

BIANNUAL K&E NEWSLETTER



J U L Y
2024



Engineering and
Land Surveying, P.C.

kcepc.com



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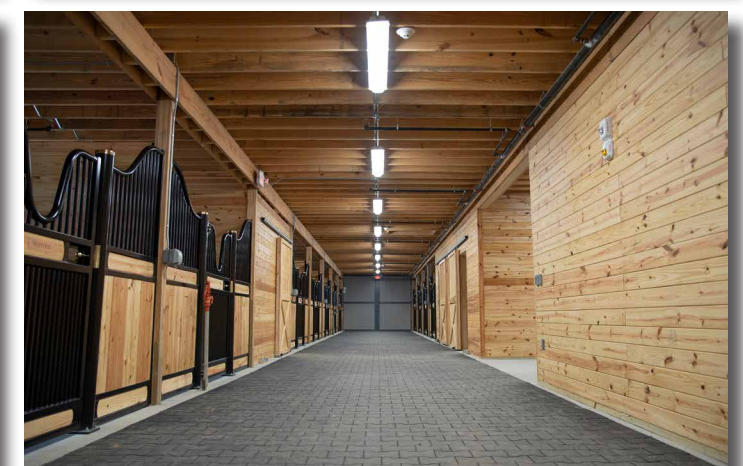
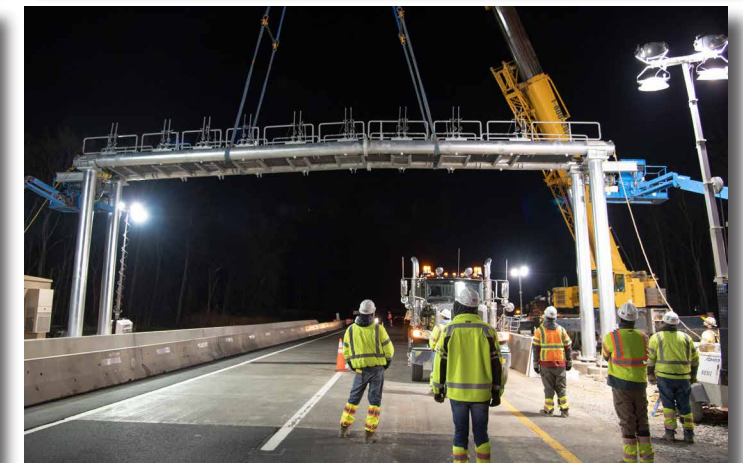
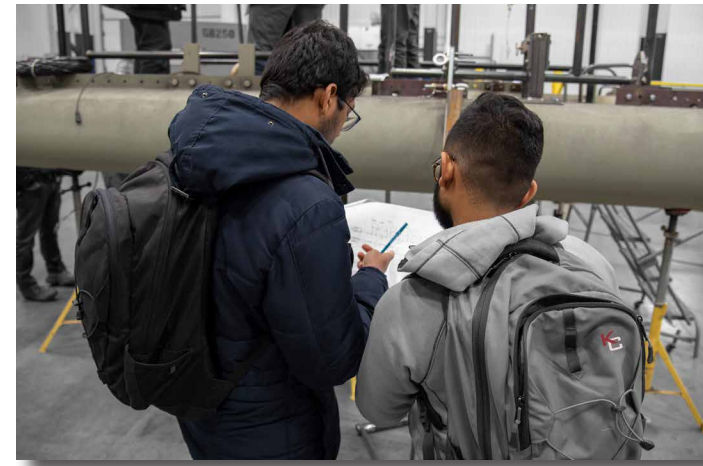
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「A LETTER FROM RAJ RAVILLA」

Hello KC family and friends.

2024 is off to a good start. Our work as Lead Designer on the New York State Department of Transportation (NYSDOT) I-81 Viaduct – Phase 1, Contract 2 project is drawing to a close. As you all are aware, this is our biggest and most intensive project, and I am proud of the teamwork and dedication consistently displayed by KC employees of all levels, including our engineering, quality control (QC), marketing, and accounting groups — the commitment of KC employees has allowed our work on this important project to progress successfully. While KC will continue our work on this project by providing quality

management, reviewing shop drawings, responding to requests for information (RFIs), and attending construction phase meetings through project completion, I would like to thank all KC employees for their hard work in ensuring that the design phase was completed successfully. It's projects like this one that remind me of the importance of the work we do here: it is humbling and exciting to work on a project that is so positively impactful to the communities of Central New York.

We have several projects underway, keeping our engineering, construction inspection, and survey departments busy. Additionally, we are continuing to provide quality management

“*Let's continue our effective collaboration as the year progresses.*”

for 2 major design-build projects: the Port Authority of New York and New Jersey (PANYNJ) JFK Central Substation #2 project and the Metropolitan Transportation Authority (MTA) Americans with Disabilities Act (ADA) Upgrades at 13 Stations project. We will continue to make inroads into new agencies and types of work, further diversifying the services that KC can provide for clients and communities.

