

# Federal Solutions

Providing sustainable, resilient, and integrated solutions to our nation's critical mission facilities, infrastructure and programs worldwide.



## More than a Century Delivering National Security Infrastructure Solutions

When planning for a future filled with uncertainty, great leaders don't go it alone. Black & Veatch works alongside all levels of government - federal, state and local - to develop, build and protect critical and integrated energy, water and mission command infrastructure. Since our earliest days designing and building America's WWI defense infrastructure, Black & Veatch has applied expertise and client-focused commitment to our Federal Solutions. Our team is your team, working to improve lives today and prepare for a more resilient, secure tomorrow.

The critical human infrastructure we deliver improves quality of life around the world, spurring economic growth and driving towards a more sustainable future. We deliver successful project outcomes that mitigate risk and maximize increasingly limited resources in all that we do. Our experts are proficient and experienced at addressing challenges unique to government services such as working to provide assessing and rehabilitating dams and control structures, preventing large headline-grabbing security breaches, designing and building critical mission defense projects and increasing installation energy resilience.

### FEDERAL SOLUTIONS

#### Federal Facilities & Infrastructure

##### Aviation

- Airfield Master Planning
- Flight Line Area Development Planning
- Airfield Pavement Design, Inspections & Lighting
- Beddown Planning, Programming & CMS
- Munitions Planning & Facility Design
- Aircraft Support Systems
- Utility Evaluations
- Vehicular Traffic Studies
- Air Installations Compatible Use Zones Planning

##### Civil Works

- Flood Risk Reduction
- Environmental & Water Quality
- Navigation
- Water Supply
- Dams, Levees & Reservoirs
- Recreation
- Hydropower

##### Area Development and Site Master Planning

- Installation Master Planning
- Facility/Asset Management
- Facility Planning & Programming
- Smart & Sustainable Base Planning & Design

#### Critical Mission Facilities

- Biological Laboratories
- C4I
- Cyber
- Missile Defense & Radars
- Nuclear Deterrent
- Resilient Energy Security
- Power Generation & Distribution Infrastructure
- Secure Facilities
- Security & Central Monitoring
- Test Facilities

#### Integrated Services

- Advisory & Assistance Services
- Biodefense
- BioSafety & Security
- Cybersecurity
- Information Technology
- International Development
- Physical Security
- Sciences
- Threat Reduction

#### Security

- Cybersecurity
- CBRNE Security
- Electronic Security
- Physical Security
- Protective Design
- SCIF Design
- Data Centers

#### Design-Build

- Designer of Record
- Military Construction (MILCON)
- Flood Risk Reduction
- Sustainment, Restoration & Modernization
- Civil Works Design-Build
- Construction Management Services



### Aviation

At Black & Veatch, we know that all flightline operations are essential to military missions at air bases around the world. We have provided military aviation planning, programming, design, construction and consulting services at more than 100 airports and air bases worldwide for beddowns, airfields, support facilities, taxiways, runways and parking aprons, including hardstands, pavements and airfield lighting. Our in-house professionals have extensive experience providing resilient and sustainable military aviation solutions to government clients worldwide.



**100+**  
years supporting military  
aviation programs



**11,000+**  
Global Black & Veatch  
professionals



**100+**  
bases where we've worked  
for the military

#### Aviation Services

- Airfield Master Planning
- Flight Line Area Development Planning
- Airfield Pavement Design and Inspections
- Beddown Planning, Programming and CMS
- Munitions Planning and Facility Design
- Airfield Lighting
- Aircraft Support Systems
- Utility Evaluations
- Vehicular Traffic Studies
- Air Installations Compatible Use Zones (AICUZ) Planning

#### Project Types

- Runways, Taxiways, Aprons and Hardstands
- Hangars and Maintenance Facilities
- Aircraft Shelters and Sunshades
- Squadron Operations Facilities
- Firing Ranges
- Training and Test Facilities
- Fuel Systems
- Administrative Facilities

## Civil Works

Our leadership in water and civil works infrastructure delivers environmentally sustainable, economic and technically sound solutions to all levels of government.

