needs. Include provisions in the plan for renovated and/or additional space to meet educational requirements
- Develop scope of work and budget cost estimates for replacement and/or modification of existing building and site components
- Present draft plan to Facilities Committee for review
- Refine/finalize plan/prepare draft report
- Present final draft plan to Board of Education
- Prepare/publish final Five-Year Capital Facilities Plan that exceeds the requirements and format suggested by NYSED to act as a blueprint for long-term planning

Building Review Time-line

Our expertise and staffing availability will allow us to move ahead upon authorization, and complete the comprehensive building surveys and assessments within one month of mobilizing. The analysis required for this task will assist in informing the physical needs of the Five-Year Plan. CSArch can fast track portions of the project to meet the District's needs to help make decisions and inform when a public referendum might be scheduled.

Pre-Referendum Planning/Design Services

We will make the programming and design process with Briarcliff Manor UFSD open and interesting, challenging you to think bigger to create better buildings. Below are a series of steps that CSArch takes during the prereferendum stage of Phase 1:

1. Establish Project Goals: We begin by meeting with the district administrators and Board of Education to review the district's needs, priorities, concerns and long-range vision to identify opportunities for project development.

Together, we will focus a great deal of time on analyzing the 2018 project that was recently defeated to better understand needs vs. wants, high priority items, the community's appetite for a capital project, and more broadly, how to reengage the community and garner support.

- 2. Review Existing Conditions: Since we'll have already completed the initial building reviews and the basic grounds for a forthcoming BCS submission, we'll take a more extensive look at all facilities to align infrastructure and instructional needs with project goals. All previous analysis and studies will be used as a guide to further define needs and useful life of the architectural fabric, site, and building systems. We will then obtain site surveys, and geotechnical investigations in locations where site work and construction of building additions may be performed.
- 3. Create Preliminary Conceptual Solutions: We investigate preliminary design alternatives to address programmatic needs, guiding principles, and design guidelines. We look at options for reorganizing existing space before considering creating new space and develop site plans, floor plans, and 3D sketches to communicate all design concepts, along with comparative cost estimates. Design concepts are reviewed with district's representatives on an on-going basis and final alternative(s) are selected for further study.
- Complete a Comprehensive Study/Facilities Needs Assesment: The culmination of findings from the initial assessment phase will culminate with a Comprehensive Study addressing the District's long-term facilities needs.

PHASE 2 //

Refine Design Concepts

Through a series of meetings with the district's representatives, Board of Education, and the public, we develop design concepts for each school site and building. We then create criteria to determine and vet the most appropriate design concepts and help the district select the best options. Depending on the size, scope of work and cost, the District may consider if one or more capital projects are required to address building condition survey findings and other program needs. If it is determined that more than one capital project is needed, we will work with the district on appropriate phasing.

Final Pre-Referendum Design

We develop the selected design options into final conceptual site plans, floor plans, and three dimensional renderings to appropriately communicate the project, the environment we're creating, and to develop a cost estimate. Along with a final prereferendum cost estimate, building aid calculation, schedule, phasing plan, and all required support data is developed. We also consult with the District's financial advisor to review tax impacts and participate in shaping the information and presenting it to the Board of Education and public.

SEQRA Compliance

We prepare all required State Environmental Quality Review Act forms and obtain compliance at least 45 days prior to the public referendum. We can also prepare Environmental Assessment Forms (EAF) including Environmental Impact Statements or a Supplemental Information documents if needed.

Pre-Referendum Communications

Supported by our in-house marketing staff and/or an outside consultant, we assist the district in disseminating information by preparing graphics and effective communications. We attend as many meetings as required with District representatives and community stakeholder groups to clearly present information, inform the public about the project, and answer questions.

PHASE 3 //

Post-Referendum Services

Upon a successful vote, CSArch proceeds with final design and construction documents. As design progresses, it is checked against design guidelines and long-range plan goals and reviewed at milestone submissions.

1. Schematic and Design Development Phases:

Drawings and outline specifications are generated to provide a clear understanding of design and construction to meet the required scope. This set of documents will serve as the basis for a more refined construction cost estimate and schedule. Value engineering, with its analysis of first-cost versus long-term costs, occurs throughout the design development phase. District representatives will need to review and approve the documents at the end of each phase.



My experience with CSArch spans over 25 years...as one of the preeminent K-12 design firms, CSArch has earned a strong reputation at SED for providing quality work and creative solutions"

Carl T. Thurnau, Director of Facilities, City School District of New Rochelle

2. Construction Documents:

66

Construction documentation will continue as a refinement of the technical information describing the established scope. The clarity and completeness of the construction documents has a major effect on the quality of the contractors' response during the bidding phase and on nearly all activities during construction, including schedule, cost control, and the quality of the building process.

3. Bidding and Award:

We assist the district in securing bids and evaluating bids for construction by participating in a pre-bid conference, responding to contractors' inquiries, and providing documentation for any addenda that may be required.

PHASE 4 //

Construction Administration

In addition to the typical tasks undertaken during building construction, such as review of contractors' requisitions for payment, review of contractors' submittals of shop drawings and materials, and the review of change orders, we make site visits as appropriate to facilitate construction, including attendance at scheduled construction meetings. At the points of substantial and final completion, we conduct reviews of the project and document additional and correctional work required of the contractors to complete their contractual obligations.

During construction, we track construction progress using Newforma Project Center to manage changes and project costs, monitor progress, and communicate with team members. Newforma is utilized throughout the life of the project but takes on additional importance during the construction phase. This program allow multiple users to access a centralized source to document, store, organize and track project information. The benefit to using this system is team members have access to project information at all times, and it reduces the time and cost of exchanging information between the design and construction management teams.

We also use a web-based tracking system provided by Submittal Exchange for processing contractor's submittals and other construction phase documents, including RFIs, cost proposals, and payment applications. This system creates a single location where, starting with the contractor, all submittals for the project are processed electronically. All project team members have up-to-date information on the status of all project documents, and at the end of the project, the district receives electronic copies of all project documents for their use in operating and maintaining the facilities.

QUALITY CONTROL

Projects are subject to peer review by cross-disciplinary principals who provide guidance, analysis, and criticism throughout a project. Design charrettes occur on a regular basis, allowing design principals to provide input and guide the design conversation. While keeping goals in mind, this process brings a fresh perspective to projects. Our documents undergo a formal quality control review to identify errors, omissions, and coordination items prior to being issued.

Our integrated team of architects and engineers, consistently collaborate with in-house construction trades personnel, providing additional layers of quality control and execution. CSArch also works with and maintains excellent relationships with some of New York State's preeminent construction management firms, and can provide input on project schedule, cost estimates, phasing and logistics plans, and participate in value engineering discussions. When it comes to representing owners in the avoidance, analysis, and/or resolution of construction claims, our team brings an important perspective, offering vested insight in ensuring that our clients' projects are accurately and thoroughly documented. This supports and aids in defending the owner against erroneous or unwarranted claims.



BUDGET

Remaining on budget through each milestone is critical. Design decisions are made with cost, longevity, and overall appropriateness in mind. Cost-saving opportunities are implemented only after careful consideration and discussions with the owner. Cost estimating occurs throughout the design process and budgets are developed based on construction experience, pricing trends, and project goals. We continue to evaluate cost and schedule at milestone deliverables to transition into bidding with known expectations.

The integration of architecture and engineering at CSArch has a direct impact on controlling change orders, as most are generally a result of lack of coordination between building systems and construction documents. We minimize change orders through effectively managing construction cost, clear documentation, and effective detailing.

Our team relies on strong relationships with regional contractors and construction managers to consider cost-effective solutions to anticipate problems before they arise.

SCHEDULE

Detailed and realistic design and construction schedules are developed in collaboration with the school district and construction manager early in the process and are regularly reviewed and adjusted as needed. Maintaining a project schedule is a result of active communication, effective use of technology, and consultant coordination, each of which directly impacts budget and design quality.

Our project teams work side by side with the owner and construction manager to develop construction phasing plans early on, identify long-lead items, complete constructibility and value engineering reviews, perform detailed cost estimates, and develop bid packages for qualified local sub-contractors.

During design, we identify key milestone dates, along with a detailed list of deliverables for each phase. The schedule and

deliverables are communicated to all parties, and the project manager is responsible for monitoring progress to ensure deadlines are met.

We regularly track SED's document review time, as this impacts projects schedules. We suggest budgeting a conservative amount of time for review and approval to avoid delays in the schedule. The district's school calendar also informs the project schedule, as we try to take advantage of unoccupied days to complete work that might otherwise not be possible.

CSArch uses Microsoft Project to develop design and construction schedules, which allows us to manage multiple projects concurrently and establish milestones. We also utilize Newforma and Submittal Exchange for project document management.

ENERGY PERFORMANCE CONTRACTING

As an integrated architecture and engineering firm, CSArch supports Energy Performance Contracting (EPC) for public school districts, particularly for the potential to modernize building systems and realize long-term energy savings while limiting the use of capital bond funding. If your district is interested in an EPC, we can guide you through the scope development, lead the process, and guarantee a valuable project.

All too often, EPCs are developed by contractors or equipment suppliers, designed by sub-consultants with little knowledge of the facilities, and the energy savings are estimated or speculative. The results of these EPCs are typically independently designed and implemented conservation measures without real measured savings.

The CSArch preferred approach to an EPC is one where the scope is developed, designed, financed, implemented, measured and verified in close collaboration with a single company (ESCO), sometimes called Integrated Energy Performance Contracting (IEPC). A proper EPC takes a whole



CSArch has provided masterful architectural leadership, vision, creativity, foresight, and now, implementation of our comprehensive and complex project."

Dr. Douglas Huntley, Superintendent at Queensbury UFSD

building and/or district-wide approach and is a collaborative process with the district and the A/E firm. We favor integrated and well-planned solutions rather than one-for-one replacements.

CSARCH APPROACH TO ENERGY PERFORMANCE CONTRACTS

- 1. Deep engineering-driven retrofits (Deep retrofits): We implement engineering-driven EPCs by partnering with companies specializing in value optimization and inhouse design capabilities that complement ours.
- Risk-free contracting: EPC contracts should be agile and customer-centric. We take the risk away from our clients. If we don't attain agreed upon financial or performance objectives on savings, costs or time-line, the ESCO pays the difference.
- 3. Cash flow and debt optimization: We suggest only energy conservation measures that yield significant value. We develop projects focused on maximum financial efficiency; solutions that will address the client's needs with the lowest construction dollars and highest energy savings.
- 4. Vendor neutral: Our cost optimization approach stems from vendor-neutrality. We work only with leading suppliers who best fit each client's unique needs. Suppliers are introduced to the process only post-project concept and audit, and not when developing scope. This allows us complete flexibility in selecting the most appropriate equipment for each client's unique needs, without constraints or vested interests.

- 5. Integration: One of the key principles to a successful EPC is the elimination of silos between design and construction. All stakeholders, including the construction team, are involved from the outset of the project to maintain aligned interests. We exert substantial effort during the feasibility and design period, leading to more precise estimates and greater control of project costs. Designs can be re-evaluated and modified throughout the project for greater optimization, generating increased savings and overall financial performance.
- 6. Performance-based compensation: Payment is tied to performance, and actual energy savings. The possibility of achieving higher savings with lower construction costs inspires the project team to invest more time and effort, and to be creative in designing the most efficient project possible. The resulting excess savings may be shared amongst the stakeholders.
- 7. Real energy savings: Post-implementation energy savings are measured and verified through savings in actual utility bills. The measured savings are used to develop our contractual guarantees. The result is a project that is contractually binding to an annual dollar amount, and not stipulated calculations. Ultimately, the utility meter is the judge.

For more information on energy performance contracts, find our article on "Maximizing Value in an Energy Performance Contract" in section 6 of this proposal.

21st Century Classrooms

TODAY'S CLASSROOM ENVIRONMENT

The interdisciplinary nature of the 21st Century classroom sets it apart from classroom of the 20th Century. Single subject lectures were the norm in the past. Today, collaboration is the thread for all student learning. As teachers develop and employ new teaching strategies that are radically different than that of the 20th Century, the traditional classroom is no longer effective.

The evolved 21st Century classroom is a productive environment where students develop skills they will require to grow into engaged, productive citizens. Modern classroom design promotes the developmental skills that support:

- Higher-order thinking
- Effective communication
- Collaboration

Today's classrooms are student centric, with teachers taking the role of facilitators and guides rather than simply providing knowledge. The spaces they teach in must ensure that they positively engage students in learning, providing effective instruction using different pedagogical approaches aided with technology.

21ST CENTURY DESIGN

Designing classrooms for today's learners requires a different approach; a flexible environment where students work with diverse groups to achieve common goals. Classrooms must incorporate furniture that accommodates multiple learners, and can also be easily repositioned for independent learning. This approach focuses on all learners, empowering them to be active participants in the learning process.

Our depth of experience has helped CSArch understand the evolution of the 21st Century classroom design. With a focus on promoting creativity, critical thinking, communication, and collaboration, we continue to explore, research and collaborate with district leaders, teachers and students to create effective learning environments. From primary through secondary education, the following examples in this section represent our approach to learning spaces that support the principals of 21st Century design.

Elementary School // 21ST CENTURY CLASSROOMS

KINDERGARTEN

With the emergence of new technology and changes in attitudes toward education, the kindergarten classroom is undergoing a rapid transition. The uniqueness of kindergarteners is that they can think somewhat abstractly but still need concrete experiences; they can follow directions but also need to explore their own ideas. Classrooms promote a friendly playful setting, which offers hands-on activity and a lasting experience.







ELEMENTARY CLASSROOMS

Elementary school classrooms value creativity, independent thinking and physical and emotional safety. Ideal classrooms for kindergarteners should be simple, welcoming, cheerful, and safe for all students.



FURNITURE

Classroom furniture provides the fundamental, underlying structure in the room. Typically, kindergarten children need a large open area to gather for lessons, for play, and sometimes for napping. Along with a low group table, daily group tables and a large rug area, many teachers use color to delineate meeting areas.





Elementary School // 21ST CENTURY CLASSROOMS

ELEMENTARY

Classroom seating options are varied throughout the classroom to aid the limited attention spans of students at this age group. Each seating group serves a purpose and is differentiated by seating type; casual lounge chairs and benches, traditional plastic chairs, stools, and soft play sectionals. STEM/STEAM concepts are incorporated into the learning environment. Storage areas, large tables and mobility support hands on learning and exploration at the elementary level.





CLASSROOM FLOORPLAN

Tables are preferred to encourage a sense of community rather than individual territory. Play and learning areas featuring soft furniture provide a place for relaxation within the classroom to unwind and release any tension built up throughout the day.