As for what's next: KC has many compelling projects on our radar that our marketing department and project managers are actively pursuing, including multiple design-build projects for which I believe we have a very good chance of winning due to the breadth of our collective experience and expertise.

Finally, I am heartened by the sizable length of the Milestones section in this newsletter, in which we recognize the work anniversaries of longtime employees in addition to the new employees that have joined KC within

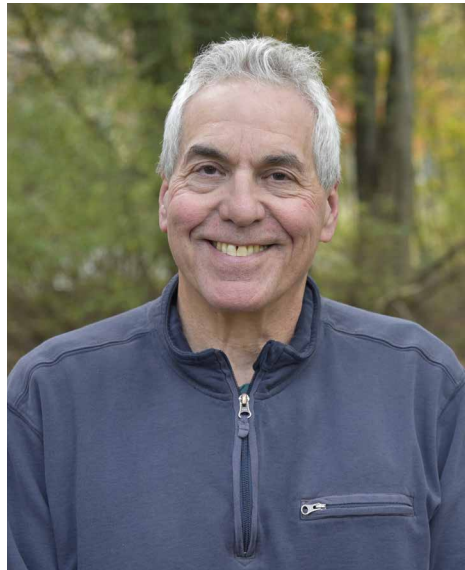
the last six months. We are fortunate that so many of our valued employees have chosen to work for KC for so many years. As employee satisfaction is one of our quality objectives, this longevity is a testament to our dedication to providing the best working environment at KC. As for the many new employees that have joined us within the past year, welcome! We look forward to showcasing you in this newsletter at 5 years, 10 years, and beyond.

Let's continue our effective collaboration as the year progresses — I see many of our more experienced employees stepping up to mentor new employees, and in turn, those of us that are newer to the industry aren't afraid to offer up new ideas or ask for help. It's great to see this culture of collaboration thriving at KC, it's part of what makes us so innovative and effective. KC has provided exceptional services for over 40 years, and I look forward to continuing to work with you all to make 2024 one of our best years yet.

-RAJ

「MILESTONES」

Today and every day, KC celebrates our employees.



40

**DAVID BAKER, P.L.S.
SURVEY MANAGER**

Dave has been with KC for 15 years. As the head of KC's survey department, Dave has overseen every KC survey project in that time and is an expert in all aspects of land surveying, including boundary and topographic surveying, base mapping, right-of-way (ROW) mapping, global positioning system (GPS) control, geographic information system (GIS), and laser scanning services. He also maintains the latest technically advanced survey equipment and software.



10

**MELINDA KWOK, E.I.T.
SR. CIVIL ENGINEER**

In her 10 years at KC, Melinda has gained experience providing design for dozens of municipal projects in the Hudson Valley and beyond, including projects involving complex civil engineering, utility improvements, and agency coordination. She currently serves as Lead Design Engineer for KC's CHPE project. Throughout this project, Melinda has significantly enhanced her CAD skills, contributing to her growth and proficiency in design engineering.



10

**LISA WEISS
AP / HR COORDINATOR**

Lisa recently celebrated 10 years with KC. As AP / HR Coordinator, she wears many hats: she provides ACA compliance, administers employee health and retirement plans, manages FMLA leave and disability claims, updates company policies and procedures, and provides general office management for KC's Newburgh office. She also assists with accounting tasks, handling select project billing and coordinating with project managers and clients.



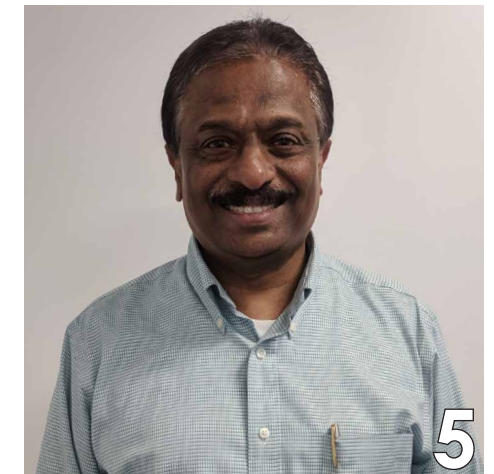
**SIDDHANT MEHTA, E.I.T.
STRUCTURAL ENGINEER**

Siddhant has been a member of KC's structural engineering team for five years, in which time he has prepared design calculations and structural details for new bridge structures, including the I-81 Viaduct – Phase 1, Contract 2 design-build project, and provided structural inspection for projects in New York City and beyond.



**BENSON LAM, P.E.
CIVIL ENGINEER**

Benson has been with KC for five years, in which time he has applied his experience related to structural design, foundations, traffic engineering, and hydraulics to many of KC's biggest projects. He recently earned his Professional Engineer (P.E.) license and is proficient in AutoCAD, SAP2000, Visual AEM, Java, and Python.



**JOE ZACHARIA, P.E., DBIA, ENV SP
QUALITY MANAGER**

Joe joined KC five years ago, after three decades as a New York State Department of Transportation (NYSDOT) Project Manager. In his time with KC, he has served as quality manager and QC engineer on some of KC's biggest projects. He currently serves as Design Manager for the I-81 Viaduct – Phase 1, Contract 2 design-build project.



