

PROJECT SPOTLIGHT

BORDER ROAD & FENCE PROJECT - DOUGLAS-NOGALES, AZ ARMORMAX™ ANCHORED REINFORCED VEGETATION SYSTEM

The Border Road and Fence Project is a 2,000+ mile (3219 km) project being constructed along the U.S.-Mexico Border from San Diego, CA to Brownsville, TX. The project is unique in that this road is being constructed with respect to political boundaries regardless of terrain. This presents unique challenges to the design and construction of this road as it crosses streams, rivers and mountainous terrain in ways where traditional civil design and construction might avoid. The ArmorMax system has been instrumental in providing permanent erosion control for cut and fill slopes that have resulted from the construction. In addition, there are drainage ways where the ArmorMax is being used to provide permanent erosion control as well. The ArmorMax system is comprised of a high performance turf reinforcement mat (HPTRM) and earth percussion anchors. Key challenges include UV Exposure- the vast majority of this road lies in arid or semi-arid climates where very little vegetation can establish and the HPTRM meets the most stringent UV stability requirement of 90% at 6000 hours. In addition, the high tensile strength of the HPTRM provides long-term protection against erosive forces - 10 times stronger than first generation turf reinforcement mats. The earth percussion anchors, made of corrosion resistant aluminum alloy, are connected to a stainless steel rod/tendon to fully enhance the corrosion resistance at the soil/air interface to ensure

that the anchors meet the permanent design life required by the project. The ArmorMax system offers the necessary material properties needed to provide the permanent erosion protection designed for this rugged environment.



PROJECT FILE

PROJECT ▶ BORDER ROAD & FENCE
LOCATION ▶ DOUGLAS-NOGALES, AZ
PRODUCT ▶ ARMORMAX™
APPLICATION ▶ ARID SLOPE & CHANNEL
ENGINEER ▶ MICHAEL BAKER COMPANY
DISTRIBUTOR ▶ CONTECH
TOTAL AREA ▶ ~50,000 SQ. YDS.