walter p moore

Land Ports of Entry

Land Port of Entry Experience

The strength of the United States border infrastructure is critical to national security. Walter P Moore has extensive experience working along the U.S. border, where we have provided civil engineering, secure design, structural engineering, traffic engineering, and transportation engineering services for multiple branches of the U.S. government for several decades including the General Services Administration (GSA) and Department of Homeland Security (DHS).

Walter P Moore has contributed to the development of new Land Ports of Entry (LPOE), and the renovation of existing LPOEs. Projects have ranged from due diligence studies, infrastructure assessments, master planning, and developing bridging documents to renovations, new design, and construction phased services as the owner's representative. Additionally, Walter P Moore is among the first firms to have designed facilities under the GSA's BIM pilot program and the latest GSA and ISC anti-terrorism standards.

LPOE Stakeholders

- U.S. Customs and Border Protection (CBP)
- Food and Drug Administration (FDA)
- Federal Motor Carrier Safety Administration (FMCSA)
- Immigration and Custom Enforcement (ICE)
- U.S. Department of Agriculture (USDA)
- U.S. Fish and Wildlife Service (USFWS)
- U.S. Department of State
- Departments of Public Safety
- Federal and State Departments of Transportation
- State Commissions of Alcohol and Beverage
- Local Municipalities
- Local Planning Organizations

Project Experience

Anzalduas Land Port of Entry Owner's Agent, Mission, TX

Carrizo Springs Border Patrol Station Expansion, Carrizo Springs, TX

Columbus Land Port of Entry Expansion, Columbus, NM

Convent Avenue U.S. Land Port of Entry Expansion and Modernization, Laredo, TX

Del Rio Land Port of Entry, Del Rio, TX

Del Rio Border Patrol Station, Del Rio, TX

Eagle Pass Border Patrol Station, Eagle Pass, TX

Eagle Pass Fuel Station Renovations, Eagle Pass, TX

Freer Border Patrol Station Expansion, Freer, TX

GSA IDIQ Texas Zone IV 2012, Various Locations

GSA Office Building - Southwest Region, Albuquerque, NM

Kingsville Border Patrol Station, Kingsville, TX

Region 7 Pavement Assessment Program Design, Various Locations

South Laredo Border Patrol Station Expansion, Laredo, TX

Ysleta Port of Entry Expansion, El Paso, TX

Tornillo-Guadalupe Land Port of Entry, El Paso, TX

Uvalde Border Patrol Station Expansion, Uvalde, TX

Federal Motor Carrier Safety Administration Land Port of Entry Bridging Documents, Various Locations

- Santa Teresa, NM
- Columbus, NM
- Douglas, AZ
- Naco, AZ
- Eagle Pass 2, TX
- El Paso BOA, TX
- Laredo WTB, TX
- El Paso Ysleta, TX
- Laredo Columbia WEBB, TX
- Los Indios, TX
- Pharr, TX
- Progresso, TX
- Roma, TX
- Presidio, TX
- Hidalgo, TX
- Roma Measurement, TX
- Eagle Pass, TX
- Veterans/Los Tomates Brownsville, TX
- Presidio, TX

Federal Motor Carrier Safety Administration Land Port of Entry Owners Representative, Various Locations

- Santa Teresa, NM
- Eagle Pass 2, TX
- El Paso BOA, TX
- Laredo WTB, TX
- El Paso Ysleta, TX
- Laredo Columbia WEBB, TX
- Pharr, TX
- Douglas, AZ
- Naco, AZ
- Columbus, NM
- Los Indios, TX
- Veterans/Los Tomates Brownsville, TX
- Presidio, TX

Columbus Land Port of Entry

Columbus, New Mexico

Services Provided
Structural Engineering

Owner
U.S. General Services Administration

Project Details
Construction Cost: $67.9 million
Completion Date: 2018
Project Size: 58,000 SF

Sustainability
LEED Platinum®

Awards
2020 AIA COTE Top 10

In operation since 1989, the Columbus Land Port of Entry was a bustling full-service border crossing that hugged the New Mexico and Mexican borders. This port screened pedestrians, privately-owned and commercial vehicles. From multiple traffic flow assessments, it was found inspections and circulation was impeded from the increased traffic and only expected to grow over the trajected fifteen years. The aging facility was also found to inadequately support the functional needs and advances in technology of the present inspection process.

At the time, the government of Mexico was amid a facility upgrade as well and opted to relocate their site southeast of the present location. This decision was in response to multiple occurrences of flood damage to both the Mexican and US ports. However, the move then required a bypass road which was completed before the US port began construction.

It was critical the existing facility remained in operation during all phases of construction however in the end, the 4.5-acre port was demolished as part of the scope. The new site spans approximately 14.7-acres and includes a main structure, vehicle inspection canopies and processing areas, kennels, an illegal substance vault, commercial buildings and booths, parking areas and addresses the site drainage problem.

