



FORT BLISS

EL PASO, TX



SAFETY RECORD

ZERO Recordable Events



PROJECT SIZE

142 buildings encompassing over 5.4 million sq. ft.

\$58,346,848



PROJECT SCHEDULE

6/10/22-7/1/24



CONTRACT METHOD

UESC



SAVINGS INFORMATION

\$4,649,535 annual cost savings

\$3,956,598 annual energy savings



The Brigade Combat Team (BCT) and Infantry Combat Team (IBCT) located at East Fort Bliss have buildings that are deemed mission critical and uninterruptible; however, only have one source of water provided by a local utility. ESG has improved Fort Bliss's lighting efficiency as well as energy and water resiliency to better align the site with Army Directive 2020-03: Installation Energy and Water Security Policy, which requires sites to meet energy resilience requirements and secure mission-critical facilities for a minimum of 14 days.

SOLUTION

The project scope included 142 buildings with 102 of those building being deemed critical to the Fort Bliss mission.

- Installed 15 MW Distributed Energy Resources (DERs) with 8 MW battery storage
- Provided water resiliency by refurbishing an existing water well and transmission lines connecting the well water to East Fort Bliss
- Provided a microgrid and Battery Energy Storage System (BESS)
 - Installed a black start-capable microgrid that will power all 142 buildings
 - Installed and connected 7 new natural gas-fired engine generators and new Battery Energy Storage Systems (BESS) for island grid stability
 - Installed microgrid master controllers and Human Machine Interfaces (HMIs)
 - Installed fiber-based communication via the existing base-wide fiber network and automated distribution switches
- Provided lighting upgrades to over 140 buildings, encompassing over 5.4 million square feet, and over 43,000 fixtures

RESULTS

With the new design, construction, and performance now being installed at Fort Bliss they will have reduced reliance on off-base purchased electricity and water. The above installations have enhanced their mission assurance and energy and water resiliency. This project has moved Fort Bliss closer to compliance with Army Directive 2020-03.