PROJECT PROFILE





Tensar

PROJECT NAME

Calexico Border Patrol Station Parking Lot and Road Paving, Calexico, CA

PRODUCT

TriAx Geogrid TX7 Geogrid UFGS Modified TriAx Geogrid Type 4 Specification

OUANTITY

50,000 Square Yards

ENGINEER

US Army Corps of Engineers, Los Angeles District

CONTRACTOR

AC LOPEZ CONSTRUCTION, INC.

INSTALLATION DATE

February, 2017

PROJECT DETAILS

Aging infrastructure required the reconstruction of existing pavement structures including parking lots and access roads. The new parking lot pavement section consisted of:

4-inches AC placed on 8-inches AB

To accommodate heavy loads, the new access road pavement section consisted of:

4-inches AC placed on 14-inches AB.

In order to construct the pavement sections, the subgrade was assumed to be firm and unyielding meeting standard compaction requirements. However, during demolition the contractor encountered the following challenges:

- Unsuitable Subgrade with extreme pumping (in-place subgrade strength ranged from 0.25% to 1.0%)
- Equipment rutting
- · Significant time delays
- Increase construction costs

PROJECT PROFILE



Access Road and Parking Lot: TriAx Geogrid Enhanced Pavement Section

4-inch AC

14-inch AB

Pumping Subgrade (CBR = 1.0%)

Tensar TriAx Type 4 Geogrid

Parking Lot: TriAx Geogrid Enhanced Pavement Section

4-inch AC

10-inch AB

14-inch AB

Pumping Subgrade (CBR = 0.25%)



Tensar.

SOLUTION

After evaluating various alternatives, the contractor elected to use two Tensar designs for the variable subgrade conditions:

- For a subgrade CBR of 1.0%
 - 14 inches of AB placed on TriAx Geogrid Type 4.
 - The alternative solution required 30-inches of AB with no geogrid).
- For a subgrade CBR of 0.25%
 - 24-INCHES OF AB using two layers of TriAx Geogrid Type 4
 - The alternative solution required 48-inches of AB with no geogrid).

Both TriAx geogrid designs provided a firm and unyielding AB surface to support the paver for the AC installation.

Compared to the alternative solutions, both TriAx geogrid pavement designs provided:

- Increased speed of construction over traditional solutions.
- 2. Reduction of material trucks improving jobsite and community safety.
- 3. Reduced environmental impact.
- 4. Improved pavement performance and longevity.
- 5. Significant project cost savings.

For more information, contact Tensar Senior Regional Manager Lars Nelson, P.E. lnelson@tensarcorp.com or visit us at www.tensarcorp.com.