ANNUAL REVIEW



OUR COMMITMENT

As I reflect upon our successes in 2023, I'm mindful not only of what we achieved on behalf of our clients but how we reached these accomplishments. Whether our clients are managing multi-billion-dollar capital improvement programs or overseeing smaller-scale but vital community-based projects, we continue to anticipate their challenges and align our expertise to surpass expectations. That clearly speaks to the talent and dedication of our team and the resourceful ways in which we approach our work.

The Van Wyck Expressway project, showcased in this issue, is one example. When the New York State Department of Transportation announced its intent to use the design-build approach for this complex capacity and access improvement contract, our alternative project delivery group stood ready to complete this demanding, high-profile project while minimizing traffic disruption.

In Southern Virginia, our project team took a research-based approach to a contemporary challenge: how can communities generate economic growth by supporting advanced manufacturing and next-generation technology within a rural region? That challenge took us across the U.S. and overseas as we studied

DÓNALD E. STONE, JR. Chief Executive Officer

cutting-edge industries to inform our design of the new Center for Manufacturing Advancement at the Institute for Advanced Learning and Research in Danville.

We've also been front and center in working with our clients to identify financial opportunities for critical building and infrastructure projects. Many of the projects cited in this issue benefited from our knowledge of funding pipelines at all levels of government. Identifying grants and financing mechanisms that ranged from \$50,000 to as much as \$10 million, we helped clients secure more than \$2 billion this year to push projects forward in communities large and small.

We pride ourselves on our ability to innovate and drive technological advances, and to remain nimble in an ever-evolving marketplace. But preparing for change requires one constant: that we stay connected to the communities we serve. From coast to coast, we are woven into the fabric of our communities, whether revitalizing and enhancing dense urban centers or addressing the needs of our small towns and rural regions. As always, our employees, who truly reflect the many dimensions of Dewberry, are at the heart of our success.

DIMENSIONS® ANNUAL REVIEW 2023

IN THIS ISSUE

1

Delivering Projects Safely Under Unique Circumstances

3

Rethinking the Standard Design

5

Creating Economic Transformation in Virginia

EXECUTIVE CHAIRMAN Barry K. Dewberry

CHIEF EXECUTIVE OFFICER Donald E. Stone, Jr.

BOARD OF DIRECTORS

FROM LEFT TO RIGHT: Thomas Greenspon, Larry L. Melton, Jr., Karen S. Grand Pré, William T. Boston, Barry K. Dewberry, Geraldine Knatz, Donald E. Stone, Jr., and Thomas L. Dewberry.



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OUR MISSION

Dewberry is a nationwide firm of planning, design, and construction professionals. We create responsible and innovative solutions for those who own, operate, and maintain natural and built environments. We value lasting relationships, achieving our clients' visions, and celebrating in their success.

7

2023 In Review: Notable Projects Take a look at project highlights across the country

.....

21

2023 Recognition for Our Communities and Projects

27

Delivering Long-Term Resilience Solutions

OUR VISION

CREATE VALUE FOR OUR CLIENTS. IMPROVE OUR COMMUNITIES. EMPOWER OUR EMPLOYEES. EXPAND OUR REACH.



DELIVERING PROJECTS SAFELY UNDER UNIQUE CIRCUMSTANCES

Throughout the year, the health, safety, and environment (HSE) team worked side-by-side with Dewberry's project teams in support of health and safety protocols and controls. For projects in international and remote locations, preparations involved securing ways to protect employees from wildlife and train staff in various types of emergency first-aid and CPR.

In 2023, Dewberry's geospatial and technology solutions team had the opportunity to map and validate data throughout remote and isolated parts of Alaska, achieved by identifying plants, evaluating soils, and observing hydrologic conditions. As field staff prepared to deploy, the HSE team worked with the crew so they were well-prepared given the barren and primitive conditions of the project areas. Team members were outfitted with satellite phones and necessary personal protective equipment (PPE), including rubber boots, cold weather gear, waterproof outerwear, and bear repellent. The HSE department also provided wilderness first-aid and CPR training and partnered with the client to train the team on the safe operation and navigation of all-terrain vehicles (ATV). ATVs were equipped with necessary supplies, such as portable coolers for easier access to food, first-aid kits, and site safety plans. Each element of this preparation led to the successful deployment, project completion, and safe return home of the team members.