CALEB STEVENS, E.I.T.
CIVIL ENGINEER

Caleb has been with KC for five years. He is currently working on the I-81 Viaduct – Phase 1, Contract 2 design-build project as Design Production Manager, for which he oversees design submittals and QC reviews for submission to NYSDOT and QA, ensuring that the design and review schedule is appropriately followed.



SEAN LENAHAN, P.E.
SR. CIVIL ENGINEER

Sean joined KC five years ago with experience in stormwater management, structural review, inspection, and restoration. He is currently working on the CHPE project, preparing drainage design, erosion and sediment control (E&SC) plans, and Stormwater Pollution Prevention Plans (SWPPPs) for several packages.



DECIRÉ GONZÁLEZ
PROPOSAL COORDINATOR

In the five years Decire has been with KC, she has gained insight into the engineering and surveying industries and obtained her State of NY Notary Public and ISO 9001:2015 Lead Auditor certifications. She was the proposal lead for KC's successful I-81 Viaduct – Phase 1, Contract 2 design-build project, providing QC auditing post-award.



MENUKA SUBEDI
ENGINEERING TECHNICIAN

Menuka joined KC with six years of experience in the design and execution of a variety of residential and commercial projects. Her areas of expertise include residential and commercial architectural design, drafting, and modeling using AutoCAD, Revit, SketchUp, V-Ray, Microsoft Office Suite, and Bluebeam.



LAKSHMI SAI LIKHITHA VELIVELA
CIVIL ENGINEER I

Lakshmi, a recent graduate with a Master's of Science degree in civil engineering and a concentration in structure and foundation engineering, recently joined the KC team. She is currently working on the I-81 Viaduct – Phase 1, Contract 2 design-build project and developing WZTC measures, alignments, and roadway profiles.



PALAS SHAH
OFFICE ENGINEER

Palas joined the KC team with 10 years of experience in construction and construction management, including 6 years of experience providing inspection and office engineering services for New York City Department of Design and Construction (NYCDDC) contracts in accordance with NYCDDC standards.



JEFFERY BITTNER
QA / QC MANAGER

Jeff joined KC in January, bringing over 35 years of industry experience, including as Capital Program Manager for the State University Construction Fund (SUCF). He has extensive experience in QA / QC of construction, renovation, and rehabilitation of buildings and is adept at managing project budgets, scopes, and schedules.



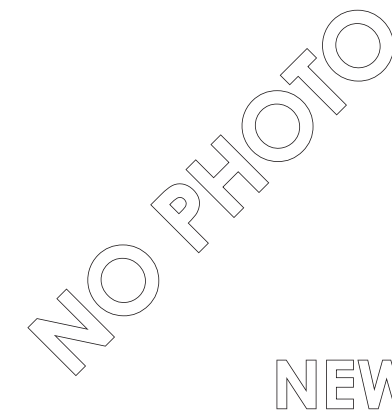
BIJAY PATHAK
STRUCTURAL ENGINEER I

Bijay, who joined KC in January, has five years of experience in structural engineering. He has worked as a Team Leader, providing project monitoring and ensuring seismic compliance. He has also assisted in the sampling of materials used in construction, including rebar and providing compression and tensile tests on concrete.



ANBESH RAWAL, E.I.T.
STRUCTURAL ENGINEER I

Anbesh joined KC back in January. He holds a Master's of Science in Civil Engineering and gained first-hand internship experience at a construction company, where he was responsible for creating submittal and material tracking logs, conducting onsite safety inspections, and verifying submittals, shop drawings, and deliveries.



ANJANNA REGUNTA, E.I.T.
STRUCTURAL ENGINEER I

Anjanna became a KC employee in April, bringing experience conducting structural analyses, designing bridges, performing load rating analyses, conducting structure analyses and design for elevated structural steel deck framing, designing vertical and horizontal curves for highways, and preparing construction documents in AutoCAD.



ESAM GAWISH
COMMUNITY CONSTRUCTION LIAISON

Esam joined KC with five years of experience serving as Community Construction Liaison for NYCDDC capital construction projects, which involved liaising with NYCDDC, team members, City agencies, stakeholders, and affected communities to keep all parties apprised of construction activities and to mitigate potential issues.



MICHAEL QUINN, P.E.
AUDITOR SPECIALIST

After over three decades with NYCDEP, Michael joined the KC team in April as an Auditor Specialist. His extensive experience in construction and project management and utility operations will better position KC to audit and provide guidance on complex consultant and contract payment matters and provide support to NYCDEP.

NO PHOTO

NEW



NEW

**NELSON MURRAY
CONSTRUCTION INSPECTOR**

Nelson joined KC in April. He is a NICET III Inspector with over 25 years of experience in the construction industry, including highway, bridge, and water main and sewer inspection experience for infrastructure contracts. He is currently providing inspection for various projects for NYSDOT and NYSTA throughout the Hudson Valley.

