POWERPOINTS

A Message from the Executive Manager

NECA’s Ongoing Education and Training Programs – Keys to Success in the Field

Ongoing education and training are critical to success in electrical construction. It results in superior quality workmanship in the field, highly skilled project management, more efficient project delivery, and a higher level of safety precautions in the field. Those results are seen in complex and demanding projects throughout our region, project after project.

The rapidly evolving technologies and platforms on which today’s construction projects are planned and built — BIM, Lean Construction, Prefabrication, EPC projects, and so many others, demand informative educational programs that keep our contractors and our skilled IBEW workforce on top of ongoing advancements in the industry. From Advanced Project Management seminars to Foreman Training programs, NECA contractors access the latest information in all aspects of the electrical and tel/data construction. These programs are led by some of the most experienced instructors in the industry.

NECA, nationally, also provides educational resources and webinars covering such topics as “Connecting the Digital Building,” new OSHA regulations, NFPA 70E, Silica, Fall Protection, and Electronic Recordkeeping; NEC Changes; LED Lighting Retrofits and many others. The NECA Safety Meeting App is being widely used in the field, helping manage and document safety meetings, job briefings, and safety checklists.

This issue of Connections touches on just a couple of the many industry-leading educational programs NECA Boston offers our contractors. Our Spring 2018 schedule is highlighted by the upcoming Lean Construction Workshop in April and the NECA National Safety Professionals Conference in Louisville, KY in May. Visit our website — bostonneca.org to learn more about these programs and others in our schedule.

It is experience, education, training, and performance that distinguish NECA electrical and tel/data contractors from non-union contractors. We look forward to continuing to report on our continuing education and training initiatives, as well as the outstanding performance of our contractors in projects throughout Greater Boston, New Hampshire and Maine.
MASS BAY Electrical Corp. based in East Boston, MA, completed the electrical upgrades at the MBTA Layover Facility at Rockport Commuter Rail Station in January 2018. The project scope included furnishing and installing a 3,500 kVA single-ended, enclosed substation with four auxiliary power units (APUs), one at each layover train set, as well as installation of associated underground conduit and wiring. The substation and APUs supply heat to the trains during nighttime layovers at the station, and eliminate the requirement of operating diesel engines all night long for generating power.

The installation of a fire alarm system as well as security cameras were also integral to Mass Bay’s project requirements.

The transport and delivery of the substation to Rockport presented a unique logistical challenge—the two-piece pre-manufactured substation, which weighs approximately 65,000 lbs., had to be transported on Route 128 over the A. Piatt Andrew Bridge to Rockport, which has low bridge height as well as weight restrictions. The Mass Bay project team worked closely with MassDOT and a team of special consultants to ensure the equipment was safely transported over the roadway, which necessitated planned early morning closure of the highway.

Mass Bay worked on a project team headed by general contractor, McCourt Construction of Boston, and in tandem with National Grid and the utility company’s overhead line crew.

Project Executive Rick Broderick, Project Manager Vince Urbanski and General Foreman Wayne Banks managed an electrical crew of six IBEW Local 103 journeymen electricians in the nine-month project, which went online in February.

L.J. Mishel Electrical Completes TJX Homesense Store at University Station, Westwood

WESTWOOD, MA — L. J. Mishel Electrical Contractors, Inc., of Danvers, MA, has completed the electrical fit-out of the TJX Homesense store at University Station in Westwood. The NECA contractor’s scope in the 40,000 sf project first required complete demolition of the former Sports Authority store, followed by installation of the new 400A/480V electrical service, power distribution, interior and exterior lighting, and the fire alarm system for the TJX concept store.

The extensive interior lighting package was comprised of the installation of a Unistrut® lighting grid in the store’s open ceiling concept and more than 300 LED highbay and track lighting fixtures. L. J. Mishel also installed conduit to support the facility’s lighting control system, as well as an inverter for emergency lighting. The project also entailed conduit installation for the store’s tel/data systems.