Internationally, the firm's design-build group supports U.S. clients abroad, which has led to the development of country-specific accident prevention plans and activity hazard analyses (AHA). Working in

As project complexity increased, Dewberry's HSE group continued to deliver a robust and safety-first mindset from project planning to execution.

FROM LEFT TO RIGHT: David Dickson, Andrew Watt, Elaine Browning, Chelsey Egbert

other nations has unique circumstances, including overcoming language barriers, identifying hazards uncommon in the U.S., and preparing emergency information that is useful under different cultural circumstances, including how to navigate the local hospitals in an emergency, and which telephone numbers connect employees to emergency resources.

In New England, Dewberry is providing bridge inspections for one of the country's oldest transit systems. To prepare for this work, the HSE team developed a project-specific health and safety plan with the transit agency, which included reviewing anticipated work associated with the project, identifying the appropriate controls, and defining what steps were necessary to safely perform the work. As part of the plan, site-specific AHAs will be completed for each unique location and definable feature of work, which may include operation of bucket trucks and other aerial lifts, work on railroads adjacent to live traffic, working in extreme weather conditions, and working near, over, or in waterways.

In addition to the work in Alaska, New England, and abroad, members of the HSE team conducted more than 100 site support visits throughout the year, and trained 170 employees in CPR, first-aid, and automated external defibrillator classes, improving staff's ability to respond to emergency situations, whether in the field or in the office.

"The health and safety of our employees and the protection of the environment are integral parts of Dewberry's culture," shares HSE Director David Dickson. "By improving existing training resources and developing new ones, maintaining a robust set of leading indicators, and regularly updating safety protocols to perpetuate an ever-attentive health and safety program, we're able to prioritize a safety-first mindset."

2023

RETHINKING THE STANDARD DESIGN

John F. Kennedy International Airport (JFK) serves as the international gateway to New York and the nation, welcoming more international passengers to the U.S. than any other airport in the country. However, in 2017, the Governor's Airport Advisory Panel found that JFK had fallen far short of global standards for airport customers. Citing substantial expected growth and unreliable transportation as a major challenge, the panel developed a vision plan to transform JFK into a world-class airport. A major step toward that objective is the Van Wyck Expressway (VWE) Capacity and Access Improvements to JFK Airport project. In New York City, the VWE serves as the main route to and from JFK, but it has become notoriously congested. To increase capacity and reduce travel times along this corridor, the New York State Department of Transportation (NYSDOT) identified a three-phase design-build project to add an extra lane in each direction.

PRIORITIZING TRAFFIC FLOW

Dewberry served as the lead designer for a design-build contractor joint venture (CJV) tasked with building the first phase of the project, which involved extending nine bridges overpassing the VWE to accommodate the future lane expansion Usually, replacing a significant portion of each bridge structure would require closing traffic lan in stages on a long-term basis. Working closely w the CJV and NYSDOT, Dewberry developed a unit design approach that circumvented a significant portion of this burden and worked to reduce traffic disruptions on the bridges and the VWE during rush hours.

The design approach entailed a top-down construction process for lengthening the bridges in which new abutments for the lengthened bridges were built behind existing abutments while the bridges remained in service. The install of micro-piles, pile caps, and tiebacks, including excavation and other work activities, occurred for the top of the road during nighttime lane closure

The Van Wyck Expressway design-build project will increase capacity between the Kew Gardens interchange and JFK Airport by adding an extra lane in each direction, alleviating traffic congestion to the heavily visited airport.



ns. nes vith ique t ffic	Typically, this work would involve creating a large excavation pit during long-term lane closures. Instead, single rows of drill piles were installed in narrow trenches, one lane at a time, which could easily be covered with steel plates during the day, allowing the bridges to reopen to full traffic flow. The narrow trenches also proved useful for dealing with myriad utilities crossing each bridge by enabling the project team to identify their location before drilling any piles or installing tiebacks.
lation g from res.	The project carried significant importance to both NYSDOT and the community and was completed successfully while minimizing traffic impacts on the expressway, service roads, and local streets. Once the remaining project phases are completed, the upgraded VWE will help improve airport accessibility, bringing JFK closer to becoming the premier facility
	conceived in the vision plan.