Convent Avenue U.S. Land Port of Entry Expansion and Modernization

Laredo, Texas

Services Provided
Civil Engineering
Structural Engineering
Traffic Engineering

Owner
U.S. General Services Administration

Project Details
Construction Cost: $17.5 million
Completion Date: May 2018

Sustainability
LEED Gold

Walter P Moore provided civil, structural, and traffic engineering for the expansion and modernization of the historic land port of entry (LPOE) expansion. Located on Bridge #1, the LPOE is 65+ years old, and is the only pedestrian crossing between the Downtown areas of Laredo, Texas and Nuevo Laredo, Tamaulipas. It is the only historic POE in Region 7 and is eligible for the National Register of Historic Places. It is also a Privately Owned Vehicles (POV) crossing. Substantial increases in pedestrian traffic have been documented and are expected to continue. The LPOE pedestrian access did not meet today's standards for handicap accessibility or life safety. Additionally, the 5-acre LPOE had site constraints that limited expansion potential for the port without significant reconfiguration.

Civil engineering services included site roadway geometry design and layout, drainage design to meet EPA Section 438 criteria and gain LEED storm water points, pavement design, perimeter fence security design meeting CBP standards, and utility design including domestic and fire water along with an onsite rain water harvesting cistern. Civil engineering services also included sanitary sewer design and design construction administration.

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Services Provided
Structural Engineering

Owner
U.S. General Services Administration

Project Details
Construction Cost: $15 million
Completion Date: 2008
Project Size: 72 acres

Ysleta Port of Entry

El Paso, Texas

Walter P Moore provided structural engineering services for the $15 million U.S. Port of Entry Expansion at the Ysleta Border Station. The Ysleta Border Station is located in El Paso, Texas at the border with Juarez, Mexico on a 72-acre site, constructed in 1991 with additions to the commercial vehicle inspection area in 1996.

The project includes the expansion and addition of several component areas of the Port of Entry on the border station site. These one story additions are load bearing masonry with steel joist roof structures. The component areas include the addition of crossover road, rapid enforcement lanes, paving and fencing, interior upgrades and high mast lighting, an eight lane Primary Inspection Canopy, exercise room and storage building, import dock additions and a safety inspection canopy. The canopies utilize tapered steel wide-flange girders that cantilever approximately 17'-0".

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Services Provided
Civil Engineering
Traffic Engineering
Structural Engineering

Owner
U.S. General Services Administration

Project Details
Construction Cost: $71.5 million
Completion Date: 2019
Project Size: 117 acres

Tornillo-Guadalupe Land Port of Entry

Tornillo, Texas

Walter P Moore provided civil, traffic, and structural engineering design and construction phase services for the new Land Port of Entry. The project is located in El Paso County at the Tornillo-Guadalupe bridge site. The 117-acre project included the site work and embankment of approximately 320,000 cubic yards of earth and design of all concrete pavement and roadways on the port site, along with administrative buildings, kennels, water distribution for domestic and fire, Privately Owned Vehicles (POV) and Government Owned Vehicles (GOV) parking and impound lots, inspection lanes, and import and export cargo building loading docks. This included approximately 22 acres of site pavement and design.

Walter P Moore designed all routing of underground utilities and the sanitary, storm, and domestic water systems. The project included design of a domestic booster pump station and storage tank, which included a 50,000-gallon steel glass lined domestic water storage, a 220,000-gallon steel glass lined fire suppression storage tank, and 6,500 linear feet of 8-inch PVC C900 for both domestic and fire suppression system lines. An onsite, packaged sanitary treatment plant performance specification was provided and coordinated with the General Services Administration, Customs and Border Protection, and potential suppliers of the packaged unit. Onsite storm water and retention was designed for the 100-year storm event and treated sanitary effluent is designed to be retained on site and reused as part of the landscaping drip irrigation.

Walter P Moore also provided design of all traffic related signage and striping, along with site circulation review and recommendations. The project was designed using BIM/Revit modeling and AutoCad Civil 3D to incorporate and minimize design and construction conflicts.

Services Provided
Civil Engineering
Traffic Engineering

Owner
U.S. General Services Administration

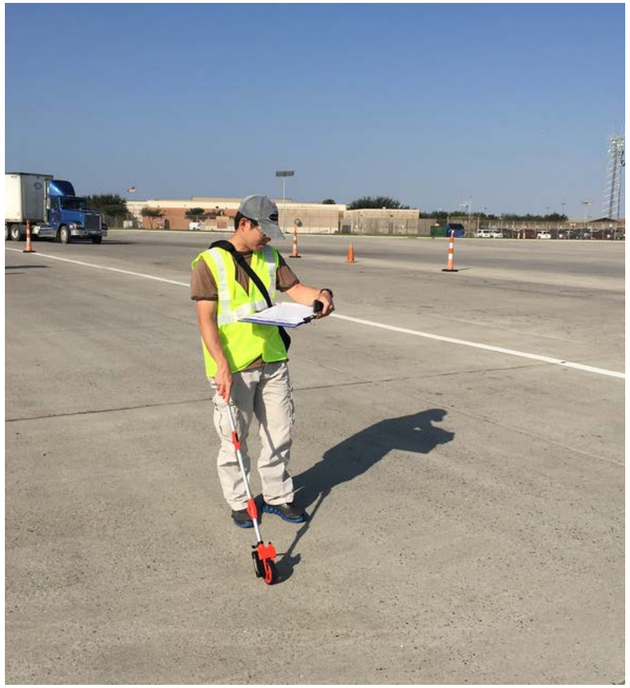
Project Details
Completion Date:
Various from 2014 to present