Project Manager Andrew Collamore and Foreman Marc Castonguay headed the electrical team, supervising a crew of eight IBEW Local 103 electricians in the fast-track, three-month project. Project operations began August 1 and Homesense celebrated the grand opening of the University Station store on November 9.
NECA Boston contractor provides immediate response to Boston’s ever-changing security and public safety needs

As Boston city officials hurriedly prepared for the “Free Speech Rally” at the Boston Common last August, security and public safety were major concerns, given the violence that broke out a week earlier in Charlottesville, Virginia. At 7 pm Thursday night, representatives from the Boston Police Department (BPD) contacted LAN-TEL Communications, an industry-leading Norwood, Massachusetts-based low voltage contractor specializing in security systems, to install security cameras at the bandstand on Boston Common in advance of the Saturday rally.

By 5 am the next morning, LAN-TEL’s crew of IBEW Local 103 certified technicians were on site at the Boston Common installing cameras at the rotunda where speeches would occur. Within four hours, the installation of security cameras was complete, addressing the City’s immediate need for heightened security.

Prefabrication facility enhances efficiency

To enhance LAN-TEL’s ability and capacity to provide the rapid response required for immediate security needs, the company houses prefabrication facilities, both in their Norwood headquarters and South Boston office. In the prefab department’s special IP Lab, technicians efficiently customize security cameras and switches to precise specifications for the Boston Police Department, and other clients. All security cameras undergo thorough pre-testing prior to being delivered and installed on site.

Project Manager Eric Johnson heads LAN-TEL’s security projects and manages the company’s field crew that services the Public Safety Sector. Commenting on the increasing security demands in Boston, and the company’s capabilities, Johnson said, “Security at large-scale public events in a major city like Boston is more demanding than ever. Public safety is the primary consideration for the BPD, and LAN-TEL understands when it comes to security systems, we must respond expertly and immediately.” He added, “Video surveillance technology is sophisticated and constantly evolving, requiring teams of professionals that are well-trained and experienced both in the hardware and software technology. To that end, LAN-TEL has ongoing company-wide training and certifications with leading manufacturers in the security industry. Timely material delivery from our vendors is critical to assure we can meet aggressive schedule requirements. And our crews of technicians must provide reliable installations and maintenance of those systems in a variety of field conditions, 24-7, whenever the call comes in.”

LAN-TEL Installs Pro Bono Security System at Sportsmen’s Tennis and Enrichment Center

Norwood, MA – In response to vandalism that took place at Sportsmen’s Tennis and Enrichment Center (STEC) in Dorchester last summer, LAN-TEL also completed the pro bono installation of a wireless video surveillance camera system at the facility that ties into area Boston Law Enforcement offices.

The NECA Boston/IBEW Local 103 contractor, furnished and installed six video security cameras, complete with an antenna system that integrates into, and is monitored at, one of Boston Law Enforcement’s area Regional Intelligence Centers. LAN-TEL’s Sr. PM and security specialist Eric Johnson supervised a crew of IBEW Local 103 technicians in the community outreach project. Senior technician Sean Pappas provided project guidance and oversight, while Scott Whitcomb used this project as an extended practical exercise for his apprentice training through LAN-TEL, which augments the Greater Boston JATC’s apprenticeship field training program.

Sportsmen’s Tennis and Enrichment Center, a non-profit organization, provides critical youth development services for children from Dorchester and the Blue Hill Corridor, as well as from other Greater Boston communities. Each summer, STEC runs a summer camp serving more than 100 local youth, who participate in the center’s recreational and competitive tennis instruction as well as in the organization’s special academic and social development programs.
Sullivan & McLaughlin Companies Completes Electrical Construction of Reebok Global Headquarters in Boston Seaport

NECA contractor teams with Architect: Gensler, Boston, MA; EE: WB Engineers & Consultants, Boston, MA; GC: Gilbane Building Company, Boston, MA

Sullivan & McLaughlin Companies (SullyMac), based in Boston, MA, has completed the comprehensive electrical fit-out of the new 220,000 square-foot Reebok International Ltd.’s headquarters facility, located at the Innovation and Design Building (IDB – formerly the Boston Design Center) on 25 Drydock Ave. in the Boston Seaport District. Reebok’s expansive new global offices are spread over five floors and three buildings of the IDB. The company moved from its former home office campus in Canton, MA.