GROUP LEARNING

Students often sit in groups of four or more for improved collaboration. Furniture mobility in this formation supports the amount of group work conducted throughout the day in primary education.



TECHNOLOGY

Student's are able to use the smart board and computer technology for individual exploration and learning. This world language learning classroom is equipped with various learning stations focusing on all users by incorporating activities that can be achieved both individually or in group-like settings.



Middle School // 21st Century Classrooms



FLEXIBILITY OF SPACE

Middle school classroom design incorporates furniture that can be moved or reconfigured easily from group study to individual study. Classrooms should provide adequate surface space to balance student technology, such as notebooks, tablets, smartphones and e-readers, as well as books, and papers.

Consideration is given to the degree of flexibility; tables and/or chairs should have casters or should be easily folded and/or stacked. Tables might also be in a variety of shapes lending themselves to different configurations.



COLLABORATIVE LEARNING

Open, flexible spaces allow students to come together to share, collaborate, and create. Our 21st Century middle school classrooms support social learning activities, as well as hands-on experimentation and discovery.





ROBOTICS LAB

Movable furniture, group seating, and space for designing and creating, inspire students in this robotics lab engage.



Middle School // 21ST CENTURY CLASSROOMS

FLEXIBLE LABS

Lab spaces vary from district to district, and even from school to school. Some are designed for very specific needs, while others remain flexible with infrastructure to support various hands-on instruction and experimentation. Visibility and accessibility between this type of space is very important, as it allows student groups to work independently while still being supervised.





ARTS CLASSROOM

Today's art classrooms are often situated adjacent to computer labs to foster the integration of digital art with fine arts. In these spaces, students can easily move from hands on to digital application.





COMPUTER LAB

As districts implement 1:1 devices and the infrastructure to support devices, there still remains a need for desk-top computer labs. Computer labs often support heavy technology driven programs especially at the secondary level.



High School // 21ST CENTURY CLASSROOMS

HIGH SCHOOL CLASSROOM

The driving concept behind 21st Century classroom design is flexibility. Students' days are full of choices that empower them to decide how they learn best, and they need an environment which supports that. Typically, these classrooms include multiple seating options, multiple teaching walls and break-out room(s) that can be adapted for unique learning activities. This layout allows for a variety of grouping formats and lesson types that take into account students' widely varying learning styles.





SCIENCE LABORATORY

Science classrooms provide full connectivity—to people, technology and the environment. The open-concept flex-plan is easily adaptable, ideal for project-based learning that encourages teamwork, an exchange of ideas and student-teacher connection. A wide range of technologies serve as tools to engage students in real-world problem solving, conceptual development, and critical thinking.









ARTS CLASSROOM

Art classrooms at the high school level have transformed into art studios, reflective of a collegiate environment and even a professional artist's studio. Natural daylight, infrastructure, storage, and easily maintainable materials are flexible, yet sturdy.

High School // 21ST CENTURY CLASSROOMS

FLEXIBILITY

21st Century classrooms need to accommodate a variety of learning activities, and so they must be flexible, with "zones" designated for different activities. Furniture can be arranged in nooks, each with a designated purpose, such as a lab or a tech zone, group seating for collaborative projects, and a "quiet space" for reading and independent study.

Furniture selection allows for easy reorganization and flexibility; and color, lighting, and transparency brightens the space, creating visual connectivity between rooms.





TIERED CLASSROOM

In addition to the typical general classroom, the Tiered Classroom maximizes active learning by creating zones for traditional lecture, project based learning or group learning, and on-line individual work.

The tiered classroom generally takes place in an oversized classroom to allow for the appropriate space to accommodate zones and maintain acoustic divisions between zones.

Unlike many general classrooms, this classroom type is typically not owned by one individual teacher. Tiered classrooms are intended to be scheduled and utilized as needed to support various subject areas.



MULTIPLE WRITING SURFACES

Multiple instructional walls are now the norm. At the secondary level, 3 of the 4 walls in the general classroom become instructional walls supporting flexibility and group work. Writing walls are also part of casual spaces for informal work.



USE OF GLAZING

Thoughtful use of glass wall systems balance safety with inspiration by providing students who may not be taking part in a particular class the opportunity to gain interest in a course that they may not consider otherwise.



HS Libraries // 21ST CENTURY CLASSROOMS

LIBRARY MEDIA CENTER

Today's libraries provide ample space with areas for both individual and collaborative study. Soft, flexible seating, and plenty of power outlets support varied learning modalities in the library. Mobile furniture, whiteboards, and bookcases can be easily reconfigured to accommodate a variety of events and meeting sizes.

Makerspaces encourage hands-on creativity and problem solving. Students gather in this space to engage in experiential projects that inspire their natural curiosity and ability to solve problems. Media tables and various table groupings create small group work areas for collaboration on STEAM education projects.







LIBRARY ZONES

Though the library has evolved into a technology savvy, media-focused learning and lounging space. Zones are still appropriate to support mutiple functions, including; cirulation, help desk, book stacks, class space, group zones, individual/heads-down study space, computers, project based space, lounge and break-out rooms.





LIBRARY SUPPORT SPACE

Access to the library is critically important as it is often the heart of the school. It's location within the school and adjacent spaces can encourage and increase student use.

HS Libraries // 21ST CENTURY CLASSROOMS

LIBRARY SPACES

Libraries today are an evolution of the traditional library into a more social, diverse place where a variety of activities take place. Libraries have become a different kind of learning destination when schools reimagine them as open, transparent spaces that invite student communication and collaboration.





STUDENT LOUNGE

Student lounge space is at the core of the library. Situated between major functional spaces including stacks, class space, small group space and the circulation desk, it provides a constant source of life in the library, while students remain aware of their presence.





SEMINAR/CLASSROOM/ COMPUTER LAB

Supporting enclosed instructional space provides for seamless transitioning from the library. Folding glass walls promote transparency and visibility into the classroom. Walls can be opened up to create a bigger space for events and large group gatherings.


HS Libraries // 21ST CENTURY CLASSROOMS

LIBRARY

Libraries have moved beyond being primarily "information repositories" by hosting a variety of learning spaces, from small group work rooms, to large common rooms. These spaces support multiple technologies, from traditional print, to internet connections and collaborative audio-visual capabilities. Printed books still play a critical role in supporting learners, but digital technologies offer additional pathways to learning and content acquisition.





MAIN FLOOR

These spaces provide a welcoming common space that encourages exploration, creation, and collaboration between students, teachers, and a broader community. They bring together the best of the physical and digital to create learning hubs in different areas of the library.



Furniture Prototype Program

Our Furniture Prototype Program allows teachers, faculty and students the opportunity to test classroom furniture solutions before committing and making a significant financial investment as part of a capital project.

Active learning represents a significant change in educational design. Aimed to engage students in the learning process, active learning is learning by doing, promoting a deeper understanding of the subject. One directional row of desks and chairs where teachers do 80% of the talking is long gone. Flexibility, supported by furniture solutions that are adaptable for different teaching and learning styles are now in demand. But, how do you know what's best for your district, for one or multiple teachers, and for your students?

CSArch is piloting a Furniture Prototype Program that gives school districts the opportunity to test classroom furniture solutions on a trial basis. This enables districts the ability to "test drive" a variety of furniture solutions from multiple vendors at their schools over time. With the number of furniture options available and constantly evolving, furniture selection can be overwhelming. Our approach makes it easy for districts to choose furniture solutions based on actual experience to meet their exact needs.







Furniture test classrooms provide a real-world hands-on evaluation of classroom furniture.





CASE STUDY

We recently completed the pilot program with Queensbury UFSD. Providing furniture prototype samples advanced and improved the design process without making a large up-front purchase.

This process worked very well and proved to be enlightening as the furniture that the district thought they would like and intended to purchase ultimately did not end up being the preferred solution.

HOW THE FURNITURE PROTOTYPE PROGRAM WORKS

As a participant in the prototype program, CSArch will work through the following steps with your district:

- 1. Establish overall goals and vision of your capital improvement project to understand space and furniture needs.
- 2. Write RFP for furniture vendors specifying test furniture. Recieve and evaluate proposals with district to select a vendor or multiple vendors to move forward with.
- 3. Identify appropriate furniture vendors and invite to the district to provide a presentation of potential furniture solutions.
- 4. Work with the district to purchase furniture for testing, setting delivery dates and installation in furniture test classrooms.
- 5. Conduct real-world furniture testing over several months. Evaluate furniture test classrooms by gathering feedback from teachers, and students.
- 6. We will make final recommendations to the district for the final furniture solution and fit-out the entire project with new furniture.

Related Experience + References

CSArch is a leader in the planning, design, and delivery of pre K-12 facilities, and has worked with more than 135 public school districts across New York State. On the following pages, we've provided project sheets detailing our firm's relevant experience and breadth of work, including small and large renovations, additions, new construction, maintenance upgrades, educational planning, and facility reorganization projects. Letters of Recommendation from five clients are included after our project sheets.

CLIENT REFERENCES

Dr. Douglas Huntley, Superintendent Queensbury Union Free School District 518.824.5602 // dhuntley@queensburyschool.org

Dr. Peter Giarrizzo, Superintendent North Shore School District 516.277.7800 // giarrizzop@northshoreschools.org

Dr. Tahira DuPree Chase, Superintendent Greenburgh Central School District 914.761.6000 ext. 3103 // tchase@greenburghcsd.org



High School Renovations/Reorganization Queensbury UFSD // Queensbury, New York

KEY PERSONNEL INVOLVED Tina Mesiti-Ceas, Design Principal Daryl Mastracci, Engineering Principal Gregory Klokiw, Principal-in-Charge/Project Manager

> ESTIMATED COST \$39.7 million

COST OF COMPLETED WORK TBD



HIGH SCHOOL REDESIGN AND REORGANIZATION

Queensbury Union Free School District underwent an extensive, multi-step planning process that included Community Education Summits made up of parents, school board members, students, community members and school district administration and employees. Ultimately, this process identified a need for inspirational, technologyenhanced facilities that support programming, active learning, and security needs.

This high school redesign project includes three major focus areas: Education Program Enhancements, Energy Efficiency and School Safety and Security. The transformation of the education program involves the reorganization of the current space to create three interdisciplinary instructional communities: Humanities, STEM, and Fine/Performing Arts.

A 2,400 square foot science lab addition will be constructed, including a new 1,500 square foot chemistry lab, allowing the district to group physics and chemistry into one classroom cluster, enabling collaboration between science faculty and students. The replacement of inefficient windows and walls will increase overall energy performance of the school, which date back to the 1963 original construction. School safety and security improvements include centralized community-use areas, a more secure school entrance with locked vestibules, clearer sight lines in student areas, and a relocated media center and library to the building's center.

CONTACT

Dr. Douglas Huntley, Superintendent dhuntley@queensburyschool.org 518.824.5602

COMPLETION DATE/PROJECT STATUS Anticipated Completion 2019-2020 School Year









Pre-Referendum Planning

Greenburgh Central School District // Hartsdale, New York



KEY PERSONNEL INVOLVED Tina Mesiti-Céas, Principal-in-Charge Daryl Mastracci, Project Manager/Engineering Principal John Leichter, Architectural Designer

> ESTIMATED COST TBD



PRE-REFERENDUM PLANNING

Greenburgh Central School District has partnered with CSArch to develop a substantial capital project that will prepare students for a global community and reconnect the local community with its schools. With sustainability and long-range cost efficiency in mind, we are designing spaces that will focus on student safety, security, well-being and state-of-the-art learning facilities.

With the goal of retaining existing students while attracting new families and students to the district, the proposed project will consolidate the district onto their existing main campus in Hartsdale, and preserve and enhance the natural and built environment of the campus. The proposed project scope includes:

- Modernizing and expanding the existing K-1 building
- Construction of a new school to house grades 3-8
- Modernization/conversion of Woodlands MS/HS to a 9-12 high school
- New and renovated athletic fields; new and improved playgrounds; new and improved roadways, parking, and bus circulation
- Walking/running trails and pathways
- Extensive security measures
- Outdoor educational spaces

CONTACT

Dr. Tahira DuPree Chase, Superintendent tchase@greenburghcsd.org 914.761.6000 ext. 3103

COMPLETION DATE/PROJECT STATUS Pre-Referendum Fall 2019









Capital Project Valhalla Union Free School District // Valhalla, New York



KEY PERSONNEL Tina Mesiti-Céas, Principal-in-Charge Daryl Mastracci, Project Manager/Engineering Principal John Leichter, Architectural Designer

> ESTIMATED COST Phase 1: \$1.69 million Phase 2: \$8.24 million

COST OF COMPLETED WORK Phase 1: \$1.69 million Phase 2: \$8.24 million



CAPITAL PROJECT

Valhalla UFSD aims to strengthen and bolster educational experiences for all of their students. Their capital and ongoing projects fulfill the district's promise to always put students at the forefront by offering rich opportunities with a substantial curriculum and improved facilities. Valhalla UFSD partnered with CSArch to achieve these goals, most recently to modernize their learning spaces, athletic fields, and auditorium.

Recently completed, Phase 1 of the capital project provided a new playground, reconfigured and improved parking, and a new athletic field at Virginia Road Elementary School, along with renovated boys and girls locker rooms at the Middle/High School.

Phase 2 of the capital project, currently under construction, includes a new varsity baseball field and facilities, new artificial turf multi-use varsity athletic field and facilities, four renovated High School science labs, one new dedicated STEAM lab, a completely renovated and modernized state-of-the-art auditorium, and masonry repairs to the exterior of the Middle/High School.

CONTACT

Christina Howe, Interim Superintendent chowe@valhallaschools.org 914.683.5040

COMPLETION DATE/PROJECT STATUS Phase 1 Completed 2018 Phase 2 Completed 2019



Capital Project Coxsackie-Athens Central School District // Coxsackie, New York



KEY PERSONNEL Daryl Mastracci, Engineering Principal Daniel Woodside, Principal-in-Charge Thomas Kenney, Project Manager

> ESTIMATED COST \$13.3 million

COST OF COMPLETED WORK \$13.1 million



CAPITAL PROJECT

Renovations occurred at multiple science classrooms, an art classroom – including the addition of a graphic arts lab – and music rooms. Technology education classrooms received extensive renovations to and to support 21st century technology. In addition to computer classrooms, and a metal and wood shop, multiple clean labs for 3D printing and CNC machinery were provided.

At the center of the campus, an existing building was reconstructed and expanded to house a new high school library/media center. The new space provides ample space for students, staff, and community members, with flexibility for various room configurations.