### We Know Civil Works and Water Infrastructure

Black & Veatch understands the critical infrastructure needs of our nation. We are a leader in water infrastructure and civil works, and we pride ourselves in providing environmentally sustainable, economic, and technically sound solutions with a focus on informed risk reduction decisions and public safety. Our solutions provide quality and responsive aid to infrastructure including flood risk management, coastal storm risk management, resiliency, hardening of assets, navigable transportation, hydropower, water quality, water supply, recreation, and environmental restoration.

### Full Suite of Civil Works Services

As one of the world's most successful large engineering firms, Black & Veatch has the resources to undertake any civil works project, regardless of size, scope and complexity. Black & Veatch is a leader in the implementation of civil works programs that involve a wide variety of complex needs and stakeholders, offering planning, engineering, construction, O&M services that touch all aspects of the Civil Works Programs.

### We Understand Your Challenges

The importance of effectively and efficiently managing our nation's water resources has never been greater. Management of these resources is dependent on providing sustainable, economical and environmentally safe civil works solutions.

We understand the needs and missions of the federal government and our municipal clients. We are committed to providing critical resources to government agencies such as U.S. Army Corps of Engineers (USACE) Districts, U.S. Bureau of Reclamation, Federal Emergency Management Agency (FEMA), U.S. Department of the Interior, U.S. National Park Service, U.S. Coast Guard, U.S. Environmental Protection Agency, Tennessee Valley Authority, the Nature Conservancy, state environmental agencies, local ports and harbors.

### A Rich History Improving Civil Works

Our distributed office network results in local teams and reach to nearly all USACE Divisions and District client offices. We offer cost-effective access to deep multidisciplinary resources, with capabilities ranging from basic civil works infrastructure services to complex water resource engineering and emergency response. We have served on U.S. government missions at every stage, from preliminary studies and planning to complete program management.



USACE Europe District | FY20 Area Development Plan (ADP) | Camp Bondsteel, Kosovo



## Area Development and Site Master Planning

We help our clients achieve better economic, stakeholder and project outcomes through integrated solutions that address the environmental needs of today and risks in the future.

### We Know Master Planning

Our multi-disciplinary teams are led and staffed by experienced AICP-Certified Master Planners selected to match your specific project needs. We supplement our teams with Black & Veatch expertise across all of the varied disciplines that comprise a typical organization's physical and operational world: engineering, energy, architecture, urban design, asset management, utilities, transportation and environmental sectors. Whether planning and programming for a specific critical mission facility, developing a long-range installation Master Plan, or creating a resilient "Smart Base" vision, we can ensure collaborative client-focused planning solutions that are implementable, technically sound, and within your budget.

We collaborate with clients to enable better navigation of fast-changing mission requirements, regardless of scale or geographic location. Our planning products are developed jointly with you and your team to ensure that all stakeholders are included in the planning process and that the plans we produce will serve as your roadmap to guide future growth and investment at your installation.

Our experience covers the full spectrum of planning needs – from visioning, charrette facilitation and concept studies thru technical design, operations and funding strategies.

### We Understand Your Challenges

For more than 100 years, we've served as a trusted partner of the Department of Defense (DoD), and are now an industry leader for the planning and design of critical mission facilities and weapons systems. We have completed master planning projects across the globe and on over hundreds of DoD installations, ranging from the preparation of programming documents and DD1391s to long-range development master plans and resiliency studies.

Today, our team is transforming the future by supporting programs like the European Deterrence Initiative (EDI) and delivering innovation in sustainable planning solutions and infrastructure. We are helping to plan the smart bases of the future by incorporating innovative systems like microgrids and renewable energy, autonomous vehicles, digital Smart Cities features, and walkable communities into our master plans. We are a leader in zero-emission vehicle infrastructure and energy storage, secure telecom and cyber engineering solutions – expertise we incorporate into the master planning solutions we deliver for our diverse clients every day.