CREATING ECONOMIC TRANSFORMATION IN VIRGINIA

Southern Virginia is a region built on manufacturing, with 17.4% of its labor force employed in the industry. In support of the state's strategic plan for economic development, Southern Virginia continues to develop new manufacturing technologies and methods, which support business expansion and a skilled workforce that is equipped for the future. The latest move in this strategy is the creation of the Center for Manufacturing Advancement (CMA) at the Institute for Advanced Learning and Research (IALR) in Danville, Virginia.



BRINGING INTERNATIONAL TECHNOLOGY LOCAL

The CMA offers state-of-the-art technology to increase workforce development capabilities to aid economic growth efforts. Called "Virginia's newest pro-business platform for developing manufacturing technologies," by Virginia Gov. Glenn Youngkin, the 51,250-square-foot facility allows advanced manufacturing companies to collaborate and enhance processes, improve quality, integrate emerging technology, and discover next-generation capabilities. It also provides support to rapidly launch new advanced manufacturing companies, significantly reducing the traditional startup time it takes to become fully operational in a new facility.

Dewberry delivered full architecture and engineering design and construction administration services for the new CMA. In support of Virginia's goals for the project, the team visited multiple industrial facilities, both locally and in the United Kingdom, to determine current needs and trends in precision machining. This included both potential industries that will be located in Danville, such as Kyocera, FasTech, and Making Everything Possible (MEP), in addition to companies that are providing the latest equipment to these industries, like Renishaw, Haas, and Phillips Corporation.

This research informed Dewberry's design and development of a facility equipped to meet current industry trends and evolve as new technologies emerge. The design supports a variety of uses and needs to promote flexibility for tenants as well as train a versatile workforce from which to recruit.

In support of Virginia's economic goals for the CMA, Dewberry visited multiple industrial facilities, both locally and in the United Kingdom, to determine current needs and trends in precision machining.



SPACE USES AND OPPORTUNITIES

The first floor consists of high bay space, an ISO-certified metrology lab, a computer numerical control (CNC) machining innovation lab, and an area designated for new Industry 4.0 technology, or the integration of digital intelligence technologies into manufacturing and industrial processes. This space was designed to allow for future expansion that can double the allotted manufacturing and support space. The second floor consists of flexible office space overlooking the high bay spaces to house large-scale advanced manufacturing equipment. Additional ancillary support areas include shared conference rooms, break rooms, teaching classrooms, collaboration areas, and a multi-story lobby.

The U.S. Navy will be the CMA's first project partner, using the space to launch its Additive Manufacturing Center for Excellence (AM CoE), a collaboration between academic, government, and industry leaders to advance standards of additive manufacturing and create new technologies for the development of the new Virginia and Columbia class submarine programs. Additive manufacturing is defined as the construction of a 3D object from a CAD model or a digital 3D model using fine metallic powders such as titanium. This program is the first of many that will support leading-edge manufacturing growth in Southern Virginia and beyond.

2023 IN REVIEW: NOTABLE PROJECTS



CHAMPAIGN-URBANA MASS TRANSIT DISTRICT -SOLAR ARRAY EXPANSION

Urbana, Illinois

In an effort to eliminate the use of fossil fuels to power new hydrogen fuel cell bus fleets, we designed a solar array to offset the hydrogen production plant power requirements. We worked with multiple stakeholders to install the array and transmit power to the plant which was completed in spite of pandemic-related supply chain shortages.





TOWN OF VIENNA POLICE STATION Vienna, Virginia

We designed a new police station that now meets anticipated population growth and incorporates key space needs such as a redesigned plaza and community room. The team incorporated design strategies, including raising the building above the adjacent road and using concrete benches and site walls instead of bollards, to protect the building.