The new Reebok headquarters house the international footwear and sports gear company’s corporate offices, meeting spaces, and a state-of-the-art design lab, located on the third floor. The facility also features a 7,600 square-foot Reebok flagship retail store with a customization shop on the first floor; and a two-story, integrated 30,000 square-foot fitness center, complete with a boxing ring and studios for Pilates, Crossfit, yoga and spin.

Project Manager Robert Worobey, General Foreman David Silva, and Foreman Shawn Kerr headed the Sullivan & McLaughlin project team, supervising a skilled field crew of 45 IBEW Local 103 electricians and technicians in the fast-track, six month project. SullyMac commenced work in May 2017 and met the aggressive project schedule, completing the 33,000+ hour project in November 2017, when Reebok began moving into its new headquarters.

The electrical contracting firm, among the Northeast’s largest, worked on a project team headed by general contractor, Gilbane Building Company, based in Boston.

Commenting on the demands of the project, PM Worobey said, “The Reebok project had a very aggressive schedule given the amount of electrical scope that was required. The SullyMac team had more than 33,000 hours of work to complete in six months, with multi-turnover phases. Our pre-fabrication coordination team was critical to expediting construction, and achieving Reebok’s project timeline.”

He added, “Gilbane led the project very effectively, working closely with the architect, engineer, and all subcontractors in order to drive the coordination process with quick turnaround of any conflicts and issues.”

To efficiently meet the project requirements, SullyMac’s prefab team of Local 103 journeymen and apprentices assembled thousands of LED lighting fixtures in the company’s prefabrication facility. The project team also employed Trimble GPS hardware and software to effectively pre-plan and pinpoint the location of all lighting supports, floor boxes, and “poke-thru” locations.

Reebok now houses more than 700 employees in its state-of-the-art Boston Seaport world headquarters.

Moulison Earns NECA Project Excellence Award

MOULISON Heavy Electrical, based in Biddeford, ME, was awarded a 2017 NECA Project Excellence Award for its bridge lighting and traffic control work on the Kenneth F. Burns Memorial Bridge on Route 9, connecting Shrewsbury and Worcester. The project was recognized in the Streetlighting/Traffic Signals category for projects over $1 million.
**Coviello Electric Brightens Malden Roadways with LED Streetlight Conversion Project**

Coviello Electric, Inc., of North Reading, MA, has completed the City of Malden LED streetlight conversion project. The NECA Boston/Local 103 contractor replaced more than 3,400 high pressure sodium streetlights with the latest, energy-efficient LED fixtures in a project that is expected to save more than $240,000 annually in Malden's energy costs. The LED fixtures provide better light quality on roadways and have a 20-year lifespan, which will result in additional savings of $15,000 to $20,000 per year in maintenance costs for the City.

The project was partially funded through a grant from the Baker-Polito Administration’s $11.4 million Rapid LED Streetlight Conversion Program that offers grants to help cities and towns across Massachusetts convert traditional streetlights to LED technology through the Department of Energy Resources.

“Converting municipally owned streetlights into energy efficient LEDs helps cities and towns across the Commonwealth realize thousands of dollars in annual energy savings while reducing emissions,” said Lieutenant Governor Karyn Polito.

“Taking into account the $187,000 Department of Energy Resources grant along with utility rebates, the project has a payback of about two years. When you add in the improvement to the quality of light delivered to our neighborhoods, it’s a win-win.”

Coviello’s Local 103 crews started working on the project in mid-October and the roadway lighting conversion was completed as scheduled in mid-January 2018.

**Dagle Electrical Shines in MassDOT I-90 Toll Plaza Lighting Project**

NECA Contractor teams with GC: Skanska McCourt LLC, Boston, MA

NECA Boston contractor, Dagle Electrical Construction Corp., based in Wilmington, MA, has completed the MassDOT Toll Plaza Lighting project on I-90 (MassPike), from Boston to the New York border. The elaborate infrastructure project encompassed all electrical work associated with the installation of all new upgraded electrical infrastructure and LED light poles for all reconfigured exit ramps on the MassPike.

All pole and lighting installations were completed in late October 2017 and the final electrical cutover, at Exit 7 in Ludlow, MA, was completed on January 10, 2018.

Dagle Electrical provided all cutover work, working in tandem with utility companies, National Grid and Eversource. As the utility companies put in new, upgraded infrastructure, the contractor provided cutover, allowing the new lights to go online.

