

Press Release – June 20, 2006

Aslan™ 100 GFRP Rebar used in Floodway Bridge – Winnipeg Manitoba



Photo Courtesy of Garth Fallis, Vector Corrosion Technologies

Aslan™ 100 GFRP Rebars have been used in the construction of several important concrete bridge structures this spring season. The most significant of these projects is the Floodway Bridge near Winnipeg Manitoba.

The bridge is a 16 span structure with each span measuring approximately 50ft x 143ft (15.3m x 43.5m). All concrete elements above the girders are reinforced with Aslan 100 GFRP bars manufactured by Hughes Brothers, Inc. of Seward Nebraska. Implementation of the GFRP bars in the bridge deck, barriers, abutments, deck drain and light standards areas was designed per the Canadian Highway Bridge Design Code which now includes provisions for the use of GFRP Reinforcing bars.

Over 310,000 lbs of Aslan 100 bars were used in this significant bridge structure making it the largest bridge built to date incorporating FRP non-metallic reinforcing. GFRP bars are 1/4th the weight of steel rebar. By using GFRP rebar, an extended service life for the bridge structure is anticipated due to the elimination of corrosion mechanisms in the steel free structure. Design guidelines, such as the Canadian Highway Bridge Design Code, CSA S-806 building Code and the ACI 440.1R-06 offer consensus standards for reinforced concrete design using FRP bars. Test methods such as ASTM D7205-06 and ACI 440.4R-03 describe tests used to validate properties of the FRP bars.

The Manitoba Floodway Authority recognized the use of GFRP Rebar as the most effective long-term solution. UMA Engineering designed the Floodway Bridge, the contractor is MD Steele and Bergen Reinforcing is installing Aslan 100 reinforcing. Each firm is from Winnipeg. For further information contact: Doug Gremel, Hughes Brothers, Inc. 210 N. 13th Street, Seward, NE 68434 Ph:800-869-0359, doug@hughesbros.com www.hughesbros.com