**MANAVENDRA MULYE
SR. STRUCTURAL ENGINEER**

Manavendra became a member of the KC team in April, and has eight years of experience in bridge, building, and façade design for New York State and City infrastructure projects. He is adept at preparing structural design plans, reviewing shop drawings and as-built plans, inspecting structural components, and other related tasks.



NEW

**SIRISHA GANGIREDDY
CIVIL ENGINEER I**

Sirisha is a graduate civil engineer with expertise in engineering design of highways and streets, traffic analysis and planning, roadway alignments and cross sections, cost estimation and reporting, data collection and compilation, geometric design, and transportation planning. She joined KC in May as Civil Engineer I.



NEW

**ROHAN GHATAGE, CMIT
GEOTECHNICAL ENGINEER II**

Rohan recently became a member of the KC geotechnical engineering group. He has experience in geotechnical recommendations; conducting field tests such as field resistivity, dynamic cone penetrometer, and pile load tests to determine soil stability; and preparing field and visual classification logs using gINT software.



NEW

**BHARGAV VAGHANI, CMIT
JR. ENGINEERING AUDITOR**

Bhargav is a construction management professional with a focus on environmental conservation efforts, which have included building trails, bridges, and wildlife habitats. He has experience in cost estimating, preparing project documentation, coordinating teams, and creating cost-benefit analyses for projects.



NEW

**VRUSHALI LAWAND
JR. ENGINEERING AUDITOR**

Vrushali joined KC this July with a Master's of Engineering degree from Stevens Institute of Technology. She has experience as a Project Manager at a construction company and is skilled in cost estimating, building information modeling (BIM), AutoCAD, Revit, Navisworks, Procore, Microsoft Project, and Microsoft Excel.



NEW

**SAI SRUTHI SOUTHA
CIVIL ENGINEER I**

Sai, a recent graduate with a Master's of Science degree in Civil Engineering, joined KC in June with proficient experience in AutoCAD. She gained internship experience with the New York City Department of Transportation (NYCDOT) where she worked on the modification of new and existing signalized intersections citywide.



NEW

**MOHAMED OMAR
CONSTRUCTION INSPECTOR**

Mohamed joined KC's construction inspection group in June. His engineering experience includes foundation, steel, and reinforced concrete design; fluid mechanicals; construction methods and material; structural analysis; soil mechanics; structural geology; geological mapping; stratigraphic columns; and fracture analysis.



NEW

**AHMED TEIMA
CONSTRUCTION INSPECTOR**

Ahmed joined KC last month. With three years of experience, he recently finished work on an NYCDOT sidewalk, curb, and pedestrian ramps project where he enacted various critical measurements for pedestrian ramps, sidewalk installation, and concrete testing procedures, including slump, temperature, and air content testing.



NEW

**AARAV SHAH
CIVIL ENGINEER INTERN**

Aarav is a rising sophomore at the University of Michigan studying chemical engineering and is a Civil Engineer intern at KC's Hudson Valley office. He says: "During my internship at KC, I gained valuable engineering experience by working with and learning from a talented team of professionals."



NEW

**KEVIN SEGALI
CIVIL ENGINEER INTERN**

Kevin is a rising sophomore at Villanova University in Villanova, Pennsylvania studying mechanical engineering and is a Civil Engineer intern at KC's Hudson Valley office. He says: "My time here at KC has been an eye-opening experience, granting me real-world engineering skills."



NEW

**AFNAN ALABBADI
CIVIL ENGINEER INTERN**

Afnan is a student studying Engineering Science with a plan to major in Civil Engineering and is a Civil Engineer intern at KC's New York City office this summer. She says: "I'm passionate about learning and am excited to contribute and grow with the team this summer."

PREFABRICATION: A TIME-TESTED APPROACH

Prefabrication is ubiquitous in modern construction: a significant majority of major infrastructure projects nowadays involve the use of at least some prefabricated materials.

Prefabrication involves creating and pre-assembling some or all construction materials before transporting them to a work site. The benefits are numerous: It allows for thorough QC in a controlled environment before delivery to the project location, minimizing issues that may arise during assembly at an active job site. It can offer cost and time savings because of the 'assembly line' nature of prefabrication, especially if several identical components need to be constructed, and they can be checked for uniformity before departing for the job site. It can also be useful in areas where weather and site conditions result in a tight construction schedule.

There are some drawbacks to prefabrication, a major one being that it can be more difficult to move prefabricated materials as they can be bulky. A crane is typically needed, and it must be able to lift the heavy weight of the prefabricated materials without falling. Additionally, prefabrication might not be feasible for every project element. However, despite these drawbacks, prefabrication can

offer benefits for almost every project, and has been utilized on construction projects dating back to the dawn of human civilization.