Senior Project Manager Rich Kaiser, Project Manager Tony Akoury, and Foreman John Culhane have managed the multi-year project. IBEW Local 103 crews worked on the project from Boston to Weston; Local 96 crews provided installations from Framingham to Sturbridge; and Local 7 crews worked in western Massachusetts.

The phased project first entailed de-energizing all existing toll plazas and lights, and providing temporary lighting feeds to allow for safe demolition of the toll plazas. Pre-construction planning and investigative work were integral to the project as the contractor isolated all electrical areas to toll plazas before de-energizing and demolition work could begin.
In November 2017, J&M Brown Company (JMB), of Jamaica Plain, MA, completed electrical construction of 5 Fan Pier Boulevard – Building C at One Seaport Square, the Seaport district’s newest and most vibrant new mixed-use project. Earlier in the year, work was completed at Building B – The Benjamin, located at 25 Northern Ave. The two 22-story towers house 850 luxury apartments and over 300,000 square-feet of retail and entertainment space, with three levels of below-ground parking. J&M Brown’s scope included providing the buildings’ primary and emergency power as well as their integrated fire alarm system. JMB also installed lighting in the buildings’ lobbies, rooftop terraces, and exterior public realm areas. Spectrum Integrated Technologies, the low-voltage division of J&M Brown, installed the buildings’ security system and provided the design-build A/V system.

J&M Brown Company, Inc. (JMB) has been awarded primary electrical construction of the Mass + Main mixed-use development in Central Square. The project includes a 19-story residential tower with ground floor retail, and two seven-story residential buildings, also with ground floor retail. The 195-foot tower will be among the tallest buildings in Cambridge. JMB has provided pre-planning and project coordination efforts. Temporary power has also been provided to the site. When complete in early 2020, Mass + Main will be a transit-oriented, 307,000 square-foot residential development community with 308 mixed-income apartment units.

PROJECT NEWS

J&M Brown Shines as One Seaport Square Rises
Architect: Elkus Manfredi Architects, Boston; EE: Cosentini Associates, Boston;
CM: John Moriarty and Associates, Winchester, MA;
Developers: Boston Global Investors, Berkshire Group, W.S. Development

J&M Brown Awarded Electrical Construction of Mass + Main Project, Central Square, Cambridge
Architect: CBT Architects, Boston; GC: John Moriarty & Associates, Winchester, MA;
EE: Consentini & Associates, Boston, MA; Owner: Watermark Central LLC / Twining Properties, Boston, MA
Developers: Boston Global Investors, Berkshire Group, W.S. Development
PROJECT NEWS

Ayer Electric Completes 2.59MW Solar Array in Moultonborough, NH for New Hampshire Electric Cooperative
NECA contractor teams with GC: Ameresco, Framingham, MA on New Hampshire’s Largest Solar Array;
Owner: New Hampshire Electric Cooperative;
Developers: Boston Global Investors, Berkshire Group, W.S. Development.

In late December 2017, New Hampshire’s largest solar PV array went online, as NECA New Hampshire Division electrical contractor, Ayer Electric, Inc., of Barrington, NH, completed installation of the 2.59MW solar project in Moultonborough, NH for utility company New Hampshire Electric Cooperative (NHEC).
Ayer’s final phase of work was performed during the severe December cold snap, as the electrical team provided wire management, which included a comprehensive and detailed tie-in check list for the 7,200 solar panels.
The solar site is projected to generate 3.5 million kWh of electricity per year, enough to power approximately 600 homes and will save NHEC more than $280,000 annually in power costs. The green energy project will dramatically help the region’s electricity demands during peak use in the summer.
Ayer Electric handled the project working as a subcontractor to general contractor Ameresco, of Framingham, MA. Ameresco supplied the solar panels and a Terrasmart racking system. Ayer managed a field crew of 25 to 30 IBEW electricians.

PROJECT SCOPE

The photovoltaic (PV) array is comprised of 7,200 solar panels installed across nine acres of a 13-acre site and wired to a NHEC substation in Moultonborough. The project scope included Ayer Electric’s installation and wiring of 40 480V-AC inverters, which feed a NHEC transformer. The inverters are installed on steel framing and are rated for exterior use. All underground conduit was installed on the remote and secluded site.

