



We are Black & Veatch.

We design efficient, scalable and resilient data centers.

Our design and build solutions cover the entire life cycle of a data center deployment for a seamless delivery. With this integrated and comprehensive suite of services, BV provides customized design solutions that optimize the lifetime value of your assets and ensures reliable and efficient operation.

Engineering is fundamental to our business. We offer Accredited Tier Designers with expertise in data center infrastructure design including architectural, electrical, mechanical/HVAC, fire protection, structural and security. With a strong Pre-Construction team, we think ahead to the next project phase and design with construction in mind. Using LEAN principles, our team develops accurate cost estimates,

schedules and competitive bids. To ensure successful execution of the project design, we work with you to manage the construction and implementation phases.

Black & Veatch engineers and designs complex infrastructure, creating a full data center solution – we can provide grid assessments, site due diligence, design, construction, infrastructure upgrades, power, water and fiber needs. Let us create your sustainable solution.

bv.com/industries/data-centers



BLACK & VEATCH

Stage 1 & 2 Site Due Diligence

A client is considering multiple locations to potentially build data center(s). In order to make the decision on a specific location, TEECOM hired BV to generate Stage 1 and Stage 2 fiber, power and geo-climate site due diligence information on land parcels (the US, Mexico, India, and Jakarta) – with additional future parcels in other countries.

Stage 1 includes fiber analysis (regional fiber standards, landscape and local availability of fiber), power analysis (regional power, competitors, location maps, and power and interconnection timeline estimates) and a geo-climate vulnerability assessment. Stage 2 includes regional fiber company capabilities and availability, landscape, transmission and distribution capabilities, defined schedule and budget costs.

New Remington Technology Park Hyperscale Data Center

BV is providing design-build services for a new greenfield data center complex and 300MW power plant. At completion, the site will consist of six data center buildings approx. 137,000 to 240,000-sq. ft. each, with IT loads of 32–40 MW. The ultimate site build-out comprises all six data center buildings. BV scope has included conceptual master plan & preliminary engineering; site development; permitting assessments; water infrastructure assessments; geotechnical evaluations; preliminary noise modeling & traffic impact assessments, etc.

The building 1 site plan provides infrastructure to support a 240,000-sq. ft. data center.

RDD & MRD Projects

BV was hired to provide design services for a Rapid Deploy Data Center (RDD) project. The project entailed the reference design of a modular, scalable data center, with a small footprint. These deployments were 1.2 MW per colocation with a total of four COLOs deployed per site. Black & Veatch was also hired for the rapid deployment of a Micro Region Data Center (MRD). The project phasing included three 1 MW single story Data Center modules arranged on site to allow for phased construction in rapid succession. The 3 MW launch building also included a modular admin and facility support area. Using minimalism as a guiding principle, prefabricated modular delivery of every component was maximized for quick set-up and tear-down of components.

Hyperscale Data Center Design in Chile

BV was contracted to perform both planning and site specific detailed design for a hyperscale data center. We developed site specific permitting approach and supported the permitting process through discussion with the local regulators, working with local legal counsel, and developing and issuing both environmental and construction permits

BV was also asked to develop IFC detailed design packages for architectural, MEP, site civil, security, and telecom utilizing a mix of both internal resources and specialized subconsultants. We provided the development of LEED Gold certification through scorecard development and site design adaptations. Deliverables also included specification development and procurement support for long lead equipment; procurement support for construction contractor; and translation of all final documentation from English to Spanish.

Contact Us

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