The *Genius Bar* located at the center of the library offers tech support and group study for school-issued mobile tablets. A 3D printer located in the library promotes real-world, hands-on learning.

A large glass exterior wall features perforated screening and solar shades for light control. In addition to building system upgrades, the scope included infrastructure upgrades at both campuses. Phone, P.A., Fire Alarm and Data services were upgraded. Extensive sitework reconfiguration for traffic control, as well as a new running track and field are nearing completion as part of Phase 1 of this project.

CONTACT

Randall Squier, Superintendent rsquier@coxsackie-athens.org 518.731.1710

COMPLETION DATE/PROJECT STATUS Completed September 2018

AWARDS Merit Award, American Institute of Architects Eastern NY Chapter, 2019



District-wide Improvements/Modernization

Eastchester Union Free School District // Eastchester, New York



KEY PERSONNEL

Tina Mesiti-Céas, Principal-in-Charge Daryl Mastracci, Engineering Principal Joe Arnow, Project Manager

ESTIMATED COST

Waverly Boiler Replacement: \$1 million Greenvale Elem. Renovations: \$1 million Safety and Security Project: \$5+ million

COST OF COMPLETED WORK

Waverly Boiler Replacement: TBD Greenvale Elem. Renovations: TBD Safety and Security Project: TBD



DISTRICT-WIDE IMPROVEMENTS/MODERNIZATION

CSArch is partnering with Eastchester UFSD to create educational environments that are conducive to learning and encourage excellence in teaching. We are working with the District to provide appropriate facilities and equipment that will best support and accommodate the needs of a quality educational program.

Our engineering team is replacing the original steam boilers in Waverly Elementary School. With space constraints, limited access, and aging infrastructure, CSArch is leading the district through all facets of the project including hazardous materials testing, abatement, demolition, reconfiguration of access to meet current codes, and new heating systems for the school.

In addition, CSArch is providing renovations to Greenvale Elementary school, based on findings in their 2015 BCS report. Project scope includes building envelope repair and replacement, masonry repointing, window replacements, roof repair and replacement of exterior doors. We are also developing a district-wide safety and security project to harden and secure all doors and windows at all buildings.

CONTACT

Dr. Walter Moran, Superintendent wmoran@eastchester.k12.ny.us 914.793.6130

COMPLETION DATE/PROJECT STATUS

Waverly Boiler Replacement: Anticipated Completion 2019 Greenvale Elem. Renovations: Anticipated Completion 2020 Safety and Security Project: TBD



High School Redesign

City School District of Albany // Albany , New York



CSARCH

KEY PERSONNEL Tina Mesiti-Céas, Design Principal Daryl Mastracci, Engineering Principal Richard Peckham, Principal-in-Charge

> ESTIMATED COST \$179 million

COST OF COMPLETED WORK TBD

HIGH SCHOOL REDESIGN

The Albany High School redesign encompasses renovations to approximately 300,400 sq ft of existing space and nearly 242,600 sq ft of new construction. An extensive planning process resulted in a four-phase renovations and additions project to support a projected enrollment of 3,000 students, integration of career and technology education, 5 learning academies to support the small school concept, student support and health services, and a healthy and effective space to deliver the current and forecasted educational program.

A community engagement process was implemented to include surveys, public updates, and multiple meetings with community members, stakeholders, faculty, students, staff and administration.

The new high school will project a modern, forward-thinking student and community-focused facility with generous daylight, a welcoming main entrance, spaces large enough to accommodate student and community events and classrooms that support 21st century learning. Overall MEP system replacement, site work and renovations will address infrastructure deficiencies and safety concerns, improve overall organization, and increase the number of learning spaces.

CONTACT

William Hogan, Business Official bhogan@albany.k12.ny.us 518.475.6020

COMPLETION DATE/PROJECT STATUS Anticipated 2024

AWARDS + RECOGNITIONS Design Award, American Institute of Architects Eastern NY Chapter, 2017



District-Wide, Multi-Phase Capital Bond

City School District of New Rochelle // New Rochelle, New York



KEY PERSONNEL

Daryl Mastracci, Engineering Principal Thomas Ritzenthaler, Principal-in-Charge Joseph Arnow, Project Manager

ESTIMATED COST

\$106.5 Million Phase 1: \$5.57 million Phase 2: \$45.98 million Phase 3: \$28.77 million Phase 4: \$26.16 million

COST OF COMPLETED WORK Phase 1: \$5.57 million



DISTRICT-WIDE, MULTI-PHASE CAPITAL BOND

The City School District of New Rochelle presented voters a capital bond project of \$106.5 million to address all of the work identified in its 2015 Building Condition Survey. The capital project will address aging infrastructure across all district school facilities including,

- Exterior envelope (roofs, masonry, historic façade restoration, window and door systems, slate roof restoration and replacement)
- Site design (improved athletic venues including athletic field lighting, artificial turf replacement, parking, and building access)
- Interior systems (new finishes, building-wide door and door hardware replacement, and ADA compliance including, elevator, signage, assistive listening, and student/staff toileting)
- Building systems infrastructure (replacement and improvements to HVAC, electrical and plumbing systems, oil tank replacements and new generators)

The capital bond project will be completed in four phases, with completion scheduled for the end of 2020. Phase 1 was completed in summer 2016, which included exterior facade work at Henry Barnard Early Childhood Center and Daniel Webster Elementary.

CONTACT

Carl Thurnau, Director of Facilities cthurnau@nredlearn.org 914.330.2607

COMPLETION DATE/PROJECT STATUS

Phase 1: Completed 2016 Phase 2: Spring 2019 Phase 3: Fall 2020 Phase 4: 2021





The Center for Advanced Technology

Mohonasen Central School District // Mohonasen, New York



KEY PERSONNEL Tina Mesiti-Céas, Design Principal Richard Peckham, Principal-in-Charge Gregory Klokiw, Project Manager

> COST OF COMPLETED WORK \$16 million



THE CENTER FOR ADVANCED TECHNOLOGY

The state-of-the-art Center for Advanced Technology (CAT) houses untraditional, high-tech classrooms and laboratories designed to simulate real-world environments. Existing through a partnership between Mohonasen CSD, a local community college, and Capital Region Boards of Cooperative Educational Services, CAT welcomes multiple users, including K12 students from over 20 districts, college students, and adults seeking college credit, certifications, or retraining. The programs and design of the facility align with the region's priorities to build a skilled workforce pipeline for local industries.

The unique programming required the design team to create a truly flexible purpose learning environment to serve multiple disciplines and demographics. The facility and spaces within support different programs and offer an interdisciplinary, hands-on approach to learning that is integral to STEM education for traditional students and adult learners. Spaces include a large group instruction room for traditional presentations/lectures; an electrical lab for alternative energy and photovoltaic systems; an advanced machining/manufacturing lab; a nanotechnology lab; a health professions lab; a black box theatre/graphic arts lab; a welding lab; and a woodshop classroom.

CONTACT

Chris Ruberti, School Business Administrator rubertich@mohonasen.org, 518.356.8210

COMPLETION DATE/PROJECT STATUS 2016

AWARDS

Design Award, American Institute of Architects Eastern NY Chapter, 2017



District-wide Capital Construction Project

Clarkstown Central School District // New City, New York



KEY PERSONNEL

Daryl Mastracci, Engineering Principal Thomas Ritzenthaler, Principal-in-Charge Robert LaFayette, Project Manager

ESTIMATED COST

\$36.2 million Phase 1: \$18.5 million Phase 2: \$9.5 million Phase 3: \$8.2 million

COST OF COMPLETED WORK

Phase 1: \$18.5 million Phase 2: \$9.5 million Phase 3: TBD



DISTRICT-WIDE CAPITAL CONSTRUCTION PROJECT

Clarkstown CSD partnered with CSArch to develop a districtwide infrastructure and capital improvement project totaling more than \$36 million. Through extensive building and site investigations, programming and financial modeling, CSArch created a comprehensive improvement plan and bond referendum for the district.

Critical infrastructure improvements performed at Clarkstown include roof replacements, boiler replacements, and electrical service replacements. The project was phased over three consecutive years focusing on summer construction periods with the first phase completed in August 2017.

CSArch also successfully performed a historic exterior masonry reconstruction project at Congers Elementary School. The project involved replacement of the entire gymnasium wall construction, replacement of the terra cotta masonry facade, as well as steel, window, and roofing replacement.

CONTACT

John LaNave, Assistant Superintendent/ Chief Administrative Officer jlanave@ccsd.edu 845.639.6300

COMPLETION DATE/PROJECT STATUS

Phase 1: Completed 2017 Phase 2: Completed 2018 Phase 3: October 2019









District-wide Capital Construction Project

North Colonie Central School District // Latham, New York



CSARCH

KEY PERSONNEL

Daryl Mastracci, Engineering Principal Daniel Woodside, Principal-in-Charge Michael Andrews, Project Manager

> ESTIMATED COST \$106 million

COST OF COMPLETED WORK

DISTRICT-WIDE CAPITAL CONSTRUCTION PROJECT

North Colonie CSD is undergoing a district-wide capital project focused on addressing an ongoing enrollment crunch at the elementary level, where classrooms have surpassed capacity in certain buildings. Because studies concluded that the district's enrollment will increase by more than 900 students over the next decade, the project will build space to accommodate the increase, including additions and renovations work at the elementary schools and the conversion of the Shaker Junior High School to a 6-8 middle school.

The project also included construction of a new athletic field at the High School. The new turf field allows for use by various sporting programs with no donwtime in between. The project will also expand the library/media centers, multi-use labs for science, engineering, robotics, computing, and other project-based learning classrooms at all elementary schools. At Shaker Junior High School, the project will construct a new hall for grades 6-8, create additional technology, music, and art classrooms, expand the cafeteria, renovate the existing auditorium, and move student services to the front of the building. Various improvements will be made to the overall infrastructure and to the project site to alleviate traffic congestion.

CONTACT

Mr. D. Joseph Corr, Superintendent superintendent@ncolonie.org 518.785.8591

COMPLETION DATE/PROJECT STATUS New Turf Field Completed September 2018 Anticipated Completion 2022



Renovations and Security Upgrades East Greenbush CSD // East Greenbush, New York



KEY PERSONNEL

Tina Mesiti-Céas, Design Principal Daryl Mastracci, Engineering Principal Paul Nickerson, Project Architect

COST OF COMPLETED WORK Part of \$24.5 million capital project



RENOVATIONS

Columbia High School's cafeteria underwent renovations and an addition to enlarge the space and flow into the school's courtyard. The new design supports an increased seating capacity, provides much-needed natural daylight, and shortens the meal serving time. Throughout the district, additional cafeteria and kitchen renovations have taken place, new secure entrances have been designed, and technology and temperature controls have been upgraded, along with other maintenance work.

SECURITY UPGRADES

Secure entrances were designed for all student-occupied buildings to include a single, well-defined main entry point. East Greenbush staff can clearly observe the lobby, entry, surrounding hallways as well as the drop-off and parking area with the new security upgrades. Secure vestibules offer a safe haven for staff to take cover in an emergency. The following buildings received renovations and additions:

- Donald P. Sutherland Elementary School
- Citizen Genet Elementary School
- Green Meadow Elementary School
- Red Mill Elementary School
- Howard Goff Middle School
- Columbia High School

CONTACT

Lawrence Edson, Jr., Assistant Superintendent for School Business Finance edsonla@egcsd.org 518.207.2535

COMPLETION DATE/PROJECT STATUS Fall 2016



Capital Project Academy of the Holy Names // Albany, New York



KEY PERSONNEL Tina Mesiti-Céas, Principal-in-Charge/Design Principal Mark Landon, Project Manager Randall Defranco, Project Architect

> ORIGINAL ESTIMATED COST \$2.5 million

COST OF COMPLETED WORK TBD



CAPITAL PROJECT

After completing their campus master plan, CSArch is working with Academy of Holy Names to plan and launch one of the largest capital investments in its 134 year history. The \$2.5 million project will enhance and expand the facility to prepare young women to be high achievers and leaders in their careers, communities and society.

Phase 1 of the capital project includes construction of a new north classroom wing, a new physics lab, safety and security upgrades and a vibrant gateway to showcase the beauty of the campus. The improvements will include cutting-edge classrooms, a fully equipped physics lab and state-of-theart technologies that will provide new opportunities for students to collaborate and innovate.

The main entry and building façade will be enhanced with a bullet resistant covered glass-enclosed corridor that will replace the current breezeway. The new lobby will offer uninterrupted sightlines to the parking lot, which will enhance security and safety with improved control over visitor entry. The enclosed courtyard will establish a modern and inviting front door to the campus.

CONTACT

Mary Anne Vigliante Head of School mavigliante@ahns.org 518.438.7895 x220

COMPLETION DATE/PROJECT STATUS Anticipated September 2019



Building Condition Surveys

Various K-12 School Districts // New York



CSArch has completed Building Condition Surveys with over 60+ school districts, covering more than 25 million square feet of space over the past 20 years.



BUILDING CONDITION SURVEYS

Every five years, all public school districts in New York are required by the New York State Education Department (NYSED) to complete a Building Condition Survey (BCS) for occupied public school buildings. Through BCS process, CSArch conducts a visual inspection of all occupied school buildings to assess the current conditions of all program spaces in addition to major building systems and their components.

The survey is intended to assess the buildings for evidence of structural failure, movement or deterioration as well as determine or reexamine probable useful life, need for repair and maintenance and need for replacement. CSArch works with school districts to answer this challenge by digging deeper into the discovery and analysis of existing conditions and preparing a more useful, long-range plan.

Along with the basics of completing the physical survey and all NYSED required form work, our Building Condition Survey services, our architects and engineers seek to find ways of combining and/or phasing recommended upgrade projects for greater efficiency and value for long-range capital plan.





Dr. Peter Giarrizzo Superintendent of Schools giarrizzop@northshoreschools.org

April 12, 2019

To Whom It May Concern:

It is my pleasure to offer this letter of recommendation on behalf of the architectural firm of CSArch. Without reservation, I fully endorse CSArch to school districts interested in floating a bond or undertaking all phases of construction work within their district.

The Board of Education of the North Shore Central School District, hired CSArch at the beginning of the 2018-19 school year to replace a large firm the district had worked with for more than twenty years. About eight (8) firms including the architect of record, responded to the district's RFP: six (6) of the eight (8) firms were selected for the initial interview, which was an intensive and thorough process. CSArch along with the district's architect of record and one other large firm, were selected as finalists to meet with the entire Board of Education. CSArch inched ahead of the pack and was selected by the Board as the District's architect for pre-referendum work only.