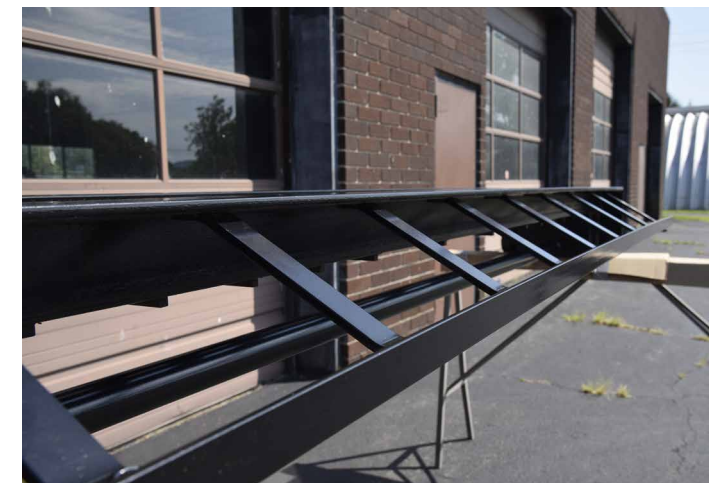
One of the oldest known roadways, the Sweet Track, dated to 3800 BCE, utilized sections of timber roadway that were prefabricated off-site and then assembled on-site to create the roadway. The earliest prefabricated building was the Nonsuch House, a four-story building that was built in the Netherlands in 1578, dismantled into pieces, and reconstructed atop the London Bridge in 1579.

The Industrial Revolution brought many innovations in prefabrication technology. For example, Portugal made many strides in prefabrication technology out of necessity in the 18th century — The Earthquake of 1755 caused great damage to Lisbon, and limited funds and the necessity for seismic protection in case of another earthquake required a standardized construction process and thoughtful urban planning. These new "Pombaline style" prefabricated buildings were made outside of the city, and large sections of the buildings were brought into the city and then assembled. Prefabricated buildings became the standard in Portugal throughout the rest of the 18th century and

well into the 19th century, and many of these buildings still stand.

England innovated in iron prefabrication in the 19th century, as evidenced by the massive 990,000-square-foot Crystal Palace structure in London as well as many Industrial Revolution-era railway stations built throughout the country.

Prefabrication for buildings and infrastructure became widespread during the World War II era and immediately following. Housing for military and medical personnel had to be built, moved, and assembled quickly and



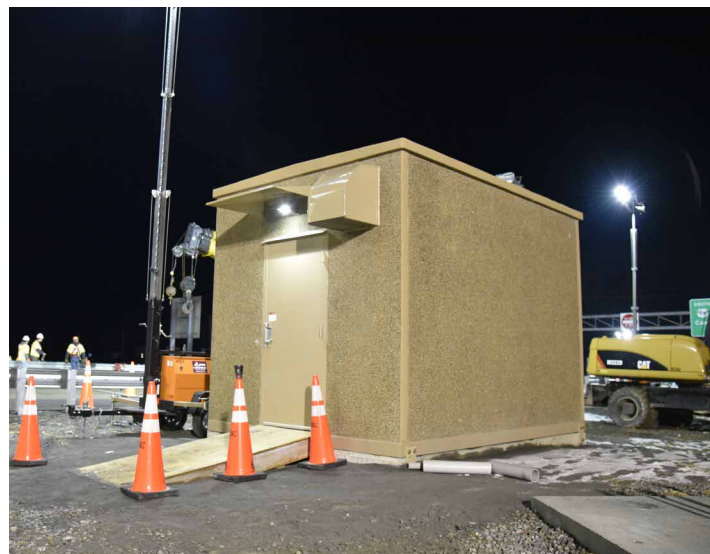
A prefabricated cashless tolling treadle ready for project delivery.

cheaply; therefore, prefabrication became almost universal. These techniques were then replicated and improved post-war in order to build cheap houses, schools, and other buildings, especially in England and the United States. For example, a cheap aluminum prefabricated building called the Type B2 was made in four sections which could then be efficiently shipped pretty much anywhere.