USACE Wilmington Contract | Philpott Dam Stability Analysis and Anchor Design, Bassett, Virginia

## Critical Mission Facilities

Reliable, efficient and no-learning curve solutions to deliver tomorrow's warfighter facilities so that your high-consequence mission is safely and successfully completed.

### We Know Critical Mission

Tomorrow's warfighter needs proven and reliable next-generation solutions that support the safe and successful completion of your high-consequence mission. Implementation of secure, resilient and sustainable solutions require greater levels of innovation and collaboration that meet the ever-changing needs of your operating environment. We know the criticality of your mission, and our specialized and dedicated teams work seamlessly with you to reduce the risk of failure through all stages of a project's development and deployment. When failure is not an option, we deliver the outcomes you need.

### Full Suite of Critical Mission Facility Solutions

Black & Veatch is a full-service AEC provider specializing in master planning/programming, feasibility studies, design, construction phase services and commissioning for critical mission facilities. We have successfully provided unique solutions on defense programs for more than 100 years. We help solve complex technical challenges on time and on-budget, all in the interest of protecting against worldwide threats. Our capabilities in high-consequence missions result in no learning curve, knowledge of the technical requirements ensures the facilities meet these requirements, and surety that power requirements are achieved both on and off the grid. We deliver solutions that are optimal, functional, reliable, resilient and sustainable.

## Integrated Services

Comprehensive and reliable one-stop solutions reducing the complexity of your challenges while improving project efficiencies regardless of geographic location.

### Providing Total Solutions to Complex Problems

We bring an integrated team and the technical expertise to ensure the solution developed is what you need. Our Integrated Services team supports programs in the U.S. and more than 20 countries in EUCOM, PACOM, CENTCOM, and AFRICOM, working with clients to design and implement complex sustainable solutions, while navigating challenging local, national and international financial and regulatory requirements.

### Integrated Services

Black & Veatch Integrated Services has a long, storied history spanning more than 25 years, of delivering expertise in providing complex systems engineering, procurement, maintenance (repair or replace), training, and logistics. Black & Veatch was selected by the DTRA to be the prime integrating contractor for Automated Inventory Control & Management (AICMS) implementation. AICMS is an integral and vital part of the Cooperative Threat Reduction (CTR) and Nuclear Weapons Safety and Security (NWSS) programs of the U.S. DoD/DTRA and the Russian Federation Ministry of Defense (MOD), in preventing the proliferation of weapons of mass destruction (WMD) in Russia and worldwide. Black & Veatch was also sole sourced by the DTRA to be the prime contractor for Electronic Integrated Disease Surveillance System (EIDSS) and Pathogen Asset Control System (PACS) implementation. EIDSS and PACS are vital systems of the Biological Threat Reduction Program (BTRP) of the U.S. DoD/DTRA, in strengthening and enhancing recipient state's existing surveillance systems and preventing the theft, sale, diversion, or release of pathogens. EIDSS and PACS are both first-of-a-kind information technology systems.

Our integrated solutions provide clients time savings due to more efficient collection and processing of information, higher quality decision making due to completeness, accuracy and timeliness of data collected in an electronic integrated disease surveillance system, and data analytics, cost savings due to more efficient disease surveillance system, quality design meeting cost limitations, minimal construction issues, skilled work force leading to more effective and efficient lab operations, and an experienced team that can meet financial and schedule constraints to for construction and renovation projects.

## Security

A proven partner in security design to support secure and reliable mission completion in the face of today's and tomorrow's full range of ever-evolving threats.

### A Proven Partner in Security Design

Critical mission infrastructure must not only be designed and built to fulfill its purpose on day one, but it must remain fully operational for years and decades to come through the full range of today's and tomorrow's threats. Regardless of whether these threats consist of attempted breaches of secure areas, assaults using long-ranged weapons, cyber-based intrusions, or CBRN attacks originating from nation-state adversaries, transnational terrorist groups, or criminal activity, we have the knowledge and experience to provide you solutions for a secure and reliable mission.