As expected, there was a lot of apprehension. We had developed a strong bond with our previous architectural firm over the years and did not know what to expect from CSArch. Nevertheless, they have met all of our expectations! I have found CSArch to be at the top of their game by being extremely client oriented. The Executive Principal, Tina Mesiti-Ceas, along with the Managing Principal, Daryl Mastracci, are always calm in extreme situations. They are deep thinkers and both have creative abilities; these skills have won over even the skeptics in the community - to realize the need for a bond. Tina and Daryl listen to every argument and synthesize it before giving a response. This reflects their deep knowledge and experience in solving complex problems. In fact, in a very short time, the team led by Tina and Daryl have quickly grasped all pertinent aspects of our facilities and have already developed plans for a November 2019 bond referendum. In addition to the bond work, the district has moved most of the current as well as future construction work, to CS Arch.

Should you choose to hire the firm of CSArch, you will not be disappointed. I have no doubt that CSArch will steer your district in the right direction to meet the unique instructional goals of all learners. Please do not hesitate to call me if you require additional information.

Sincerely,

200 Maering

Peter Giarrizzo, Ed. D. Superintendent of Schools





Dr. Tahira A. DuPree Chase

Superintendent of Schools T: 914.761.6000 ext. 3103 F: 914.761.6075 E: tchase@greenburghcsd.org

April 13, 2019

Dear Selection Committee:

It is my pleasure to submit this letter of recommendation on behalf of CSArch, one of the most highly regarded design firms in New York State. As the superintendent of schools for a progressive school district, I know firsthand the importance of partnering with a dependable, knowledgeable, and honest architect firm—especially where the health and safety of students and staff are at stake and budgets are extremely limited.

The Greenburgh Central School District has worked with CSArch for numerous years. In the past, our lead architect from CSArch worked from an office in a northern county of New York State. While this distance did not serve as a hindrance to productivity, we preferred a firm that was more proficient in local needs. About two years ago, CSArch Executive Principal Tina Mesiti-Ceas, contacted my office informing us of the opening of a CSArch White Plains office. We were promised more hands-on attention to local needs, more face-to-face contact with the award winning architect and excellent quality of service.

Since continuing our partnership with the CSArch White Plains office, we have found that not only have the well credentialed Executive Principal Architect and Managing Principal Engineer, Daryl Mastracci been responsive to our specific needs, they provide hands-on attention, they have been honest in their assessment of our building condition, and they value both time and money while delivering a service within the stipulated deadline and budget.

Recently, CSArch joined forces with the Greenburgh Central School District to plan for a major capital project; this project would mark the first of its kind for the school district. CSArch made it their priority to connect with the Greenburgh community and the school board at the onset of the planning process. The community, as well as school board, felt at ease with their expertise and candor about the state of the districtwide facilities and future plans to ensure 21st Century learning spaces for all students, create an infrastructure for long term cost savings and efficiencies, and honor the district's rich history.

We, at the Greenburgh Central School District, are most pleased with our decision to continue our relationship with CSArch and are looking forward to a long-lasting partnership. Please do not hesitate to contact me should you require further elaboration and/or additional information about our favorable experience with CSArch. Thank you.

Sincerely, *Tahira DuPree Chase* Dr. Tahira A. DuPree Chase Superintendent of Schools



CITY SCHOOL DISTRICT OF NEW ROCHELLE 515 NORTH AVENUE NEW ROCHELLE, NEW YORK 10801-3416

MAGDA PARVEY, ED. D. INTERIM SUPERINTENDENT OF SCHOOLS 914-576-4200 914-5632-4144-FAX

THOMAS J. RYAN INTERIM ASSISTANT SUPERINTENDENT BUSINESS AND ADMINISTRATION 914-576-4241 CARL T. THURNAU, PE DIRECTOR OF FACILITIES 914-576-4222

JAMES W. HEUBEL ASSISTANT DIRECTOR OF FACILITIES

KEITH W. WATKINS, CDF ASSISTANT DIRECTOR OF FACILITIES

To Whom It May Concern:

I am pleased to have the opportunity to recommend CS Arch.

My experience with CS Arch spans over 25 years, both in my capacity as Director of Facilities at the New York State Education Department ("SED") which reviewed their architectural and engineering services to school districts across NY State and, most recently, as the Director of Facilities in the City School District of the City of New Rochelle, which is mid-way through a multi-year Infrastructure Improvement Project designed by CS Arch.

During my 20 years at SED, I found CS Arch to always be professional and highly competent. The firm demonstrated a thorough knowledge of building codes, the intricacies of the SED filing, aid financing and the referendum process. As one of the preeminent-K-12 design firms, CS Arch has earned a strong reputation at SED for providing quality work and creative solutions to design challenges.

In my current position as Director of Facilities for the New Rochelle School District, I oversee four phases of a \$106 million infrastructure improvement project, with design and construction administration by CS Arch. The scope includes items such as safety and security enhancements, athletic fields, playgrounds, parking, planetarium upgrade, roofing, historic masonry restoration, windows, gymnasium floors, bathrooms, ceilings, and MEP upgrades. Now three years into the project, the District is very pleased with the results from CS Arch's design.

CS Arch is very responsive to the needs of this District. They prepared the Building Conditions Report, developed the Pre-Referendum package through passage of the bond, and currently provide design and construction administration of each phase of the project. Throughout the construction schedule, and especially during tight summer construction periods, CS Arch is regularly onsite and is proactive to resolve issues and keep the projects moving on schedule. This aspect is a significant reason that we have asked CS Arch to complete another 5 year Building Conditions Survey and to advise on other long-range planning.

Based on my experience working with CS Arch, I would I highly recommend their services for your project. Please feel free to contact me if you have any questions.

Sincerely.

Carl T. Thurnau, PE Director



Eastchester Union Free School District

Lisa Sanfilippo, CPA Assistant Superintendent for Business

April 10, 2019

To Whom It May Concern:

It is with great pleasure that I recommend CS Arch for architectural and engineering services. The Eastchester Union Free School District retained CS Arch in January, 2018 for the design of a boiler plant replacement project at one of our elementary schools. The project is scheduled to begin next month, and the process has been extremely smooth and orderly. We were impressed with the level of detail and accuracy of their plans and specifications, as evidenced by the very competitive pricing we received on the project.

Subsequently, we have engaged the firm to design two other projects, a roof replacement and pointing project, and a district-wide safety and security bond project. Again, we were impressed with the thoroughness of their plans and level of detail contained within, as well as their knowledge and understanding of school district needs. Their ability to perform both architectural and engineering services in-house ensures that their end product is more seamless.

We have found them to be very responsive, knowledgeable, and a pleasure to work with. I would be happy to discuss our experience with CS Arch should you need additional information.

Sincerely,

Sisa Sanfilippo

Lisa Sanfilippo Assistant Superintendent for Business


District Office • 429 Aviation Road • Queensbury, New York 12804 • (518) 824-5600 • Fax: (518) 793-4476



Douglas W. Huntley, Ed.D. Superintendent of Schools Kyle L. Gannon Assistant Superintendent for Instruction Scott Whittemore Assistant Superintendent for Business Amy Georgeadis Director of Human Resources

To Whom it May Concern,

As Superintendent of Schools of the Queensbury Union Free School District I have had the pleasure of working with the CSArch Architecture, Engineering, Construction Management firm for the past eleven years. During this time, CSArch has provided the District with a variety of architectural and engineering services during four major capital projects totaling close to 70 million dollars. Currently, we have reached the halfway mark of Legacy 2020; a 40 million dollar reconstruction/addition project at our high school.

The Legacy 2020 project commenced with CSArch guiding our school district through a comprehensive master-planning process which began in 2014 with a series of community summits. The summits consisted of all stakeholder groups represented in interactive, cooperative planning structures. This community based planning process allowed our local stakeholders to become integrally involved in the creation of their future school. During these sessions, local taxpayers helped determine how their school would eventually serve the children of the community as well as meet other important community wants and needs.

CSArch's leadership in Legacy 2020 will result in the reorganization and renovation of a rigid, mid-century high school structure to:

- Provide three interdisciplinary instructional communities (instead of subject-area silos):
 - Humanities English language arts, social studies, foreign language
 - STEM science, technology, engineering, math
 - Fine and performing arts
- Allow for greater collaboration among faculty and students through extended learning areas that are more flexible than the traditional classroom and that provide collaboration, socialization and enrichment opportunities. These areas provide for high levels of visibility and are dispersed throughout the instructional communities.
- **Centralize support services** such as the Counseling Center, psychological and social services, and the nurse's office to increase the ease of access for students and parents.
- Increase the usability of school-community spaces by relocating the media center and creating a large-group room to the front of the building called the Queensbury Room, and renovating the auditorium.
- Enhance security by providing a more secure school entrance and more clear sight lines in student areas, which puts learning on display while allowing for improved oversight. Centralizing support services and school-community spaces along a main corridor would also allow the school to more easily prevent unauthorized public access to classroom areas.
- **Conserve energy** through new lighting, replacing critical infrastructure, replacing original, energy inefficient windows and exterior walls.

CSArch has provided masterful architectural leadership, vision, creativity, foresight, and now, supervision and implementation of this comprehensive and complex project. From groundbreaking to ribbon cutting, the project will be completed within two school years. October 2018 marked the halfway point of construction. To date, significant progress has been made, with students and teachers benefitting from many of the new spaces every day. In addition, much of the ongoing construction in Legacy 2020 is being conducted in a student-occupied building. CSArch has met all of our unique challenges and has met all of our needs in their planning of scope, sequence, phasing, communication, and by being sensitive to student and adult construction-related issues.

CSArch has been integral in creating a team atmosphere in all phases of our project. With strong leadership and management skills, they bring together the different trades, businesses, suppliers, general contractor, and others in order to keep the project on time and within budget. These are essential skills for the success of our project.

Sincerely,

Douglas W Huntley, Ed.D. Superintendent of Schools

Team Qualifications

ORGANIZATION CHART



Union Free School District

ARCHITECTURE AND MEP ENGINEERING



Tina Mesiti-Céas AIA, LEED Green Assoc Design Principal



Daryl Mastracci PE, LEED AP BD+C Engineering Principal

CONSULTANTS





Site/Civil Engineering

CSARCH TEAM AND SUB-CONSULTANTS

After learning more about Briarcliff Manor UFSD, we will expand our team to include consultants that best fit the project needs. CSArch values relationships and would be happy to accommodate any working relationships the district may already have with other sub-consultants.





DESIGN PRINCIPAL Tina Mesiti-Céas AIA, LEED GREEN ASSOC.

With 20 years of experience in educational design, Tina has successfully worked with multiple Boards of Education and Steering Committees for school district capital projects. Tina will be responsible for the overall project leadership and accountability. Her role will include: managing contract and issue resolution; overseeing project development and quality; and ensuring the design plans meet the program requirements.

EDUCATION

Bachelor of Architecture, Wentworth Institute of Technology

REGISTRATION New York, Connecticut, Massachusetts

NCARB Record

LEED Green Associate

AFFILIATIONS

American Institute of Architects: ENY Chapter President; ENY

Design Awards Committee Member; Awards Committee Past Chair/Co-Chair, NYC Chapter

Association for Learning Environments: Secretary, New York Chapter

United States Green Building Council

AWARDS + RECOGNITIONS

AIA Henry Adams Award for Excellence in Academic Achievement in Architecture

AIA ENY Design Awards: Cohoes High School; Albany High School ReDesign; Malone Central School District; Mohonasen Central School District

PROFESSIONAL REFERENCES

Dr. Tahira DuPree Chase, Superintendent, Greenburgh CSD tchase@greenburghcsd.org 914.761.6000

Dr. Peter Giarrizzo Superintendent, North Shore CSD giarizzop@northshoreschools.org 516.277.7801

SELECT PROJECTS

Greenburgh Central School District Capital Project Planning, Ongoing Capital Projects

Eastchester Union Free School District Capital Project Planning, Annual Capital Projects

Public Schools of the Tarrytowns Ongoing Capital Projects, Long-Range Planning

Valhalla Union Free School District Ongoing Capital Projects

North Shore Central School District Capital Project Planning, Annual Capital Projects

City School District of Albany High School Renovation and Expansion, Ongoing Capital Projects

Queensbury Union Free School District Ongoing Capital Projects, High School Renovation and Expansion

Center for Advanced Technology at Mohonasen New Construction School

Cohoes City School District High School Gymnasium and Classroom Addition, Major Renovations

East Greenbush Central School District Security Upgrades, Building Additions and Renovations

Malone Central School District Additions and Renovations

Youth Shelter of Westchester Feasibility Study, Concept Design



ENGINEERING PRINCIPAL Daryl Mastracci PE, LEED AP BD+C

Daryl leads CSArch's engineering practice, overseeing the mechanical, plumbing, electrical, lighting, fire protection/life safety and telecommunications design teams. With every project, he strives to design spaces that inspire and enhance the student experience. His responsibilities include directing the design of building systems and promoting innovative design and implementation practices focused on energy efficiency, health and wellness, and sustainability.

EDUCATION

Bachelor of Science, Electrical Engineering, The Pennsylvania State University

REGISTRATION

New York, Arizona, California, Connecticut, Maryland, Massachusetts, Nevada, North Carolina, Ohio, Virginia, Washington DC

NCEES Record

LEED Accredited Professional Building Design + Construction

AFFILIATIONS

United States Green Building Council

AWARDS + RECOGNITIONS

The Business Council of Westchester, 40 under 40 Rising Star, 2018

PROFESSIONAL REFERENCES

Dr. Tahira DuPree Chase Superintendent, Greenburgh CSD tchase@greenburghcsd.org 914.761.6000

Dr. Peter Giarrizzo Superintendent, North Shore CSD giarizzop@northshoreschools.org 516.277.7801

SELECT PROJECTS

Greenburgh Central School District Capital Project Planning, Ongoing Capital Projects, Energy Performance Contract

Eastchester Union Free School District Capital Project Planning, Annual Capital Projects

Public Schools of the Tarrytowns Ongoing Capital Projects, Long-Range Planning

Valhalla Union Free School District Ongoing Capital Projects

North Shore Central School District Capital Project Planning, Annual Capital Projects, Energy Performance Contract

City School District of New Rochelle Ongoing Capital Projects

Clarkstown Central School District Ongoing Capital Projects

Pearl River School District 2019-2020 Capital Project

City School District of Albany High School Renovation and Expansion, Ongoing Capital Projects

Queensbury Union Free School District Ongoing Capital Projects, High School Renovation and Expansion

Coxsackie-Athens Central School District Energy Performance Contract

Fallsburg Central School District Capital Project



Ryan Biggs Clark Davis

STRUCTURAL ENGINEERING





Ryan Biggs | Clark Davis Engineering & Surveying, D.P.C., is one of the largest woman-owned engineering firms in Upstate New York. Specializing in structural engineering; civil engineering; repair and restoration; construction support, inspection, and testing; and surveying; we provide services to architects, engineers, developers, and private and public owners. The firm was created as a result of the merger between Ryan-Biggs Associates (founded 1973) and Clark Engineering & Surveying (founded 1986). Ryan Biggs | Clark Davis has offices in New York's Capital Region and Finger Lakes Region and maintains a staff of nearly 50, including over 20 licensed engineers.

