ADVANCE**DESIGN**™

case study

"EXECUTION OF THE FORT BLISS EXPANSION PROGRAM IS THE BEST, IN MY OPINION, OF ANY MAJOR CONSTRUCTION PROGRAM IN D.O.D."

- TROY COLLINS, PE, DEPUTY DISTRICT ENGINEER FOR PROGRAMS & PROJECT MANAGEMENT, USACE FORT WORTH DISTRICT



Fort Bliss Expansion

BACKGROUND

The 2005 Base Realignment and Closure Commission (BRAC) initiative targeted the Army Installation of Fort Bliss, Texas, to receive an influx of nearly 30,000 troops, ultimately totaling six new Brigade Combat Teams. Many compared the Fort Bliss Expansion Program to building a small city from the ground up.

The \$4.8 billion program encompassed 4,500 acres of greenfield development, 130 projects, and 300 facilities, totaling 11 million square feet of new buildings. This program was laid out in four land development districts: East Fort Bliss, Infantry Brigade Combat team, Biggs Army Airfield, and Main Cantonment.

Huitt-Zollars, as part of a Joint Venture, was selected to be the Land Development Engineer (LDE) for the Fort Bliss Expansion Program and was responsible for design, program integration, and construction management.

CHALLENGES

Challenges of the development and design of this extensive project included:

- Develop and ready a 160-year-old military installation located in the Chihuahuan Desert for a 250 percent increase in soldiers and their families (from 49,000 to 106,000), all within a seven-year window
- Deliver facilities better, faster, and greener – facilities that cost 15% less than traditional Army construction in 30% less time, while maintaining quality and sustainable design
- Borrowing from private sector practices, the LDE team planned and developed the site while moving from a "prescriptive" to a "performancebased" approach to contracting in order to accelerate delivery.

ADVANCEDESIGN SOLUTION

Huitt-Zollars, a multidisciplinary design firm, specializes in wide-range of practice areas such as federal, aviation, public works, and buildings. This depth enabled the team to provide a variety of in-house services, including MEP engineering, civil engineering, architecture, construction

disciplines + services

HUITT-ZOLLARS

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dient

u.s army corps of engineers fort worth district

location

el paso, texas

"Team Bliss" grew from a handful of key personnel to more than 350 fulltime, part time, and contract members performing work in full integration with the USACE personnel.

www.huitt-zollars.com

\$**4.8** Billion Program

- 4,500 Acres of Greenfield Development
- 130 Projects
- 300 Facilities
- 11 Million SF of New Buildings

disciplines + services

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management, landscape construction, and planning. Huitt-Zollars has the knowledge and resources to manage a project of this size effectively.

Innovation and creativity played key roles in successfully integrating a high performance design program. The team was able to understand the complex nature of the program and incorporate innovative solutions that ultimately paved the way for success. For example, in order to meet the new LEED requirements, the LDE team and the USACE organized a sustainability validation team. This specialized and dedicated team ensured the complex design met the standards of the LEED principles, and developed a new installation approach and method for documenting Fort Bliss LEED credits.

These innovations, along with demonstrating continual flexibility throughout the project

and the commitment of Team Bliss, all helped keep the project on schedule and within budget.

Learn more about the specific projects of Fort Bliss Expansion Program:

- <u>Alternative Project Delivery Fort Bliss</u>
- Fort Bliss Replacement Hospital
- Fort Bliss CAB Airfield Design

OUTSTANDING FEDERAL PLANNING PROJECT AWARDED TO USACE, FORT WORTH DISTRICT, AMERICAN PLANNING ASSOCIATION (2012)



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