### Full Suite of Security Services

Our multi-discipline teams are tailored for your requirements. We have proven expertise across a broad range of security needs including physical security, protective design, cyber security, electronic security, Sensitive Compartmented Information Facility (SCIF) design, biological and nuclear security, and the unique and challenging security requirements of data centers.

When your project requires even more specialization, we have a suite of proven industry partners to enhance our capabilities, which ensures that your needs are met by the exact proven solution. Our ability to tailor our approach to your precise needs translates to a delivered project that is within budget and of a level of quality that you would expect from someone with whom you've entrusted our nation's security.

### We Understand Your Challenges

We collaborate closely with military and civilian Federal agencies and other institutions including the utilities, financial institutions, health agencies, and foreign government agencies to determine their unique goals and issues. From that knowledge, we develop comprehensive solutions that include cost effectiveness, constructability, and regulatory compliance in the local environment as well as meeting the security requirements. Our mission is to support clients in limiting mission downtime, casualties, facility damage, data loss, data breaches, intrusions and release or theft of sensitive material.

Designing the optimal security solution requires more than engineering knowledge. It requires an understanding of mission parameters, strengths and vulnerabilities, threats and countermeasures, and most of all, human nature. We have developed this understanding through more than 100 years of service on diverse, secure Federal government programs. We are also fully independent from security equipment manufacturers, ensuring that our sole priority on every project is to find the right solution for your challenge. Nothing is more important than protecting our nation's security.



USACE Savannah District | United States Army Cyber Command (ARCyber) | Fort Eisenhower, Georgia

### Black & Veatch is dedicated to providing excellence for your high-consequence missions:

- Solutions that aid to a greater level of mission assurance and lethality
- Providing solutions that incorporate resiliency, redundancy, reliability and sustainability into engineering solutions
- Providing energy solutions that provide mission assurance, reduce cost and provide greater consumption and utilization efficiencies
- Addressing environmental concerns
- Solutions that fit within client funding constraints
- Modernization that meet current codes, safety and environmental guidelines
- Safe, functional systems that provide extended equipment life and reduced unscheduled shutdowns and repairs
- Facilities at the cutting edge of performance coupled with ever longer life span



USACE Kansas City District | NGA West Headquarters Facility | St. Louis, Missouri

## Design-Build

Cradle-to-grave architecture and engineering services integrated with design-build contractor teams to deliver efficient, reliable, and high quality mission critical facilities.

### We Know Critical Mission Design-Build

Black & Veatch offers our clients the resources of a global organization combined with the responsiveness of a local partner. Our integrated team is structured to maximize input from the client to develop then implement intelligent design-build solutions. Our flexible structure and broad expertise encourages full collaboration, allowing clients to realize their project goals and achieve the maximum return on their investment. Our in-house experts can manage all of your site development needs, from site selection to engineering design, regulatory approvals and procurement through project and construction management.

### We Understand Your Challenges

Black & Veatch understands the unique requirements of Federal agencies such as the U.S. Department of Defense, U.S. Army Corps of Engineers, Naval Facilities Engineering Command, Air Force, Air Force Materiel Command, General Services Administration, the Intelligence Community, as well as Original Equipment Manufacturers and clients with limited execution staff seeking turn-key solutions. We step in and provide support when some projects require

a faster schedule than a design-bid-build process will allow. We know the importance of developing strategic partnerships with trusted designers and creating value-oriented design. We understand funding constraints and work in consultation with the military to develop solutions that achieve mission objectives and comply with funding mandates. Our design-build solutions also support projects that utilize proven technology and construction approaches.

### Improving Design-Build Across Our History

Black & Veatch's design-build team provides clients continuous quality, efficiency and collaboration. We deliver over \$1 Billion in design-build construction each year with an exceptional safety record. We serve our federal clients regularly in many other roles including program manager, planner, designer, owner's engineer, and construction manager. This continuous "cradle-to-grave" engagement in design build projects worldwide means one thing - we bring an unusually broad understanding of how to achieve and sustain project success at every stage. Since we have our own full design, procurement and construction capabilities in-house, we know how to balance and control every element of project scope, quality, cost, risk and schedule, while engaging construction contractor partners.