The projects we have completed demonstrate our deep and continuing commitment to providing quality engineering and our appreciation for the uniqueness of every engineering endeavor, regardless of project size. We have both the technical ability and desire to work collaboratively with you to tailor specific solutions to your diverse challenges, economic limitations, and time constraints imposed by each and every project.

Service Capabilities

Structural Engineering

- New Structures, Renovations, Additions
- Forensic Investigations, Studies, Reports
- Delegated Design

Civil Engineering

- Site Planning and Design
- Water, Wastewater and Stormwater Engineering
- Municipal Infrastructure and Bridge Design

Repair and Restoration

- Masonry Restoration
- Concrete Repair
- Historic Preservation

Professional Engineering Licenses



Construction Support/Inspection/Testing

- Contractor Support Services
- Construction and Special Inspection
- Nondestructive Testing

Surveying

- GPS and Aerial Mapping Control Survey
- Boundary, Topographic and Utility Survey
- Highway and Bridge Survey

Key Market Sectors

College/University | Commercial | Cultural Hospitality | Housing | Industrial | K-12 Schools Medical | Municipal/Government | Office Buildings Parking Structures | Religious Institutions Residential | Specialty Structures | Transportation

WBE Information

Ryan Biggs | Clark Davis is a Certified Woman Owned Business Enterprise (WBE) New York State, New York City, City of Syracuse (NY), and Commonwealth of Massachusetts

Federal ID No 14-1599413

RYAN BIGGS | CLARK DAVIS ENGINEERING & SURVEYING, D.P.C. www.ryanbiggs.com info@ryanbiggs.com CAPITAL DISTRICT – CORPORATE OFFICE 257 Ushers Road Clifton Park, NY 12065 p 518 406.5506

FINGER LAKES OFFICE 4592 Jordan Road, PO Box 217 Skaneateles Falls, NY 13153 p 315 685.4732

K-12 Schools

Ryan Biggs Clark Davis Engineering & Surveying, is one of the largest woman-owned engineering firms in Upstate NY specializing in structural engineering; civil engineering; repair & restoration; construction support, inspection, & testing; and surveying.

K-12 Experience

The firm has a long history of working at and for New York State school districts. Ryan Biggs | Clark Davis provides structural engineering services to districts directly and as a subconsultant to architects. Over our 40 plus year history, the firm has completed hundreds of projects and public and private school campuses ranging from investigative studies to the structural design of classroom, media center, gymnasium, auditorium, and cafeteria additions, as well as the design for several brand new schools. The firm has assisted architects and school districts with the structural portions of their Building Condition Surveys (BCS) as mandated by the NYS Education Department.

Jamestown



Client List Albany Argyle Arlington Averill Park Avon **Ballston Spa** Berlin Berne-Knox-Westerlo Bethlehem Bolton Landing Broadalbin-Perth Brunswick Burnt Hills-Ballston Lake Chatham Clarkstown Cobleskill-Richmondville Cohoes Congers Delhi East Irondequoit Eldred Fonda-Fultonville Gloversville Greater Johnstown Green Island Greenville Greenwich Guilderland Harpursville Herkimer **Highland Falls** Holland-Patent Hoosic Valley Hudson Hunter-Tannersville Hyde Park Ichabod Crane

Jamesville-Dewitt Jefferson Johnsburgh Kingston Lansing Liberty Little Falls Liverpool Long Beach Malone Margaretville Mechanicville Menands Middleburgh Middletown Mineola Mohonasen Monroe-Woodbury New Paltz Newburgh Newcomb Niskayuna North Colonie North Warren Northville Norwood-Norfolk Oneonta Pine Bush **Pine Plains** Plattsburgh Port Chester Port Jervis Potsdam Ravena-Coeymans-Selkirk Red Hook Rensselaer

Salem Salmon River Saratoga Springs Saugerties Schalmont Schenectady Schoharie Schuylerville Scotia Glenville Shenendehowa Skaneateles South Colonie South Glens Falls South Orangetown Stillwater Sullivan West Syracuse Taconic Hills Troy Union-Endicott Voorheesville Warrensburg Waterford-Halfmoon Watervliet Whitehall Windsor Wynantskill



Newburgh Enlarged City Schools Newburgh Enlarged City School District; Newburgh, New York



- Ryan Biggs | Clark Davis provided the structural design of two-story classroom additions to Balmville and New Windsor Elementary Schools. Roof structure evaluations were also performed at these two elementary schools.
- At Newburgh Free Academy, projects included an evaluation of the existing roof framing and the structural design of the stage rigging support system for the auditorium.
- At North Junior High School, Ryan Biggs | Clark Davis provided the structural design of a cafeteria addition. The addition is a two-story structure with load-bearing masonry walls.



Burnt Hills-Ballston Lake High School STEAM Addition Burnt Hills-Ballston Lake Central School District; Glenville, New York



- Ryan Biggs | Clark Davis provided the structural design of a new wing at the Burnt Hills-Ballston Lake High School.
- The new 25,000-square-foot STEAM wing houses science, technology, engineering, art, and math classes.
- A new fine arts computer lab is located on the ground floor of the addition, while a wall of windows across the hall opens into a large space divided into three technology workshops and a central design hub.
- The technology side of the addition includes a machining, welding, and metalworking space. A large wood-working space is connected by a slightly smaller area that is dedicated to creating prototypes and small models that can be scaled up on the metal or wood side of the shop.
- The second floor of the addition houses math classes, which are paired so they can easily be combined into large, collaborative spaces.
- A computer science room is outfitted with a high-end video conferencing system, which will allow the district to offer remote classes or teleconference classes from elsewhere.
- Construction also included updates to the high school library and the construction of a new black box theater.



Bethlehem Central School District Repair Work

Delmar, New York



- Ryan Biggs | Clark Davis provided structural design services relating to the emergency stabilization of the Bethlehem Middle School front entrance. The stone cornice at the roof pediment was deteriorated and required repairs after several pieces fell and became a safety concern. Ryan Biggs | Clark Davis performed site visits and assisted the school district in selecting a Contractor to provide tasks to stabilize potential conditions. The full scope of the repair work was not approved by voters under this referendum.
- Ryan Biggs | Clark Davis was again retained under another referendum to provide structural design services as part of the district's capital improvement plan. Our scope included structural evaluation of the existing roofs and design for reinforcing, design of masonry repairs for the Middle School façade and several chimneys (implementing our earlier investigation), structural design for additions and new buildings, and column repair at the bus garage.
- The masonry projects for the school district included structural services relating to:
 - Removal and replacement of parapet cast stone. Rebuilt deteriorated portions of the backup wall. Repoint mortar joints in backup wall. Provided structural connection of the parapet wall to the roof framing.
 - Removal and replacement of coping stones. Through-wall flashing below coping, and weathercap at coping head joints.
 - Repointed cast-stone mortar joints above horizontal cornice. Installed patching material at deteriorated portions of horizontal and raked cornice. Replacement of horizontal cornice roofing. Anchors mechanically anchored.
 - Design of masonry repairs for chimneys at the Middle School and two elementary schools. Design of masonry repairs for the roof edge at one elementary school and the corroded lintel at another elementary school.



Oneida Middle School

Schenectady, New York



- Ryan Biggs | Clark Davis provided the structural design for a large renovation project at the Oneida Middle School.
- Our extensive scope of work included stair infills at the ground, first, and second floors, and resupporting floor framing; infilling the basement storage room and boiler room with flowable fill, and infilling wall and roof slab openings; removing and replacing slabs on grade, and providing new floor slab and structure in the existing boiler room; and reinforcing the adjacent existing floor structure.
- We also reinforced the roof structure and designed additional supports at 10 proposed roof-top mechanical units and at miscellaneous openings for ducts.
- We also provided modifications at the entrances, including the existing east and west entrance foundation walls, slabs, and ramps, and provided new exterior slabs and frost walls and a new interior supported ramp at the west entrance.
- We removed and resupported existing floors of the masonry bearing walls to accommodate a new interior main stair, including the design of new columns, beams, floors, lintels, and stair supports.
- We also provided the structural design of the new main entrance canopy and provided support of the new stone veneer.
- The construction cost was approximately \$20 million.





Paul A. Rouis III, P.E.

Principal

Background:

Paul has provided the structural design and management of numerous new design and renovation projects at K-12 schools. His relevant experience includes:

Eagle Point Elementary School; Albany, NY

Structural design for the renovation of the original Public School 27 building. The two-story addition doubled the size of the school. The new space provides 12 new classrooms, a gymnasium, and a cafeteria and kitchen, which also serves as an auditorium. The existing gymnasium was converted into a new library and media center. Paul was Principal-in-Charge.

Giffen Elementary School; Albany, NY

Paul was Principal-in-Charge for a renovation and addition project at Giffen ES. Provided structural design for a cafeteria addition, an elevator addition, concrete ramp, and alterations to install a handicap lift. Also provided a roof framing evaluation for support of new rooftop equipment.

Thomas O'Brien Academy for Science & Technology (TOAST); Albany, NY

Foundation and framing alterations for installation of a new elevator. Provided design of alterations to install at handicap lift at the front vestibule. Also provided analysis of existing framing and design of new framing to support rooftop mechanical equipment. Paul was Principal-in-Charge.

Arbor Hill Elementary School; Albany, NY

Paul was Principal-in-Charge for a renovation and window replacement project at the school. He provided oversight of structural design including design of stairs, mechanical equipment lofts, lintels in existing walls for proposed windows and design of mechanical duct penetrations.

New Scotland Elementary School; Albany, NY

Principal-in-Charge for a one-story, steel-framed masonry bearing gymnasium addition with an approximately 4,000-square-foot connecting corridor to the existing School 19 building. Also provided design for a one-story, steel-framed kitchen addition, including replacement of existing adjacent structural slab over the basement. Detailed a new elevator installation, removal of existing bearing walls, support of mechanical equipment, penetrations of existing foundation walls for MEP work, and new concrete exit stairs and ramp at various locations.

Newburgh City Schools; Newburgh, NY

Provided the structural design of two-story classroom additions to Balmville and New Windsor Elementary Schools and roof structure evaluations and reinforcing to these two schools and Newburgh Free Academy. Paul was Principal-in-Charge.

Bethlehem High School; Delmar, NY

Provided the structural design for additions and renovations. This \$32 million project included two classroom additions; a new gymnasium, locker room, and fitness center; additions to the chorus room, band room, and cafeteria; and a pedestrian bridge. Modifications were made to the existing building to support new mechanical equipment and new firewalls. Paul was Project Manager.

Employed by Ryan Biggs | Clark Davis November 1987

Education 1985/Bachelor of Architectural Engineering Penn State University State College, PA

Licensing Professional Engineer: NY (License No. 066214) NH (License No. 12330) NJ (License No. 24GE04771600) Slab Moisture Testing Technician

Affiliations American Institute of Steel Construction American Society of Civil Engineers American Concrete Institute International Concrete Repair Institute

Contact Information 257 Ushers Road Clifton Park NY 12065 p 518 406.5506 ext 317 e-mail prouis@ryanbiggs.com





Jeffrey T. Hodgson, P.E., S.E.

Associate

Background:

Jeff has provided the structural design and management of many of the firm's projects in the K-12 sector. His relevant experience includes:

Port Chester High School; Rye Brook, NY

Providing structural design and management of additions and renovations to the high school. Scope includes a 14,000-square-foot, one-story gymnasium addition with a flat, long-span roof structure, and a 36,000-square-foot, two-story classroom addition elevated above a parking lot at the ground level.

Danbury High School; Danbury, CT

Project Manager for additions and renovations to high school. Project included renovation to the front entrance, including foundation walls for a new lobby. Work also included a 7,000-square-foot, one-story addition that houses a theater and music rooms. Renovations and expansion of the cafeteria was also part of the scope of the project.

Port Jervis High School; Port Jervis, NY

Provided the structural design for renovations to Port Jervis High School in Port Jervis City School District. A structural roof analysis and design of reinforcing were performed for drifted snow loads. Also provided the structural design of a new entry wall. Jeff was Project Engineer.

Eagle Elementary School; Delmar, NY

Provided the structural design for a new 25,000-square-foot elementary school for the Bethlehem Central School District. The new building includes a classroom wing, gymnasium, media center, cafeteria/auditorium, and support spaces. The building structure is a combination steel frame and masonry bearing wall construction on spread footings. Jeff was Project Engineer.

Burnt Hills-Ballston Lake High School; Glenville, NY

Project Manager for structural design of a new 25,000-square-foot STEAM wing houses science, technology, engineering, art, and math classes. A new fine arts computer lab is located on the ground floor of the addition, while a wall of windows across the hall opens into a large space divided into three technology workshops and a central design hub. The second floor of the addition houses math classes, which are paired so they can easily be combined into large, collaborative spaces. A computer science room is outfitted with a high-end video conferencing system, which will allow the district to offer remote classes or teleconference classes from elsewhere. Project also included updates to the high school library and the construction of a new black box theater.

Long Beach High School; Long Beach, NY

Work for the district was part of a five-year capital facilities master plan for architectural and engineering services. The high school was experiencing masonry façade issues with the building envelope. Prepared an initial façade investigation and prepared repair documents. Also provided structural design of and Construction Phase services for building additions and modifications in the existing building. Jeff was Project Engineer.

Employed by Ryan Biggs | Clark Davis January 2006

Education

2005/Bachelor of Science Civil Engineering Rensselaer Polytechnic Institute Troy, NY

2006/Master of Engineering Civil Engineering Rensselaer Polytechnic Institute Troy, NY

Licensing

Professional Engineer: NY (License No. 087799) CT (License No. PEN.0032203) Structural Engineer: IL (License No. 0.81007535)

Affiliations

American Society of Civil Engineers American Institute of Steel Construction

> Contact Information 257 Ushers Road Clifton Park NY 12065 p 518 406.5506 ext 341



The LA Group

LANDSCAPE ARCHITECTURE, SITE/CIVIL ENGINEERING

Q The LA GROUP

FIRM BACKGROUND AND QUALIFICATIONS

GENERAL DESCRIPTION

The LA Group, Landscape Architecture and Engineering, P.C. is a Small Business Enterprise (SBE) design firm that provides environmental analysis, land planning, and civil engineering for public space planning, colleges and institutions, government projects, parks and recreational facilities, and private initiatives. Founded in 1974, The LA Group has an established reputation for excellence, that is reflected in the number of continuing client relationships maintained in addition to design awards.