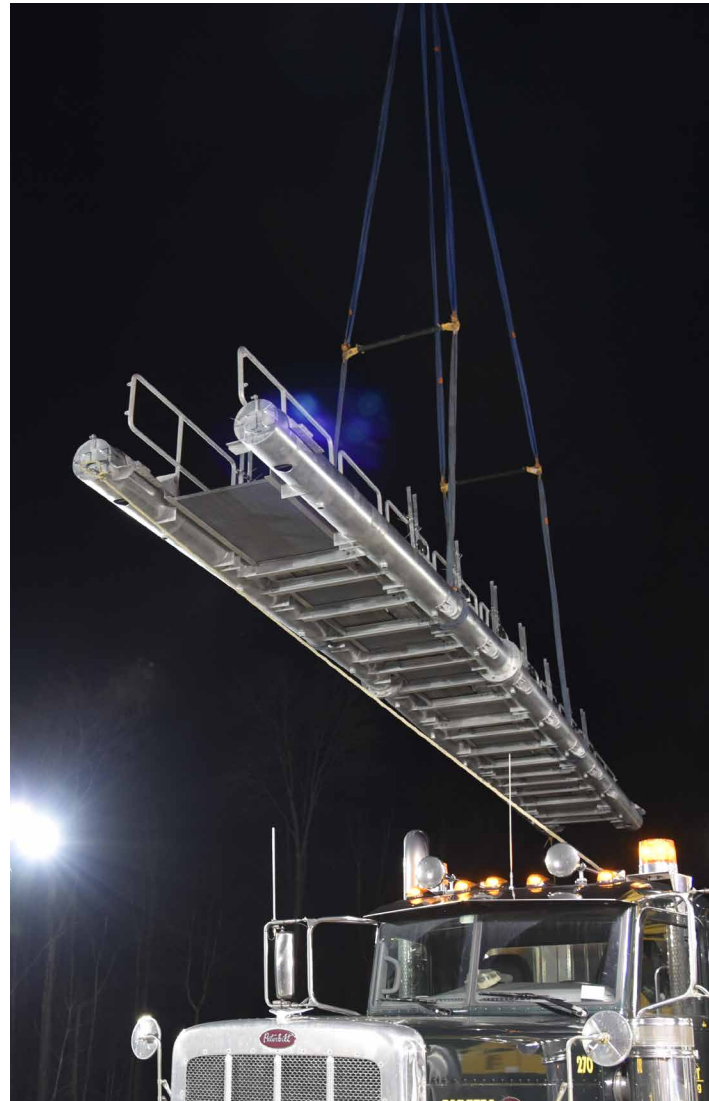
Today, with construction costs continuing to rise and tight project timelines becoming more commonplace, prefabricating elements of infrastructure is practically a necessity, especially when it comes to steel and concrete construction. Prefabrication strategies can be especially useful on design-build projects, where tight timelines and project efficiency are of utmost importance.

KC has been an innovator in this field, having been at the forefront of the design-build industry in New York State since 2014. For example, KC led the structural engineering team on the Cashless Tolling design-build project, which involved the design and construction of cashless tolling infrastructure on the New York State Thruway ticketed system from approximately Thruway Exits 16

to 61 on an incredibly expedited timeline. KC provided design for four different types of cashless tolling gantries and their associated communication buildings. These were prefabricated in order to reduce construction time, promote standardization, and verify that all buildings arrived on site with the appropriate building code certification. Due in part to KC's innovative design approach, the cashless tolling system "went live" more than a month ahead of schedule, no small feat for one of the largest design-build projects in New York State history. ϕ