PHOTO: ANICE HOACHLANDER

PENINSULAR OF FLORIDA LIDAR DATA ACQUISITION AND PROCESSING Statewide

This award-winning project is known in the mapping industry as one of the largest, most complex projects ever completed with lidar. Enhanced hydro feature delineation and detailed 3D maps were produced to precisely represent Florida's geography. The resulting products were used to create more accurate FEMA flood maps that play an integral role in protecting lives and property.

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FLOOD PROTECTION FOR AN HISTORIC COMMUNITY

study for Pin Point, a Gullahfor generations to come.

SHELTERING ARMS INSTITUTE PHYSICAL THERAPY AND REHABILITATION CENTER

We provided site/civil engineering and on-site utility design for the Sheltering Arms Institute Physical Therapy and managed a master plan of the building, advanced technologies, research, and evidence-based clinical care facilities.





OKLAHOMA STATE UNIVERSITY CENTER FOR HEALTH SCIENCES NORTH HALL

Tulsa, Oklahoma

PHOTO: BRENT NILES

Shared by state agencies and students, North Hall is a newly designed and constructed, \$44-million facility featuring new offices and laboratories for the state medical examiner and classroom and laboratory spaces to meet the needs of medical education services. The design enhances natural light, incorporates high-cooling demands of anatomy work, and fits on a tight urban campus site.

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PEDESTRIAN SAFETY SIDEWALK IMPROVEMENTS Gwinnett County, Georgia

As part of the Gwinnett County Department of Transportation pedestrian safety action plan, we developed a concept for two community sidewalk improvement projects. These consist of multi-purpose paths, trails, and bike lanes to promote pedestrian safety throughout the growing county.

EDMUND D. EDELMAN CHILDREN'S COURT REMODEL

Monterey Park, California

The Judicial Council of California Edmund D. Edelman Children's Court is a redesign of the sixth floor of the 1994 building's office. We designed new courtrooms and support spaces with child safety and comfort in mind. Smaller courtrooms were designed to be less intimidating with lower judge's benches, soft lighting, curved features, and support areas with child-friendly furnishings.

PHOTO: JUN TANG PHOTOGRAPHY







PARKSIDE (SMITH HOME FARM)

Prince George's County, Maryland

Designed around a central park featuring native plants and forest conservation efforts, we provided surveying, planning, landscaping architecture, and engineering services, including conceptual and specific engineering design plans, preliminary plan of subdivision, permitting, and construction stakeout and administration.





UNION HIGH SCHOOL RENOVATION AND EXPANSION Tulsa, Oklahoma

Intended to be a best-in-class high school football stadium, our design included a new home side structure that encompasses two decks of seating, a 40-yard-wide press box, several specialty-designed suites, and an elevator to serve staff, press, coaches, and fans. For the award-winning marching band, a new building was added at the north end zone, enclosing the stadium bowl and providing a backdrop for a large digital scoreboard.

PHOTO: JON PETERSEN

ALASKA FOOD SECURITY AND INDEPENDENCE TASK FORCE Statewide

We took part in a statewide initiative to assess food insecurity and food systems in Alaska. Gov. Mike Dunleavy's administrative order brought key organizations and subject matter experts together, and our team created an interactive website to accompany the report collaboratively authored by task force members.

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MANASQUAN MAINTENANCE DREDGING AND CHANNEL IMPROVEMENTS

Monmouth and Ocean Counties, New Jersey

Initially an eight-channel dredging project, we helped create safe navigational channels and delivered additional benefits; such as a lay-down area for geotextile dewatering of dredged material that later became a much-needed community parking lot. We also expanded the Fisherman's Cove Conservation Area dog beach by adding more than 45,000 cubic yards of dredged beach-quality sand, increasing its size tenfold.





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CHERRY HILL WATER PRODUCTION FACILITY

Lakeland, Florida

We planned and implemented new water supply solutions through the design and construction of a new facility that can receive raw water from multiple sources, depending on how applicable regulations change over time.