SERVICES

The firm offers services in landscape architecture, civil engineering, community and regional planning, environmental analysis, and Geographic Information Systems (GIS). Staff have specialized areas of expertise in downtown revitalization, public parks and streetscapes; cemetery planning and design; resort and golf course design; college, university, and school design; and festival planning. In addition, the firm has demonstrated experience with New York State-based land use and watershed planning, local laws and regulations. Areas of service extend throughout the northeast and nationally in specific market areas.

The LA Group has received numerous prestigious awards in over 45 years of business. A few of these include:

- ASLA Practitioner of the Year Award for Private Practice (New York Upstate Chapter): Joseph Sporko (2017 recipient), C. Michael Ingersoll (2012 recipient)
- The LA Group was ranked the Largest Landscape Architectural Firm (2006-2008, 2010, and 2012-2017) and the Seventh Largest Engineering Firm (2006) in NY's Capital Region by the Albany Business Review.
- In 2016, The LA Group was named one of the "Best Places to Work" (medium category) in NY's Capital Region by the Albany Business Review. The award recognizes the company's achievements in creating a positive work environment that attracts and retains employees through a combination of benefits, working conditions, and company culture.
- The Zweig Letter 2010 Hot Firm List
- In 2007, The LA Group was named one of the Fastest-Growing Private Companies in America by Inc. 5000.
- The LA Group was named **Small Business of the Year** in the *Capital District Business Review* (2005) in recognition of the firm's growth, management strengths, and profitability over a 20-year period.

SUSTAINABLE DESIGN PHILOSOPHY

The LA Group is a strong advocate of environmentally sensitive design. Through over four decades of experience, the firm has learned that successful, creative designs are those that blend a concern for environmental characteristics with client program goals, aesthetic and cultural issues, and project budgets. We believe that the built environment is a complex process that calls for just the right balance: manmade structures have to complement the natural site; human needs must be accommodated in an environmentally sensitive way; and form should follow function since the success of a design depends on the way an environment is used, the purposes it serves, and the access it permits the user. The firm is a member of the U.S. Green Building Council and employs LEED Accredited Professionals.

STAFF CAPABILITIES

At the heart of The LA Group is a diverse and talented staff. The firm's unique mixture of professional and scientific disciplines allows a comprehensive approach to land planning and design. Professional staff includes licensed landscape architects, licensed civil engineers, and landscape designers. In addition to design staff, the firm has in-house natural resource scientists, certified planners, and GIS/CADD specialists, along with support staff. This expertise allows The LA Group to provide a comprehensive approach to land planning issues based on an in-depth level of natural and built physical resource analysis.





DEDICATED TO ADVANCING SERVICES

The LA Group continually encourages staff to advance skills and professional credentials with the goal of ever-improving services to clients. The firm has led by example by deepening its experience in athletic field and campus design with the acquisition of HMH Site & Sports Design of Ithaca, NY. HMH team members are

masters of process and are known for having a design approach that is exceptionally collaborative and efficient. With precise execution, they have made their mark in the industry with campuswide athletic plans, complexes, fields, and parks for clients such as Farmingdale State College, SUNY Cortland, Binghamton University, St. Bonaventure University, and more.



2016 BEST PLACES TO WORK ALBANY BUSINESS REVIEW



New Rochelle High School Fields New Rochelle, NY



The LA Group assisted in the design and construction administration of \$8.75M in site work capital improvements at the New Rochelle High School. With a facelift for nearly the entire school campus, the high school emerged with a newly surfaced running track and field events, two reconstructed multi-sport synthetic turf fields, addition of one tennis court, and reconfiguration and surfacing of existing parking lots and walkways. The existing running track facility required new retaining walls and fencing throughout and around the venue. The running track and jumping events were stripped and ground down to provide a new



asphalt top course and resilient rubber surfacing. Both existing synthetic turf fields were due for new turf carpet. Explorations beneath the existing carpet revealed that the existing stone base and drainage system were also pushed beyond their functional life expectancy.

The facility now has two all new synthetic turf fields to support soccer, lacrosse, field hockey, football, and softball. Improvements to the existing facility include protective netting for the school greenhouse, an all-netting softball backstop, sliding vehicular access gates, and all new chain link fencing and concrete walks throughout.

client: City School District of New Rochelle reference: Carl Thurnau, Director of Facilities phone: (914) 576-4222

New Rochelle High School Fields New Rochelle, NY



The LA Group assisted in the design and construction administration of \$8.75M in site work capital improvements at the New Rochelle High School. With a facelift for nearly the entire school campus, the high school emerged with a newly surfaced running track and field events, two reconstructed multi-sport synthetic turf fields, addition of one tennis court, and reconfiguration and surfacing of existing parking lots and walkways. The existing running track facility required new retaining walls and fencing throughout and around the venue. The running track and jumping events were stripped and ground down to provide a new



asphalt top course and resilient rubber surfacing. Both existing synthetic turf fields were due for new turf carpet. Explorations beneath the existing carpet revealed that the existing stone base and drainage system were also pushed beyond their functional life expectancy.

The facility now has two all new synthetic turf fields to support soccer, lacrosse, field hockey, football, and softball. Improvements to the existing facility include protective netting for the school greenhouse, an all-netting softball backstop, sliding vehicular access gates, and all new chain link fencing and concrete walks throughout.

client: City School District of New Rochelle reference: Carl Thurnau, Director of Facilities phone: (914) 576-4222

Nyack Public Schools Athletic Facilites Nyack, NY



Through extensive site and athletic facilities master planning and pre-referendum support services, The LA Group (as HMH Site & Sports Design) helped the district develop a \$27.5M district-wide capital improvement project that addressed parking expansion, circulation improvements, and \$7.6M in athletic facilities upgrades. In-depth analysis of athletic field usage, synthetic turf vs. natural grass fields, and health and safety aspects were instrumental in the success of the referendum. The overall project was broken into two phases. Phase 1 included a new synthetic turf soccer/lacrosse field and natural grass softball field. Phase 2 includes a synthetic turf baseball/field hockey field, reconstructed running track from 6 to 8 lanes with new synthetic turf multi-purpose field, bleachers, press box, and concessions building.

Other athletic facility improvements for the district have included the reconstruction of tennis courts.



Pelham Public Schools Athletic Facilities Pelham, NY



Over the past ten years, The LA Group (as HMH Site & Sports Design) has worked on several district projects. One of the more notable projects was the replacement of a natural grass field within an existing track with synthetic turf at Glover Field. The firm worked with the District and Friends of Pelham Sports, a 501c3 organization that funded the project.

Extensive discussions were held regarding health and safety issues involved with synthetic turf. Usage analysis was also developed demonstrating the benefit of synthetic turf in school districts with minimal athletic acreage to address district and community needs.



Other recent work includes an athletic facilities master plan, a natural grass softball field at the Middle School, parking lot design, and district-wide planting plans.

client: Pelham Public Schools reference: Angelo Rubbo, Assistant Superintendent for Business phone: (914) 738-9140 x4

SUNY Purchase Athletic Facilities Purchase, NY



The LA Group (as HMH Site & Sports Design) collaborated with campus athletics and facilities staff on an athletic facilities master plan that provided better long-term solutions to allow the campus to maximize field use opportunities, facility rental opportunities, and to minimize scheduling impacts associated with necessary natural grass field regeneration. The client's initial thought was to replace an existing natural grass athletic field with a new synthetic turf field.

The first project included a synthetic turf multi-sport field located adjacent to existing athletic fields and designed for football, soccer, lacrosse, and field hockey. Other project scope included field lighting, bleacher seating, press box design, parking,



pedestrian pathways, and integration of native plant materials for a more sustainable stormwater management approach.

The next facility improvement project consisted of switching the locations of the existing natural grass baseball field with the larger terrace area soccer fields and building a new synthetic turf baseball stadium with integrated soccer field and associated amenities such as field lighting, stadium seating, bull pens, dugouts, press box, parking, and pedestrian pathways. As a result of reorganizing the fields, the campus increased the number of athletic fields and also greatly reduced the environmental/ wetland impact on the sensitive site.

client: SUNY Purchase reference: Chris Bisignano, Director of Athletics phone: (914) 251-6534



Michael J. Herzog, RLA, ASLA Senior Associate/Landscape Architect Project Role: Lead Landscape Architect

People. Purpose. Place.

ce. Experience Summary

BLA/1984/Cornel University AAS/1982/SUNY Cobleskill

RLA/NY/1990/#001297-1 RLA/NJ/2002/#21AS00088500

American Society of Landscape Architects (ASLA)

Mike adds a wealth of hands-on expertise to your project. He has managed dozens of educational facilities projects with accurate estimating, top quality design, on budget bids, and on time completion. In all of Mike's projects, he is mindful of site safety, sustainability, minimizing maintenance and specifying materials, products and equipment with proven durability and longevity. Mike listens closely to your objectives and promotes strong teamwork throughout design and construction which goes a long way in the success of projects. Additionally, his construction administration skills are exceptional. In 33 years, Mike has seen just about everything during construction and will bring those experiences to your project.

Project Experience

New Rochelle City School District Elementary Playgrounds, New Rochelle, NY

Playground Design – Designed playgrounds and prepared construction documents for the district at five elementary schools. They are Barnard Early Childhood Center, Columbus ES, Daniel Webster Elementary School, Jefferson Elementary School, Trinity Elementary School and Ward Elementary School. This effort included construction administration. Project Manager.

Roosevelt UFSD Additions and Alterations Capital Improvement Project Roosevelt, NY

As part of a State Education Department managed project, work included accessibility improvements, new and reconstructed parking, sidewalks, tennis courts and track and field facility. Principal-in-Charge/Project Manager.

Nyack UFSD Capital Improvement Project Nyack, NY

District-wide improvement project with over \$7.6M in athletic facility upgrades including natural grass softball field, synthetic turf soccer/lacrosse field, reconstructed track and new synthetic turf infield with bleachers, press box, and concessions, and synthetic turf baseball/field hockey field. Previous experience with the district included reconstruction of tennis courts. Project Manager.

Yonkers Public Schools Athletic Facilities Upgrades Yonkers, NY

Project included the reconstruction of tennis courts and running tracks at four high schools. Design schedule was accelerated. Principal-in-Charge/Project Manager.

Long Beach City Schools Site and Athletic Facilities Planning Lido Beach, NY

\$92M capital improvement project included circulation reorganization, the total reconstruction of Veteran's Field into a new track and synthetic turf facility at the MS and a new exhibition synthetic turf field at the HS. Project Manager.

Hempstead UFSD District-Wide Upgrades Hempstead, NY

Site and athletic facilities design for 10 district schools with an accelerated schedule. Scope included new and reconstructed sidewalks, roadways, parking, athletic facilities, and accessibility improvements. Principal-in-Charge/Project Manager.

Syracuse City School District Fowler High School Additions/Alterations Syracuse, NY

\$21.5M additions/alterations project included site evaluation, vehicular and pedestrian circulation reorganization, new bus drop off and entry, new and reconstructed parking, accessibility upgrades, and planning for phase two athletic facilities. Principal-in-Charge/Project Manager.

Niagara Falls City Schools \$66.7M District-Wide Improvements Niagara Falls, NY

As part of the capital improvement project, \$17.5M was dedicated to district-wide site and athletic facilities upgrades including new and reconstructed parking, sidewalks, curbing, playgrounds, general upgrades as part of on-going BCS work, 6 tennis courts, 9 synthetic turf fields, and reconstructed running track. Principal-in-Charge/Project Manager.

Massapegua UFSD Athletic Facilities Massapegua, NY

Layout, design and specifications for a new softball field. Construction Administrator.

Palmyra-Macedon CSD District-Wide Improvements

Palmyra, NY

Projects for the district included Building Conditions Survey, site infrastructure upgrades (new and reconstructed parking, sidewalks, roadways, curbing, etc.) and running track reconstruction. Principal-in-Charge/Project Manager.

Eastport-South Manor CSD Site and Athletic Facilities

Eastport, NY

Project included replacing a natural grass field with synthetic turf within an existing track at the high school and parking/circulation reorganization at the elementary schools. Project Manager.

Salmon River CSD District-Wide Improvement Project

Fort Covington, NY

Project included health and safety upgrades and modernization of facilities. Site components of the project included vehicular & pedestrian circulation, parking, accessibility improvements, playground, and athletic field upgrades. Principal-in-Charge/Project Manager.

Highland Falls-Fort Montgomery CSD Highland Falls, NY

Highland Falls Intermediate School Site Improvements

Extensive playground and playfield study culminating in a play area improvement project that includes new play structures, independent fitness stations, covered shelters, an improved basketball court area and re-sodded and irrigated central playfield area. Principal-in-Charge/Project Manager.

Highland Falls-Fort Montgomery CSD Pavement Evaluation

Study and associated report of findings including estimates of all vehicular and pedestrian pavement at the School District's High School and Intermediate School properties. Principal-in-Charge/Project Manager.

Highland Falls-Fort Montgomery CSD Playfield Evaluation

Study and associated report of findings including estimates for possible improvements to playfields and other exterior athletic areas at the School District's High School and Intermediate School properties. Principal-in-Charge/Project Manager.

Highland Falls-Fort Montgomery CSD BCS

Field work and associated reporting for site, civil, athletics and landscape architectural elements complying with NYSED building condition survey surveys for the School District's four properties. Principal-in-Charge/Project Manager.

John O'Neil HS Baseball Field

Multi-purpose playfield area designed for baseball and soccer use. Principal-in-Charge/Project Manager.

Windham-Ashland-Jewett CSD District Alterations Windham, NY

Project scope included design for new and reconstructed sidewalks, roadways, parking, and athletic facilities, as well as general accessibility improvements. Principal-in-Charge/Project Manager.

Oxford CSD Addition/Alterations

Oxford. NY

Site and athletic facilities design for an addition/alterations project that included new and reconstructed parking, circulation, and reorganization of athletic fields. Principal-in-Charge/Project Manager.

Bloomfield CSD Athletic Facilities

East Bloomfield, NY

Site and athletic facilities design for a capital project that included a reconstructed running track and other improvements. Project Manager.