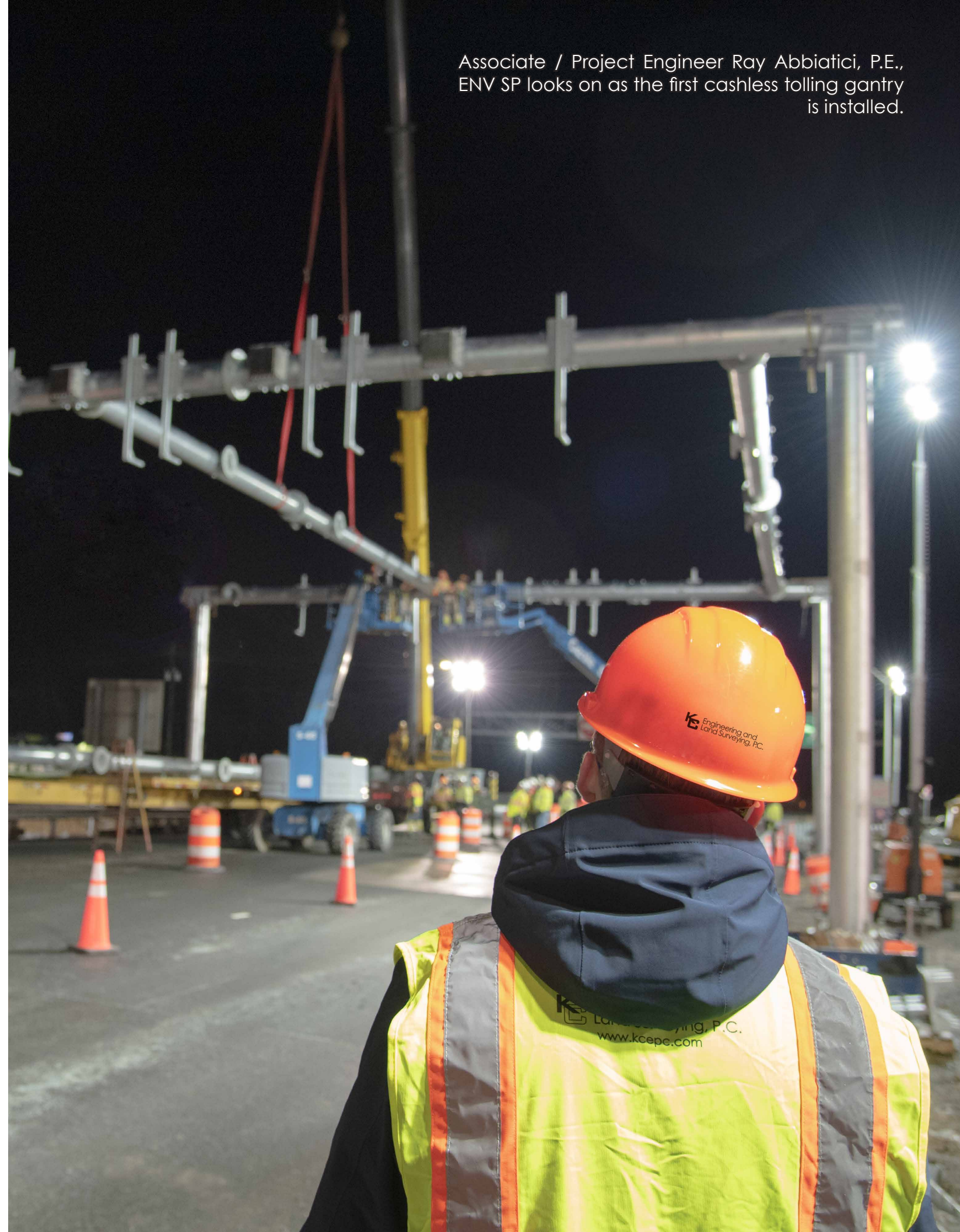


KC designed these prefabricated communication buildings for every tolling site.



Placing the prefabricated walkway on a mainline gantry.

Associate / Project Engineer Ray Abbiatici, P.E., ENV SP looks on as the first cashless tolling gantry is installed.



NEW PROJECTS

KC's new worklog from the 1st half of 2024 demands meticulous attention to detail, and our capable staff are always ready to rise to the occasion.

NEW AWARD: Contract M033-123M: Engineering Design Services for Hamilton Fish Recreation Center and Pool Reconstruction, New York City Department of Parks and Recreation (NYC Parks): The scope of work for this project involves civil, structural, fire protection, plumbing, mechanical, and electrical engineering design services for the reconstruction of the recreation center and pool at Hamilton Fish Park. KC, as subconsultant, will be providing survey and geotechnical engineering services.

NEW AWARD: Contract D041169: CI Services for Route 376 at Hooker Avenue Intersection Improvements in Region 8, New York State Department of Transportation (NYSDOT): The scope of work for this project involves CI for improvements to the signalized intersection of Route 376 (Raymond Avenue) at Hooker Avenue (Route 983T) and New Hackensack Road (Route 376). A modern roundabout will replace an existing signalized intersection. Pedestrian improvements will be made at the intersection and along the Hooker Avenue approach. KC, as the prime consultant, will manage the CI scope for this project.

NEW AWARD: Contract WS4173720577: Surveying Services MSA, Amtrak: This project involves providing survey services to augment the Amtrak Engineering Division

Survey crews. The scope of work for projects under this contract may include boundary / ROW surveys; topographic surveys; existing conditions or as-built surveys; geodetic control surveys; wetlands delineation and location; hydrographic surveying; top-of-rail profiles; cross-sections; boring and test pit locations; flood plain limits; stream boundaries; bridge, track, or tunnel movement or settlement monitoring; utility locations, including subsurface or above-ground; layout of engineering design field data; horizontal and vertical control for LiDAR, photogrammetric, and ground-based surveys; and drafting and related services as required to provide digital information compatible with Amtrak's CADD system. KC, as the prime consultant, will provide survey services.

NEW AWARD: Contract D214974: Term Agreement for Design Support Services Statewide, New York State Thruway Authority (NYSTA): The scope of work for this project includes statewide design support services for highway and interchange reconstruction, rehabilitation, and operational improvements; bridge replacement, rehabilitation, and element specific improvements; and Intelligent Transportations System (ITS) / cashless tolling systems, including toll gantry design / modification, toll system electrical