Land Port of Entry (LPOE) Bridging Documents

Various Locations

Walter P Moore provided civil and traffic engineering analysis and design of expansions, modifications, retrofits, and complete replacements at 18 LPOEs between Brownsville, Texas and Tucson, Arizona. The scope of work included a feasibility study/due diligence report for each site to determine the improvements required and to accommodate current and future needs, promote safety, and avoid conflicts with other LPOE tenants. After the studies were complete, Walter P Moore provided bridging documents for each location so the GSA could procure a design-build contractor and architecture/engineering team. Each location consisted of a new administrative building, inspection canopy, and related civil site work. We also provided construction management and administration for locations that went to design and construction.

- Santa Teresa Port of Entry, Santa Teresa, NM
- Eagle Pass Port of Entry Bridge 2, Eagle Pass, TX
- Bridge of the Americas Port of Entry, El Paso, TX
- World Trade Bridge Commercial, Laredo, TX
- Ysleta Port of Entry, El Paso, TX
- Laredo Columbia WEBB, Laredo, TX
- Los Indios, Brownsville, TX
- Pharr, TX
- Progresso Port of Entry, Progresso, TX
- Roma Port of Entry, Roma, TX
- Presidio Port of Entry, Presidio, TX
- Douglas Port of Entry, Douglas, AZ
- Naco Port of Entry, Naco, AZ
- Columbus Port of Entry, Columbus, NM
- Hidalgo Port of Entry, Pharr, TX
- Roma Measurement, Roma, TX
- Eagle Pass Port of Entry Order for Pavement Work, Eagle Pass, TX
- Progresso Port of Entry Order for Pavement Work, Progresso, TX



Services Provided
Civil Engineering

Owner
U.S. General Services Administration

Project Details
Completion Date: 2017

Region VII Land Port of Entry Pavement Assessments

Various Locations

Walter P Moore developed the pavement assessment operational program for all of GSA Region VII, which includes Texas, Louisiana, Arkansas, Oklahoma, and New Mexico. The main focus of the program included conducting pavement assessments at multiple Land Port of Entry (LPOE) sites. PAVER™ 7, the off-the-shelf non-proprietary system, was used to document the information collected. PAVER™ 7 develops Pavement Condition Index (PCI) ratings for the pavements through field inspections and data collection. The PCI ratings helped develop annualized budgeting and provide recommendations for future maintenance, including repair and replacement. The assessments were conducted in accordance with the American Society for Testing and Materials (ASTM) D6433 – Standard Practice for Roads and Parking Lots Pavement Condition Index Surveys. The LPOEs and their approximate total pavement areas included the following:

- Ysleta, El Paso, TX – 2,814,865 SF
- Bridge of The Americas, El Paso, TX – 1,062,500 SF
- Columbia, Laredo, TX – 1,507,300 SF
- Los Indios, Harlingen, TX – 1,030,300 SF
- Los Tomatoes, Brownsville, TX – 1,602,700 SF
- Pharr, Pharr, TX – 1,669,900 SF
- Tornillo Guadalupe, El Paso, TX – 1,112,800 SF
- World Trade Bridge, Laredo, TX – 1,698,600 SF
- Santa Teresa, El Paso, TX – 417,500 SF

GSA Office Building - Southwest Region

Albuquerque, New Mexico

Services Provided
Structural Engineering
Secure Design

Owner
U.S. General Services Administration

Project Details
Construction Cost: $17.7 Million
Completion Date: 2012
Project Size: 80,000 SF

Sustainability
LEED Silver®

Awards
2012 AIA Austin Merit Design Award

The General Services Administration Office Building is a two story building that houses support offices, fitness areas, weapons and arms storage and detention spaces for the U.S. Immigration and Customs Enforcement Agency. Walter P Moore modeled the structure in REVIT Structure to enhance the coordination efforts with the architect who also worked in REVIT.

The building is set back a minimum of 100 feet from a secure perimeter and required a high level of protection for blast. From the onset the design team knew that the exterior wall was going to be heavy. When fully grouted CMU was determined to be the most economical system, WPM designed the exterior CMU as load-bearing to support the steel framed superstructure and reduce costs. The building architecture mimicked an adobe look that is predominant in New Mexico with the application of a final finish on the exterior face of the CMU.

The project is certified LEED Silver. WPM pushed sustainability at every opportunity (during the pursuit, early in and throughout the design and through construction) even as it appeared that other stakeholders were not accustomed to structural engineers being so proactive about promoting sustainability.

WPM relentlessly pushed to implement a strategy of using high recycled contents, including high levels of fly ash replacement of cement. Included in this strategy was the use of a minimum 50% fly ash replacement of cement in the CMU wall grout. This was the first use of high fly ash grout in the Albuquerque market and equivalent to the CO2 emissions of the annual commuting of the office of record.

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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 24 U.S. offices and six international locations.