

## **Veterans Healthcare Experience**

Walter P Moore is recognized nationally for the design of premier healthcare facilities. Our portfolio contains a multitude of private and public healthcare facilities ranging from small clinic renovations to the planning and design of new greenfield hospital campuses. However, we are proud to provide structural engineering, civil engineering, secure design, parking & traffic consulting, and structural diagnostic services to the Department of Veterans Affairs, USACE, and other agencies that support Veteran and military healthcare.

By working closely with architects and contractors, we develop facilities that are flexible and functional for medical staff and our Nation's veterans, who deserve world-class healthcare.









#### **Featured Projects**

Charlotte VA Health Care Center, Charlotte, NC

Tulsa VA Ernest Childers
Outpatient Clinic, Tulsa, OK

Fort Knox Ireland Army
Health Clinic, Fort Knox, KY

Greenville SC VA Outpatient Clinic, Greenville, SC

#### **Additional Projects**

Orlando VA Medical Center Primary Care Expansion, Orlando, FL

Michael E DeBakey VA Medical Center Vertical Expansion, Houston, TX

Greenville VA Outpatient Clinic, Greenville, NC

VA New Orleans Hospital Garage Nondestructive Evaluation, New Orleans, LA

VA Energy Center Building 70 Condition Assessment and Repairs, Dallas, TX

Topeka VA Chiller Plant Blast Study, Topeka, KS

Milwaukee VA Medical
Center Zablocki Spinal Cord
Injury Center, Milwaukee, WI

Kansas City VA Medical Center Parking Garage, Kansas City, MO

Southern Nevada Healthcare System VA Outpatient Clinic,

Las Vegas, NV

Lee County VA Outpatient Clinic, Cape Coral, FL

Bay Pines VA Secure Design Consultation, Bay Pines, FL







Secure Design
Structural Engineering

#### Owner

Department of Veteran's Affairs

#### **Project Details**

Construction Cost: \$100 million

Completion Date: 2016
Project Size: 325,000 SF

Department of Veteran Affairs

## **Charlotte VA Health Care Center**

Charlotte, North Carolina

The Charlotte Health Care Center is one of the largest in the country and is the largest design-build-leaseback project in the United State for Veterans Affairs. This six-story outpatient health care facility, is located on a 35-acre site in Charlotte, North Carolina, and will provide more than 20 different medical services to Veterans Administration patients.

At the project kick-off, we participated in a pull planning meeting and identified the leanest way to deliver the structural design. The result was an early foundation package, early steel mill order package, and two early steel detailing packages. Although this was outside the normal VA design/review/procurement process, we negotiated the early packages to expedite the construction schedule and provide information to the contractor when needed. The foundation and steel mill order packages for this 325,000 SF facility were issued less than 4 months after receiving notice to proceed.

Walter P Moore's secure design group provided design and detailing of the force protection system for this federal facility according to the specified guidelines. Floor reinforcement and roof deck connections were designed to provide protection against progressive collapse anywhere in the building. Perimeter cladding was supported only from the perimeter beams, and cladding connection points were designed to absorb blast energy without damaging the primary structural frame. We also worked with the cladding suppliers to provide forces and detailing requirements for all the exterior cladding. The insulated precast panels were extensively modeled to optimize the thickness, connection type and spacing, panel proportions and jointing, and internal reinforcement. Site security was also designed with standoff distances integrated with a pleasing site and landscape plan for this beautiful facility.









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Structural Engineering
Secure Design
Construction Engineering

#### Owner

Department of Veterans Affairs

#### **Project Details**

Construction Cost: Confidential
Completion Date: June 2021
Project Size: 180,000 SF

Department of Veterans Affairs

# Tulsa VA Ernest Childers Outpatient Clinic

Tulsa, Oklahoma

Walter P Moore provided structural engineering, secure design, and construction engineering services for a Department of Veterans Affairs outpatient health care center in Tulsa. This new two-story facility consolidated a multitude of services into one building, replacing the Ernest Childers VA Outpatient Clinic, Tulsa VA Behavioral Medicine Clinic, and Tulsa VA Dental Clinic. The center includes spaces for patient registration, offices for Veteran Service Organizations, a Veterans Canteen Service retail space and food court, a VA Police operations center, storage spaces, and five conference rooms.

For the primary structure, our structural engineering delivery was integrated with our construction engineering team to provide full structural steel connection design and steel detailing services. Walter P Moore provided a fully connected LOD 400 TEKLA model to the steel fabricator to expedite an early steel mill order, accelerate steel fabrication, and increase the fidelity of fabricated steel. Impressed by our team's work, the steel erector lauded this as the easiest steel erection project they had completed to date.

Now complete, the facility provides veterans with easy access to world class healthcare services under one roof.



Structural Engineering Secure Design

#### Owner

U.S. Army Corps of Engineers (USACE) - Louisville District

#### **Project Details**

Construction Cost: \$36 million
Completion Date: January 2020
Project Size: 101,000 SF

#### Sustainability

LEED Gold®

U.S. Army Corps of Engineers

## Fort Knox Ireland Army Health Clinic

Fort Knox, Kentucky

Following base changes at Fort Knox, the previous Ireland Army Community Hospital was deemed much larger than was necessary to meet the community's needs. The Army decided that the aging facility needed to be replaced, resulting in the Ireland Army Health Clinic. The clinic was designed to create a patient and family-friendly environment. It was imperative to improve the quality and safety of care while still designing for future flexibility and growth.

Walter P Moore used moment framing around the perimeter to allow for more windows and an open facade. Additionally, with the moment frame we were able to achieve brace-free interiors for building flexibility in the future.

Secure design and specific vibration criteria were necessary for this clinic. A hardened facade design to meet DOD requirements took special consideration as it includes special overhangs, a two-story curtain wall and an interior clerestory. The building was also designed to meet the Facilities Guidelines Institute (FGI) vibration requirements.

Now complete, the facility includes physical therapy, primary and specialty care clinics, laboratories, radiology, pharmacy and mental health care.



Secure Design

#### Owner

Department of Veterans Affairs

#### **Project Details**

Construction Cost: \$31 million Completion Date: August 2013 Project Size: 80,000 SF

#### Sustainability

LEED Gold®

Department of Veterans Affairs

## **Greenville VA Clinic**

Greenville, South Carolina

The one-story clinic serves 18,000 outpatients through audiology, dental, dietetics, laboratory services, mental health, optometry, prosthetics, radiology, rehabilitation services, pharmacy, and primary care services. Our team provided structural hardening of the exterior envelope and progressive collapse resistance using tie force method per the UFC 4-023-03 Design of Buildings to Resist Progressive Collapse.

Walter P Moore performed blast and physical security design services for this project from conception through construction to achieve compliance with the Physical Security Design Manual for VA Facilities - Life SAFETY Protected. Primary scope areas included the design of the exterior envelope for blast resistance, including specification and review of window systems for blast resistance, and design of impact rated vehicle barriers. Where structural elements were exposed to blast loading or supported exterior envelope systems, our team performed dynamic analysis to confirm or adjust the design to achieve required blast performance.



## Who We Are

Walter P Moore is an international company of engineers, architects, innovators, and creative people who solve some of the world's most complex structural, technological, and infrastructure challenges. Providing structural, diagnostics, civil, traffic, parking, transportation, enclosure, technology consulting, and construction engineering services, we design solutions that are cost- and resource-efficient, forward-thinking, and help support and shape communities worldwide. Founded in 1931 and headquartered in Houston, Texas, our 725+ professionals work across 23 U.S. offices and six international locations.