Local 490 electricians, based out of Concord, NH, in the fast-track, three month project. The Ayer management team, headed by Project Supervisor Todd Sanborn and Project Estimator Frank Ganter, worked in close cooperation with NHEC Project Engineer Gary LeMay and Ameresco Project Manager Nabih Younis.

“The Moultonborough solar project is important for NHEC and its customers, and Ayer Electric pleased to have worked to have worked in tandem with Ameresco in its installation. Our Local 490 crew did a skillful job throughout the project, and especially in extremely harsh weather conditions, to meet the project scope and timeline,” said Ganter.
The NHEC Moultonborough solar project is a Davis Bacon project, funded by New Clean Renewable Energy US Bonds.
Ayer Electric is New Hampshire’s largest solar installation company (excluding solar developers). The electrical contractor installed 4.224MW of solar power in 2017 and has tripled its solar production each year since 2014.

SAFESITES

The National Electrical Contractors Association holds its annual 2018 NECA Safety Professionals Conference (NSPC) May 21 - 23 in Louisville, Kentucky at the Omni Louisville Hotel. The electrical construction industry’s premier safety event, the NSPC provides attendees with the most up-to-date information on regulation, compliance, management techniques and standards development that impact safety and health in the electrical construction industry. All technical sessions are educational in nature and presented by experienced safety professionals.
Safety directors, project managers, supervisors, risk managers, and HR professionals from throughout the U.S. will gain access to the latest safety and health information required to navigate the rapidly changing environment of the industry and the new regulations being updated and promulgated by regulatory agencies.
Educational tracks will cover the most important topics related to NECA Safety Systems, Inside Electrical Construction, Outside Electrical Construction, Safety Risk Management, and Safety Management Regulations. Keynote speakers will be Mark Breslin who will speak on Safety as a Core Value and Brandon Schroeder, whose personal experience of having survived an arc flash accident, shares his story in his Believe in Safety presentation. The focus of his compelling, real life presentation is on daily wear, arc-rated PPE.
To learn more and to register, visit www.necasafetyconference.com or call NECA Boston Chapter at 617-969-2521.
On November 20 and 21, NECA Boston Chapter conducted an advanced Building Information Modeling (BIM) workshop at the Greater Boston JATC. The NECA continuing education program, taught by Thomas Cassell, Micro-CAD Training & Consulting, was attended by 21 project managers and CADD coordinators of NECA member firms, as well as a member of the Wentworth Student Chapter. The program focused on parametric engineering design and documentation within Revit MEP. The course covered fabrication settings and converting Revit to fabrication. Additional topics included schematic design, spaces and zones, performance analysis, design visualization, circuits and panel schedules, tags and schedules, construction documents, annotation, detailing, and much more. Additional BIM workshops are scheduled throughout 2018—visit www.bostonneca.org for dates and details or call the Chapter at 617-969-2521.

During the week of November 13, NECA Boston joined with the union electrical construction industry in events held during National Apprenticeship Week. In Lewiston, Maine, IBEW Local 567 held Apprenticeship Open House events at which guidance counselors, career and technical school educators and vocational school instructors were introduced to the Local 567 training facility and program. Local 567 Business Manager Jim Valente and Apprenticeship Training Director Allen Shepard spearheaded the events, which were also attended by NECA Boston’s Assistant Manager Kristen Gowin. During the Saturday open house and skills competition, instructors brought juniors and seniors from area trade schools to learn more about careers in the IBEW. Apprentices performed pipe-bending demos and a skills competition.

NECA’s Kristen Gowin and Local 103 Business Agent Kenell Broomstein introduced local area students to opportunities in the electrical trade at the Massachusetts Building Trades Council “Girls in the Trade” outreach event, held at UA Local 550 Sprinkler Fitters in Boston.

Women Building a Bright Future!

Arlington, MA—On January 26, representatives from NECA Boston Chapter and IBEW Local 103 and MA solar industry stakeholders joined with Sen. Edward Markey in a press conference, voicing concerns about the new 30% Solar Tariff on imports of solar panels recently imposed on the industry in Washington. The tariff threatens solar job growth as the cost of solar installations will rise and demand is expected to slow.