HOME REPAIR AND CONSTRUCTION Northern Mariana Islands

Following Super Typhoon Yutu and under the FEMA Logistics Construction Support Contract, we deployed a team within 72 hours of the notice to proceed and assessed 1,050 homes. We also monitored repair and construction of homes for the affected communities.





2100 PENN

Washington, D.C.

For this 507,800-square-foot, 11-story commercial office building, we provided mechanical, electrical, and plumbing (MEP) engineering, construction, energy modeling, and commissioning services. After base building design services were complete, we incorporated modifications to accommodate tenants, such as roof terrace amenities, a conference center, retail vertical transportation, and kitchen exhaust and grease waste infrastructure.





SUNCOAST PARKWAY 2, SECTION 2 Citrus County, Florida

This five-mile extension of an existing high-speed toll facility minimized impacts to the local roadway network and residences and included a county-requested trail. It also incorporated species protection measures, such as wildlife exclusion fencing, signature tree protection, Kestrel boxes, and grade-separated wildlife crossings.



CITYWIDE DRAINAGE AND WATER QUALITY MASTER PLAN

Somerville, Massachusetts

Following the creation of the master plan, we designed and refined a model to compile flood mitigation and water quality improvements into six sewer shed plans. We then coordinated with the city's internal project team to develop conceptual plans to address the rapidly growing community's existing infrastructure challenges.

PHOTO COURTESY OF THE CITY OF SOMERVILLE



DUKE UNIVERSITY CHESTERFIELD QUANTUM COMPUTING RESEARCH LAB UPFIT

Durham, North Carolina

The center represents a major commitment from the Duke Pratt School of Engineering towards being a leader in quantum computing research. We developed dedicated heating, ventilation, and air conditioning (HVAC) systems within the converted 1940s Chesterfield Tobacco factory to provide precise temperature and humidity control with electromagnetic isolation fundamental for their trapped-ion research.

PHOTO: TZU CHEN PHOTOGRAPHY



2023 RECOGNITION FOR OUR COMMUNITIES AND PROJECTS

DEWBERRY

- ★ Analytics to Insights Award, Esri
- ★ Employer of the Year, WTS Central Pennsylvania Chapter
- ★ Public/Federal Impact Award, Partner Excellent and Achievement Awards, Lynxspring
- * Supplier Environmental, Social, and Governance Leader, Avetta
- * "Tidy Otter" Sustainability Award, American Water Works Association
- ★ Top Employer for Interns, Virginia Talent + Opportunity Partnership

COMMUNITY FACILITIES

David M. Roh Fairfax Count Fairfax, Virgini

Three Police Lubbock, Texa

Manasquan A Maintenance Community E Monmouth an New Jersey

EDUCATION

Oklahoma Sta for Health Sci Tulsa, Oklahon





FEDERAL

AccessAIS-Na Provisioning Nationwide

hrer Aviation Center, ity Police iia	★ Bronze Award, Officer Station Awards
Substations as	★ Bronze Award, Officer Station Awards
Area Channels e Dredging with Enhancements nd Ocean Counties,	★ Distinguished Engineering Award, New Jersey Alliance for Action
tate University Center ciences North Hall ma	 Design Award, American Institute of Architects (AIA) Tulsa Construction Excellence Award, Ceilings and Interior Systems Construction Association (CISCA) Honor Award, Large Commercial Category, AIA Eastern Oklahoma
lational Cloud System	 ★ Honor Award, Engineering Excellence, American Council of Engineering

Companies (ACEC) Virginia

HEALTH AND WELLNESS

PICTURED BELOW OSF Ministry Headquarters Renovation

OSF Ministry Headquarters Renovation Peoria, Illinois

- ★ Award of Merit, Parking Structure Category, International Concrete Repair Institute
- ★ Richard H. Driehaus Foundation National Preservation Award, National Trust for Historic Preservation

St. Francis Cardiology of Tulsa Tulsa, Oklahoma

★ Excellence in Construction, Healthcare under \$2 Million, Associated Builders and Contractors