Avoca CSD Capital Project

Avoca, NY

Performed site assessment and design services for the sitework components of the project. These included pedestrian and vehicular circulation improvements, new track and field facility, new softball field and other playfield improvements, and related infrastructure. Project Manager.

Trumansburg CSD Athletic Facilities

Trumansburg, NY

Athletic facilities master planning and extensive pre-referendum support led to the \$3M of athletic improvements including a track and field complex and athletic fields. Principal-in-Charge/Project Manager.



Douglas B. Heller, PE, ASCE Associate Principal Director of Engineering Project Role: Project Engineer

People. Purpose. Place.

BSCE/2006/University of New Hampshire

> PE/OK/2017/#29843 PE/NE/2017#E-16750 PE/KY/2017/#33042 PE/MD/2017/#51434 PE/NY/2012/#091339 PE/VT/2012/#091319 PE/VT/2012/#91215 PE/NH/2010/#13319

American Society of Civil Engineers (ASCE)

Experience Summary

Mr. Heller has over nine years of municipal, commercial, residential, and general civil engineering experience. He has served as a project engineer, or design engineer on a broad range of projects and has demonstrated expertise in the following areas: drainage design/stormwater management, site grading, bank stabilization, rural roadway design, connections and extensions to existing municipal water and sewer facilities, on-site wastewater treatment and disposal facilities. Mr. Heller is a registered professional engineer in New York, Vermont, New Hampshire, Nebraska, Kentucky, Oklahoma and Maryland.

Project Experience

South Glens Falls Central School District South Glens Falls, NY

Provided comprehensive site design, civil engineering, and environmental services for a capital project that involved all properties owned by South Glens Falls CSD. Project Engineer.

West Point Military Academy Stormwater Management Plan and Design West Point, NY

Creation of a comprehensive Stormwater Management Plan (SWMP) for the US Army Garrison (USAG) at West Point Cantonment Area (approximately 1,850-acres). Project Engineer.

Ravena-Coeymans-Selkirk CSD Capital Project Ravena-Coeymans-Selkirk, NY

Collaborated with the project team to implement design and construction of the approved capital project improvements including synthetic turf, multi-purpose field, new soccer, baseball, softball, and soccer fields, tennis courts, new access drive, and related drainage and infrastructure design. Project Engineer.

Malone Central School District Transportation Facility Expansion Malone, NY

Designed the bus access, fueling, and parking expansion that including a 30,000SF addition. This effort included utility capacity/relocations, stormwater management, and two new athletic fields. Project Engineer.

NYSOGS Term Contract – Environmental Engineering Various NYS Correctional Facilities

Provided services for several design and analysis projects including construction documents and administration for a waterline replacement at Green Haven CF, a water system analysis at Albion CF, and a traffic flow/roadway signage assessment at Sing Sing CF. Project Engineer.

Saratoga County Water Authority Stream Mitigation Milton, NY

Stream mitigation measures were proposed throughout five locations along the Creek and include improving fishing habitat adjacent to public fishing areas, stabilizing eroded stream banks, and constructing in-stream structures to help stabilize channel boundaries. Project Manager.

Denning's Point Shoreland Trail Improvements Hudson Highlands State Park, Beacon, NY

Providing construction documents to construct a 1.2 mile fully accessible trail segment. Scope includes site reconnaissance, geotechnical analysis, assessment of regulatory controls, SPDES stormwater permitting, programming, design and engineering, estimating, and construction documentation. Project Engineer.

Ballston Spa Central School District New Elementary School, Wood Road Campus Ballston Spa, NY

The LA Group continued a long relationship with the Ballston Spa CSD by designing the sitework for a new elementary school. This project involved the design of a new school and phasing to remove an existing school building after the new one was completed. Project Engineer.

Johnstown CSD Capital Project Johnstown, NY

Designed the phased site improvements from the capital project including new bus drop-off at the high school, several new playgrounds, arrival/departure improvements at several schools, and related infrastructure and landscape improvements. Project Engineer.

The LA Group Landscape Architecture and Engineering, P.C.



Joseph F. Kral, Jr., RLA Landscape Architect Project Role: Landscape Architect

People. Purpose. Place. | Experience Summary

BLA/2005/SUNY ESF

RLA/NY/2017/# 002707

Richford Town Planning Board Member Joseph Kral has ten years of landscape design experience for educational facilities as well as commercial businesses. Joseph has been responsible for site evaluations, SEQR/EIS coordination, conceptual design options, cost estimates, developing construction documents and specifications, and providing construction administration assistance. One of his biggest attributes is his ability to provide contractors timely information, diligently reviewing submittals and shop drawings without delay to help keep projects moving forward.

Project Experience

New Rochelle City School District New Rochelle, NY

Elementary Playgrounds

Playground Design – Designed playgrounds and prepared construction documents for the district at five elementary schools. They are Barnard Early Childhood Center, Columbus ES, Daniel Webster Elementary School, Jefferson Elementary School, Trinity Elementary School and Ward Elementary School. This effort included construction administration. Landscape Architect.

Athletic Field and Court Design

Prepared design and construction documents for various playfield and sports court improvements at Young Middle School. Services included construction administration. Landscape Architect.

Running Track and Synthetic Turf Field Improvements

Provided design and construction documents for maintenance/resurfacing improvements for the running track, tennis court and synthetic turf field replacements at New Rochelle High School. Landscape Architect.

Valhalla Union Free School District Valhalla, NY

Virginia Road Elementary School

Collaborated with the project team to provided design and construction services for a new satellite parking lot, sports court improvements, natural turf playfield improvements, and ADA accessible/inclusive play structure area. Landscape Architect.

Valhalla High School Athletic Fields

Provided design and construction services for a new synthetic turf softball/field hockey field, miscellaneous JV/practice playfield drainage improvements, and natural turf varsity baseball/soccer field upgrades. Landscape Architect.

Dobbs Ferry Union Free School District Dobbs Ferry, NY

Middle School/High School Athletic Field

Provided design and construction services for the replacement of including construction observation. Landscape Architect.

Springhurst Elementary School

Collaborated with the school district and project team to provided design and construction services for a new synthetic turf field and new tennis courts. Landscape Architect.

Pelham UFSD District Landscape Architect Pelham, NY

Projects have consisted of a synthetic turf field at Glover Field, district-wide planting plan, athletic facilities master plan, and various small site improvement projects. Landscape Designer.

Nyack UFSD Athletic Facilities

Nyack, NY

Project consists of \$7.6M in athletic facility upgrades including natural grass softball field and synthetic turf soccer/lacrosse field (Phs. 1), track reconstruction and synthetic turf field complex and synthetic turf baseball/field hockey field (Phs. 2). Landscape Designer.

The LA Group Landscape Architecture and Engineering, P.C.

Campus-Wide Site Infrastructure Improvements

Project included \$6.5M in reorganization of Loop Road, parking, vehicular and pedestrian circulation, and reconstruction of Bunche Plaza. Provided campus-wide tree inventory plan assessing conditions and identifying trees in need of pruning or removal. Landscape Designer.

Parking Lot Improvements

Project consisted of integrating new parking at the former Child Care Center site while maintaining proper circulation to and around the Service Building, Heating Plant, and Campus Center and expanding the Great Lawn area in front of the Campus Center. Landscape Designer.

Great Mall Improvements

Project includes improving inner campus landscape with respect to historical significance, reinforcing pedestrian safety, developing "walk hierarchy", creating gathering spaces, addressing drainage and lighting needs, and improving building entries. Landscape Designer.

Syracuse City School District Fowler High School Syracuse, NY

\$21.5M additions/alterations project included vehicular and pedestrian circulation reorganization, new bus drop off and entry, new and reconstructed parking, accessibility upgrades, and planning for phase two athletic facilities. Landscape Designer.

Scarsdale UFSD Athletic Facilities Scarsdale. NY

District-wide athletic facilities planning and athletic field improvements. Landscape Designer.

Niagara Falls City Schools Athletic Facilities Improvements Niagara Falls, NY

Provided schematic design for \$17.5M in district athletic facilities and associated parking. Landscape Designer.

Roosevelt UFSD

Hempstead, NY

Design for additions/alterations project that included new and reconstructed parking, roadways, and sidewalks, as well as athletic facilities. Landscape Architect.

Sullivan West CSD Athletic Facilities Upgrades

Jeffersonville, NY

Project included reorganization of natural grass fields to include a new softball and baseball field and multipurpose soccer field. New small ADA parking area was developed in closer proximity to the fields to improve access for the disabled. Landscape Designer.

Fayetteville-Manlius CSD Track and Field Fayetteville, NY

Design included reconstruction of the running track and replacement of the existing natural grass field with a new synthetic turf multi-sport infield. Landscape Designer.

Randolph CSD Capital Improvement Project

Randolph, NY

Project includes new and reconstructed vehicular and pedestrian parking, new bus loop, and athletic field upgrades. Landscape Designer.

Highland Falls-Fort Montgomery CSD Highland Falls, NY

Highland Falls Intermediate School Site Improvements

Extensive playground and playfield study culminating in a play area improvement project that includes new play structures, independent fitness stations, covered shelters, an improved basketball court area and re-sodded and irrigated central playfield area. Landscape Designer.

Highland Falls-Fort Montgomery CSD BCS

Field work and associated reporting for site, civil, athletics and landscape architectural elements complying with NYSED building condition survey surveys for the School District's four properties. Landscape Designer.

Fee + Additional Information

COST ESTIMATING RECORD

To demonstrate our firm's accuracy of estimating costs, we've provided the following list of our previous school construction projects:

Valhalla UFSD

Phase 1: 2016 Capital Bond Project including selective masonry restoration, parking lot expansion, modernization and lighting, new playground, and athletic field improvement at Virginial Road Elementary; and locker room renovations at the middle-high school.

Estimated construction costs: \$1.69 million *Actual construction costs:* \$1.69 million

Phase 2: Includes a new varsity baseball field and facilities, new artificial turf multi-use varsity athletic field and facilities, four renovated High School science labs, one new dedicated STEAM lab, a completely renovated and modernized state-of-the-art auditorium, and masonry repairs to the exterior of the Middle/ High School.

Estimated construction costs: \$8.24 million *Actual construction costs:* \$8.24 million

Clarkstown CSD

Phase 1: District-wide critical infrastructure upgrades, including boiler replacement, transformer upgrades, and roof replacement across four buildings.

Estimated construction costs: \$18.5 million *Actual construction costs:* \$18.5 million

Phase 2: Includes roof replacements at six elementary schools across the district and electrical service upgrades at four elementary schools.

Estimated construction costs: \$9.5 million *Actual construction costs:* \$9.5 million

New Rochelle CSD

The first phase of a multi-phased \$106 million capital project addressed infrastructure and other critical building system needs; and historic roof replacement and masonry restoration at Barnard and Webster Elementary School.

Estimated construction costs: \$5.57 million

Actual construction costs: \$5.57 million

*This project had no ADD Change Orders. The district was credited \$22,000 back for unused allowances.



CONFLICT OF INTEREST

CSArch is independent of the Briarcliff Manor Union Free School District, and has no conflict of interest relative to performing the proposed services.

CHANGE ORDERS

The integration of architecture and engineering at CSArch has a direct impact on controlling change orders, as most are generally a result of lack of coordination between building systems and construction documents. We minimize change orders through effectively managing construction cost, clear documentation, and effective detailing. Our team relies on strong relationships with regional contractors and construction managers to consider cost-effective solutions to anticipate problems before they arise. Since 2010, the change orders on our projects required by plans and specifications has averaged 1%-3%, with the higher end being associated with complicated renovation projects.

LITIGATION

The following litigation action occurred within the last 10 years:

Averill Park CSD: CSArch was named in a lawsuit by a former student indicating that she had medical problems as a result of exposure to mold. CSArch was not retained to provide any mold remediation design services and the date of the claimed exposure was before our work in this area of the building. The claim was resolved through mediation without any actual liability determined.

Long Beach CSD: CSArch was involved with dispute resolution at Long Beach City School District related to two issues associated with a project that was bid and started construction in 2011. The issues involved included the foundation design for athletic field fence posts, designed by the project site consultant; and the recommended detailing of a fiber cement panel rain screen system. The issues have been resolved through mediation.

FINANCIAL STABILITY

CSArch is a privately held firm that has been in continuous active practice since 1991. In 2017, we ranked #24 in Architect Magazine's Top 50 Firms in Business, which is a national recognition based on net revenue per employee, profitability, business practices, and employee benefits. Our firm has also been ranked among the top ten highest grossing educational facilities design firm in the tri-state region since 2008. Additional information regarding the firm's financial stability can be verified by contacting the following:

CSArch Accountant LCS&Z, L.L.P. Chris Cannucciari 33 Century Hill Drive, Latham, NY 12110 518.783.7200 | cmc@lcszcpa.com

Following are the firm's financial references:

Pioneer Bank Shane Rauh, Business Banking Officer 652 Albany Shaker Road Albany, New York 12211 518.730.3074 OMNI Development Corporation (Albany Landlord) Mark Aronowitz, Senior Vice President 40 Beaver Street, Albany, New York 12207 518.432.1500

AGREEMENT ON TERMS OF DISCUSSION

The District's receipt or discussion of any information submitted in response to the District's RFP, including information submitted during discussions after said submittal (including ideas, models, drawings or other material communicated or exhibited by us or on the District's behalf) will not impose any obligations whatsoever on the District or entitle us to any compensation, except to the extent specifically provided in such written agreement, if any, as may be entered into between the District and the firm. Any such information given, either orally or in writing, is not given in confidence and may be used, or disclosed to others, for any purpose at any time without obligation or compensation and without liability of any kind whatsoever. Any statement which is inconsistent with this agreement, whether made as part of or in connection with any information received from us in any fashion, shall be null and void and of no effect. This letter is not intended, however, to grant to the District the right to use any matter which is the subject of valid letters patent.

The foregoing applies to any information whether or not given at the invitation of the District.

Officer of Company (Signature)

April 17, 2019

Date

Executive Principal Title 914.997.2724 Telephone Number

CSArch

Company

n/a Facsimile Number

445 Hamilton Avenue, Suite 1200, White Plains, NY 10601 Address

BRIARCLIFF MANOR UNION FREE SCHOOL DISTRICT REQUEST FOR PROPOSAL (RFP) CERTIFICATIONS

FIRM NAME:	CSArch
BUSINESS ADDRESS:	445 Hamilton Avenue, Suite 1200
	White Plains, NY 10601
TELEPHONE NUMBER:	914.997.2724
DATE OF PROPOSAL:	April 18, 2019

GENERAL RFP CERTIFICATION

The offeror certifies that he will furnish services as proposed in this proposal.