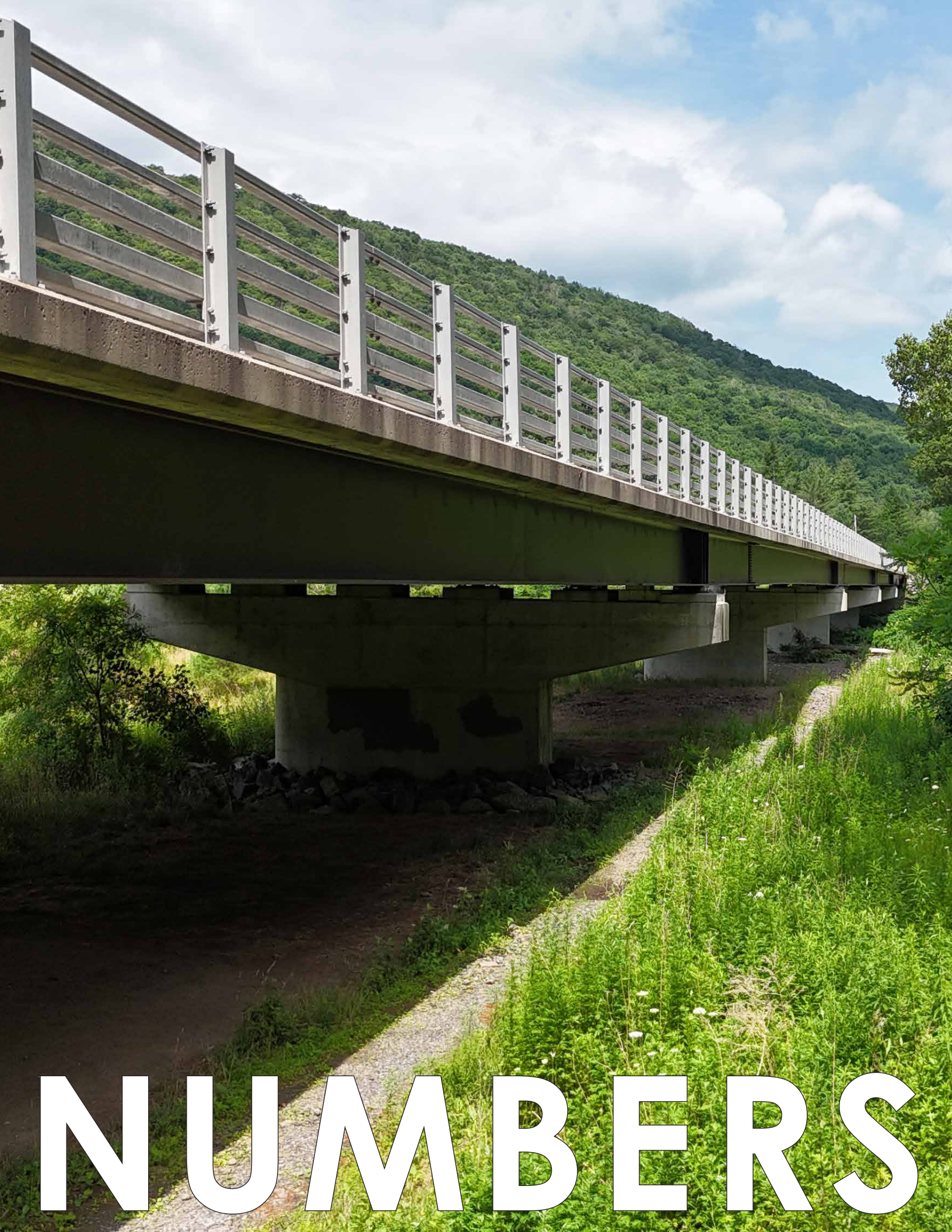
design and site development, including communication buildings, dynamic message signs (DMS), transmit systems, and fiber optics. Additional tasks may include supporting NYSTA design efforts by collecting data, performing in-depth inspections, conducting field investigations or surveys, and preparing related reports. KC, as subconsultant, will provide survey, highway design, and bridge design for this project.

NEW AWARD: Contract D214976: Term Agreement for Preliminary Engineering Support Services, NYSTA: The scope of work for this project includes preliminary engineering support services for NYSTA's highway and bridges statewide. Assignments will include the preparation of scoping memos; bridge rehabilitation reports; highway rehabilitation reports; alternatives analysis; life-cycle costing; technical reports, including seismic reports, fatigue analysis, deck evaluations, and hydraulic analysis; and cost estimating. Preliminary engineering will be prepared in accordance with the NYSDOT Project Development Manual resulting in a Final Design Report / Environmental document. KC, as subconsultant, will provide design support for this project.

NEW SHORTLIST: Contract SE720: Structural, Waterproofing, Roadway, and Mechanical,

Electrical, and Plumbing (MEP) Repairs, New York State Cultural Education Center RFQ, New York State Office of General Services (NYSOGS) : This project will generally consist of the mitigation of water infiltration into the New York State Cultural Education Center Mechanical Equipment Room, repairs of damaged Mechanical Equipment Room structural concrete elements and MEP components, replacement of the structural roof waterproofing barrier system, as well as the reconstruction of Madison Avenue between Swan Street and Eagle Street in Albany, NY. KC, as a member of a design-build team, was shortlisted for this project. KC's scope will involve providing quality management and resident engineering services. φ





NUMBERS

6 ***New opportunities awarded in 2024 so far***
KC continually wins new jobs thanks to our qualifications and our leadership.

2 ***Municipalities where KC is the Municipal Engineer***
We take pride in serving our clients, especially when it benefits our local communities.

67 ***Proposals submitted in 2024***
KC's project managers, in tandem with the marketing group, produce a steady stream of new proposals, keeping KC at the forefront of the industry.

115 ***KC employees***
KC's staff is comprised of engineers from many disciplines, land surveyors, inspectors, and administrative staff.

7 ***Job openings***
KC is currently hiring for multiple positions. [Visit our website to learn more.](#)

3 ***KC offices***
The KC headquarters is located in New York, NY with regional offices in Newburgh and Albany, NY.