PICTURED ABOVE

Manasquan Area Channels Maintenance Dredging with Community Enhancements





Climate Change Adaption Plan New York, New York	*	Gold Award, Engineering Excellence, ACEC New York
Peninsular of Florida Lidar Data Acquisition and Processing Project Florida		Category Winner, Data Acquisition and Processing Projects, MAPPS Grand Award, MAPPS
Virginia Coastal Resilience Master Plan Virginia Beach, Virginia	*	Merit Award, Engineering Excellence, ACEC Virginia

TRANSPORTATION

Bridge Replacement of Evergreen Road Over Mason Brook Hubbardston, Massachusetts

★ Bronze Award, Engineering Excellence, ACEC Massachusetts

Engineering Excellence,

American Public Works Association

★ Category Winner, Outstanding

Local Street and Road Project,

County Engineers of California

ACEC Massachusetts

(APWA) Sacramento

★ Project of the Year,

★ Diamond Award,

ACEC New York

★ Merit Award,

ACEC Virginia

APWA Sacramento

Engineering Excellence,

Engineering Excellence,

Final Design for Beach 108th Street ★ Silver Award, Streetscape Improvement New York, New York

Grant Line Road Widening Phase 2 ***** Project of the Year, Sacramento County, California

Hickman Bridge over the **Tuolumne River** Waterford, California

Hunts Point Interstate Access Improvements (AECOM/Dewberry JV) Bronx, New York

I-64 Capacity Improvements Segment III Design-Build New Kent, Virginia

Newark Liberty International Airport New Terminal A Newark, New Jersey

★ Award of Merit, Airport/Transit Category, Engineering News-Record (ENR) New York's Best Projects Competition

CEEEEEEEEEEEE

PICTURED ABOVE

I-64 Capacity Improvements,

Three Bridge Segment III Newark, New North Riverw Sacramento, C **Skiffes Creek** James City Co SR 132 West Sacramento C Union Road I Manteca, Cali

WATER



Newark Liberty International Airport Terminal A, Design of Three Bridges (VTCA) Newark, New Jersey	*	Distinguished Engineering Award, New Jersey Alliance for Action
North Riverwalk Trail Expansion Sacramento, California	*	Project of the Year, APWA Sacramento
Skiffes Creek Connector James City County, Virginia	*	Category Winner, Design-Build, Virginia Transportation
SR 132 West Freeway/Expressway Sacramento County, California	*	Project of the Year, APWA Sacramento
Union Road Interchange Manteca, California	*	Project of the Year, American Society of Civil Engineers Region 9
City-wide Sewer Separation Master Plan Chelsea, Massachusetts	*	Bronze Award , Engineering Excellence , ACEC Massachusetts





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27

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DELIVERING LONG-TERM RESILIENCE SOLUTIONS

Conceptualizing, developing, and delivering resilient design solutions has taken a marked shift in recent years. These solutions must now be envisioned as part of an integrated, comprehensive view of infrastructure investments. When viewed alongside the substantial federal infrastructure resources, including the Bipartisan Infrastructure Law and Inflation Reduction Act, the next several years represent an exciting time for the professional design community to offer bold and creative solutions to client project challenges.

To address these challenges, Dewberry has found that climate resilience necessitates a systems-based approach that transcends project scope. One example of this approach was the reconstruction of the Beach 108th Street project in the Rockaways of New York City. As engineer-of-record, Dewberry's multidisciplinary team incorporated transformative resilience and sustainability design recommendations, which included managing increased rainfall events through green infrastructure practices such as porous pavement. The award-winning project was recently constructed to allow 1.3 million gallons of stormwater to infiltrate through pavement, which in turn reduces street flooding and drainage system demands.

To continue supporting clients in achieving project goals within a larger resilient community infrastructure context, Dewberry has combined subject matter expertise from across the firm into an integrated resilience design studio to create solutions. This approach supports multiple client market segments, including transportation, water, commercial utilities, and public works.

D I M E N S I O N S ®