The Architect will execute either AIA Document B141 or B141 CMA (Owner-Architect Agreement), as appropriate and as negotiated by the School District's attorney and agreed to by the Board of Education.

Signature

REFERENCE SHEET

All offerors will be required to complete this form providing three references of past performance. References should involve downstate projects and/or service situations of similar size and scope to this bid. References must have had dealings with the offeror within the five years. The District reserves the right to contact any or all of the references supplied for an evaluation of past performance in order to establish the responsibility of the offeror before the actual award of the contract. Completion of the reference form is required.

OFFERER'S NAME:	Tina Mesiti-Céas, Executive Principal // CSArch
DATE FILED:	April 18, 2019
COMPANY NAME:	CSArch
ADDRESS:	445 Hamilton Avenue, Suite 1200
CITY: STATE: ZIP:	White Plains, NY 10601
OFFICER:	Tina Mesiti-Céas
CONTACT:	Tina Mesiti-Céas
FEDERAL ID #:	14-1747049
TELEPHONE: 914.997.2724	FACSIMILE: n/a

REFERENCE #1:

CONTACT:	Dr. Peter Giarrizzo, Superintendent
ADDRESS:	North Shore School District 112 Franklin Avenue
CITY-STATE-ZIP:	Sea Cliff, New York 11579
TELEPHONE: 516.277.7800	PROJECT COST/ DATE: TBD
REFERENCE #2:	
CONTACT:	Dr. Tahira DuPree Chase, Superintendent
ADDRESS:	Greenburgh Central School District, 475 West Hartsdale Avenue
CITY-STATE-ZIP:	Greenburgh, New York 10530
TELEPHONE: 914.761.6000	PROJECT COST/ DATE: TBD
REFERENCE #3:	
CONTACT:	Dr. Douglas Huntley, Superintendent
ADDRESS:	Queensbury Union Free School District, 421 Aviation Road
CITY-STATE-ZIP:	Queensbury, New York 12804
TELEPHONE: 518.824.5602	PROJECT COST/ DATE: \$29 million awarded to date, anticipated completion is 2019-2020 school year

ARCHITECT/ENGINEERING SERVICE CONSULTANT FEE SCHEDULE

Architect/Engineer Services – Phase 1 \$ 20,000.00 (Conducting BCS and Development of Five-Year Plan) **Pre-Bond Cost – Initial Phase 2** \$ 10,000.00 (All work performed prior to referendum date) **Pre-Bond Cost – Subsequent Phase 2** \$ 5,000.00 (All work performed prior to subsequent referendum date) Final Plans and Construction – Each Phase 3 and 4 **Approved Bid Amount/Total Construction Cost** \$-0to \$1,000,000 12% of construction cost \$ 120,000.00 plus 6.3 % of cost over \$1,000,000 \$1,000,001 to \$5,000,000 \$5,000,001 to \$10,000,000 \$ 372,000.00 plus 5.6 % of cost over \$5,000,000 \$10,000,001 to \$15,000,000 \$ 652,000.00 plus 5.6 % of cost over \$10,000,000 \$15,000,001 to \$20,000,000 \$ 932,000.00 plus 5.4 % of cost over \$15,000,000 \$ 1,202,000.00 plus 5.4 % of cost over \$20,000,000 \$20,000,001 or more

ARCHITECT/ENGINEERING SERVICE CONSULTANT FEE SCHEDULE (continued)

Proposal Submitted by:

Architect/Engineer (Signature)

Tina Mesiti-Céas, Executive Principal
Name/Title

445 Hamilton Avenue Address

Suite1200

White Plains, NY 10601

April 17, 2019 Date

917.997.2724 Telephone

n/a Facsimile

tmesiticeas@csarchpc.com E-Mail

NON-COLLUSIVE BIDDING CERTIFICATION

Offeror

Name: CSArch

Business

Address: 445 Hamilton Avenue, Suite 1200, White Plains, NY 10601

Telephone No. 914.997.2724

Date of Bid: April 18, 2019

I. GENERAL BID CERTIFICATION

The offeror certifies that he or she will furnish, at the prices herein quoted, the materials, equipment, and/or services proposed in this proposal.

II. NON-COLLUSIVE BIDDING CERTIFICATION

By submission of this proposal, the offeror certifies that he/she is complying with Section 103-d of the General Municipal Law as follows:

Statement of non-collusion in bids and proposals to political subdivisions of the state. Every bid or proposal hereafter made to a political subdivision of the state of any public department, agency or official thereof where competitive bidding is required by statute, rule, regulation, or local law for work or services performed or to be performed or goods sold or to be sold, shall contain the following statement subscribed by the offeror and affirmed by such offeror as true under the penalties of perjury: Non-collusive bidding certification.

- a) By submission of this bid, each offeror and each person signing on behalf of any offeror certifies, and in the case of a joint bid, each party thereto certifies as to its own organization, under penalty of perjury, that to the best of knowledge and belief:
 - 1. The prices in this bid have been arrived at independently without collusion, consultation, communication or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other offeror or with any competitor.
- 2. Unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the offeror and will not knowingly be disclosed by the offeror prior to opening, directly or indirectly, to any other offeror or to any competitor; and
- 3. No attempt has been made or will be made by the offeror to induce any other person, partnership, or corporation to submit or not to submit a bid for the purpose of restricting competition.
- b) A proposal shall not be considered for award nor shall any award be made where a) - 1., 2., and 3. above have not been complied with, provided however, that if in any case the offeror cannot make the foregoing certification, the offeror shall so state and shall furnish with the bid a signed statement which sets forth in detail the reasons therefor. Where a) - 1., 2., and 3. above have not been complied with, the bid shall not be considered for award nor shall any award be made unless the head of the political subdivision, public department, agency or official thereof to which the bid is made, of his/her designee, determines that such disclosure was not made for the purpose of restricting competition.

The fact that an offeror has a) published price lists, rates or tariffs covering items being procured, b) informed prospective customers of proposed or pending publication of revised price lists for such items or c) sold the same items to other customers at the same prices being proposed, does not constitute, without more, a disclosure within the meaning of subparagraph one a).

Any proposal hereafter made to any political subdivision of the state or any public department, agency or official thereof by a corporate offeror for work or services performed or goods sold or to be sold, where competitive bidding is required by statute, rule, regulation, or local law, and where such bid contains the certification referred to in subdivision one of the section, shall be deemed to have been authorized by the board of directors or the offeror, and such authorization shall be deemed to include the signing and submission of the bid and the inclusion therein of the certificated as to non-collusion as the act and deed of the corporation.

Signature Two
Title Executive Principal

Date April 17, 2019

Enhancing Safety and Security at Your School



Daryl Mastracci PE, LEED AP BD+C Tina Mesiti-Céas AIA, LEED GREEN ASSOC. William Hooley RCDD Building Technology Consulting

Improving safety and security is at the forefront of school design. Across the country, communities and first responders are concerned about the vulnerability and the potential for violence. How can we protect the very places that are meant to educate, inspire, challenge, and comfort our youngest generations?

With every tragedy sparked by violence, school leaders increasingly feel the urgency to prevent threats, secure their facilities, and protect their students, faculty, and staff. Referred to as facility hardening, school safety improvements and modern security measures require design teams to evaluate the risks and threats that make schools susceptible.

CSArch works hand-in-hand with specialized security consultants like Building Technology Consulting (BTC) to provide intelligent security solutions for campuses and sites, building perimeters, and school building interiors. Together, we develop and implement safety and security measures to address and mitigate the growing safety concerns that school district's face today.

While each school presents a unique case, there are several common strategies that school districts should consider. Here are a few of the ways schools can enhance the safety and security of their facilities.



Secure vestibules enable staff to clearly observe lobby, entry, bus drop-off and parking areas. They also offer a safe haven for staff to take cover in an emergency.



Security Through Architecture

Crime Prevention Through Environmental Design (CPTED) is an approach that uses the architectural design of the built environment to reduce the occurrence and fear of crime. CPTED aids in deterring a criminal act before it happens, giving school staff and teachers time to prevent an act before it happens. It includes environmental barriers, constructed obstacles, and thoughtful entry portals for students, staff and visitors. CPTED offers ways to safeguard school entries against a threat. A few key design elements include:

- Separate student and visitor building entrances, with active security measures, to control entry to a building.
- Unencumbered visibility for administrators situated near or at entrances.
- Clear paths and site lines within buildings to achieve 100% visibility to guarantee a potential attacker will have nowhere to hide.
- Balance of clear glazing at classrooms and sufficient space within the classroom to tuck away.

Situational Awareness

Situational awareness is an imperative skill set when it comes to safety, as students and staff must understand their surroundings and feel confidently prepared. It could be as simple as knowing how to get out of a building during an emergency, or as complex as what to do if someone starts shooting a gun. We work with school districts to develop training and education on situational awareness for all faculty, staff and students.

Technology and Active Security Measures

Technology plays a pivotal role in situational awareness that teachers and staff should possess. Situational awareness takes on many forms, for example; observation of entry and exit portals to understand current events, what may come from an event, and up to the second information to reduce threats to a manageable level. Incorporating technology into dayto-day school operations is integral to maximizing situational awareness. Other active security measures include:

Video Surveillance: Visibility in real-time

Cameras with surveillance technology is becoming more prevalent in today's school environment. This technology helps staff understand current events, anticipate the outcomes, and ultimately reduce possible threats. Camera systems can now identify faces and license plates and can scan police databases. They can identify a bag left behind, follow a person as they travel around school grounds, and detect the color of clothing worn by a person in question. Surveillance systems provides critical information improving situational awareness and reducing threats to school property and people.

Access Control: Reducing unauthorized access

Access control security measures are common at most school buildings, but many schools can do a better job at implementing them to best mitigate today's threats. In addition to secure entry vestibules, creating and enforcing card access at all building entries and exits is a critical deterrent. Exits are required and designed for escape during a fire or event where students and staff need to quickly exit without obtrusion. Active monitoring, electronic locks, video surveillance, and card access at each building entry/exit are key components to securing a school building and reducing vulnerability while still meeting code and providing a safe exit path.



Active monitoring, electronic locks, video surveillance, and card access at each building entry/exit are key components to securing a school building.

As education design experts, CSArch has teamed with security consultant BTC to develop diligent solutions to monitor and address concerns with students and staff on an ongoing basis. Together, we provide intelligent security solutions for K-12 school campuses and sites. Alongside our school district clients, we also work with local authorities and educate them on the active security measures and plans our schools utilize to keep our students as safe as possible.



Contact me for more information on how to improve safety and security at your district.

Daryl Mastracci PE, LEED AP BD+C Managing Principal 914.278.6602 / dmastracci@csarchpc.com



Maximizing Value in an Energy Performance Contract



Daryl Mastracci PE, LEED AP BD+C

As an integrated architecture and engineering firm, CSArch supports Energy Performance Contracting (EPC) for public school districts, particularly for the potential to modernize building systems and realize long-term energy savings while limiting the use of capital bond funding. While EPCs allow school districts to complete energy savings projects with little or no up-front expenditures, knowing the common pitfalls and how to best avoid them is critical to a successful project.

The common problem with EPCs

All too often, EPCs are developed by contractors or equipment suppliers with little knowledge of the facilities—resulting in energy savings that are estimated or speculative. Common EPCs often proceed as though one building system has no influence over another. For example, a lighting company advocates for LED lighting, an HVAC company pushes for more efficient equipment, and a solar company only knows photovoltaics. So, who makes clear that the level of investment in one will directly affect the level of investment needed in the other, and who ensures all of these new systems work together?

The results of these EPCs are typically independently designed and implemented conservation measures without real measured savings to the benefit of the district. And if executed during the same time as a capital project, conflicts and coordination issues typically arise.

The CSArch approach

By leveraging CSArch to lead both capital projects and energy performance projects, our clients can maximize the benefit and value of each by reducing overall costs and minimizing conflict between projects. The CSArch preferred approach to an EPC is one where the scope is developed, designed, financed, implemented, measured and verified in close collaboration with a single energy services company (ESCO), a process sometimes called Integrated Energy Performance Contracting (IEPC).

A proper EPC avoids compartmentalization by taking a whole-building and/or district-wide approach. Our collaborative process with the district focuses on integrated, well-planned solution rather than one-for-one replacements. We ensure that all concurrent projects are in sync, optimize debt, and generate cash flows when necessary.



1. Focus on deep engineering-driven retrofits

We implement engineering-driven EPCs by partnering with companies that specialize in value optimization and offer in-house design capabilities that complement ours. This synergy maximizes energy savings for our clients.

2. Vendor neutrality is key to finding the best fit solution

Our cost optimization approach stems from vendor neutrality; we work only with leading suppliers who best fit each client's unique needs. Suppliers are introduced to the process only post-project concept and audit, and not when developing scope. This allows us complete flexibility in selecting the most appropriate equipment for each client's unique needs, without constraints or vested interests.

3. Eliminate silos through integration

One of the key principles to a successful EPC is the elimination of silos between design and construction. All stakeholders, including the construction team, are involved from the outset of the project to maintain aligned interests. Comprehensive designs and cost estimates are developed sooner and can be modified throughout the project for greater optimization, generating increased savings and overall financial performance.

4. Maximize cash flow and debt optimization

We suggest only energy conservation measures that yield significant value. We develop projects focused on maximum financial efficiency—solutions that will address the client's needs with the lowest construction dollars and highest energy savings.

5. Risk-free contracting benefits you, not the ESCO

EPC contracts should be agile and customer-centric to take the risk away from our clients. If we don't attain agreed upon financial or performance objectives on savings, costs or timeline, the ESCO pays the difference. We ensure that the performance metrics benefit the client and not the ESCO, generating maximum scope or cash flow depending on the client's criteria.

6. Performance-based compensation equals higher savings

Payment is tied to performance and actual energy savings. The possibility of achieving higher savings with lower construction costs inspires the project team to invest more time and effort and to be creative in designing the most efficient project possible. The resulting excess savings can be shared amongst the stakeholders.

7. Real energy savings measured through utility bills

Post-implementation energy savings are measured and verified through savings in actual utility bills. The measured savings are used to develop our contractual guarantees. The result is a project that is contractually binding to an annual dollar amount, and not stipulated calculations. Ultimately, the utility meter is the judge.



Contact us if you are considering an EPC

Contact me for more information on how you can benefit by having CSArch, your trusted partner, develop and lead your next Energy Performance Contract.

Daryl Mastracci PE, LEED AP BD+C

Managing Principal / Engineering Leader 914.278.6602 / dmastracci@csarchpc.com

CSARCH