

ACN 109 200 900

## **AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT**

## 21 September 2017

# FHWA APPROVES USE OF EDENCRETE<sup>®</sup> IN FEDERALLY FUNDED REPAIR PROJECTS IN GEORGIA

#### HIGHLIGHTS

- FHWA APPROVES USE OF EDENCRETE<sup>®</sup> IN GDOT FEDERALLY FUNDED REPAIR PROJECTS
- FIRST PROJECT IN GEORGIA TO INVOLVE REPLACEMENT OF 11 LANE MILES (17.7 km) OF PAVEMENT ON I-16

#### DETAILS

The US Federal Highway Administration (FHWA) has approved the use of EdenCrete<sup>®</sup> in concrete used by the Georgia Department of Transportation (GDOT) in federally funded repair projects in Georgia (and to which FHWA contributes 80% of the costs).

GDOT has advised that the first federally funded project that it has selected in which EdenCrete<sup>®</sup> is to be used, will be a full depth concrete slab replacement project on Interstate Highway I–16 in Twiggs County. It will occur during this financial year and will involve replacement of approximately 11 lane miles (17.7 km) of pavement.

Replacement of 1 lane mile on Interstate Highways requires the placement of approximately 2,300 cubic yards (approximately 1,758 cubic metres) of concrete. State roads, which may have slower speeds and narrower lanes, would require less.

GDOT has advised that it expends an estimated \$18 Million annually on federally funded concrete rehabilitation projects, involving the replacement of approximately 22 lane miles (35.4 km) of pavement.

GDOT already includes the use of EdenCrete in all state funded, full depth concrete slab rehabilitation projects in Georgia. To date Invitations To Bid for two such state funded projects have now been issued.

GDOT has also advised that it invests an estimated \$20 Million annually in state funded concrete rehabilitation projects, estimated to involve replacement of approximately 28 lane miles (45.1 km) of pavement.

In January 2017 (see Eden announcement ASX: EDE 23 January 2017) EdenCrete<sup>®</sup> was added to the GDOT Approved Product List, and the GDOT specifications for the 24 hour repair mix for full depth slab replacements were amended to include the addition of EdenCrete<sup>®</sup> at 2 gallons/ cubic yard of concrete.

The approval for use of EdenCrete<sup>®</sup> in GDOT federally funded projects, followed a review in May 2017 by FHWA of the performance of EdenCrete<sup>®</sup> in the following projects in Georgia:

- the GDOT I-20 field trail (August 2015),
- the GDOT I -16 commercial slab replacement project (February 2017),
- the GDOT State Highway new concrete road pavement field trail (March 2017),
- the MARTA (Metropolitan Atlanta Rapid Transit Authority) field trial at a bus depot in Atlanta (May 2016), and
- a very heavy load bearing, high abrasion application on a hard-stand area at a large private factory (April 2016).

This initial FHWA acceptance in Georgia of the use of EdenCrete<sup>®</sup> in federally funded repair projects is a major advance in the EdenCrete<sup>®</sup> marketing programme and may assist in gaining FHWA approvals for use of EdenCrete<sup>®</sup>, in due course, in other States.

As previously announced (ASX: EDE 29 June 2017) EdenCrete<sup>®</sup> is now approved for use or on the Approved Product List (or Qualified Product List) in 9 US States, being:

Arkansas, Colorado, Georgia, Mississippi, North Carolina, Tennessee, Texas, Virginia and West Virginia (see Figure 1), collectively having approximately:

- 23.45% of the total US population;
- 19.11% of the total US land area; and
- 36,004 bridges that are structurally deficient or functionally obsolete or 24.59% of the total number of such bridges in the USA\*.

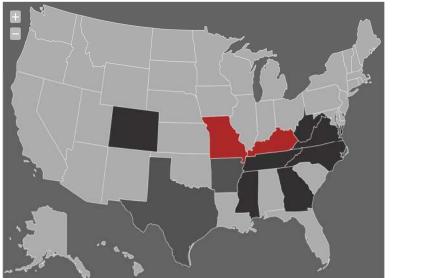




Figure 1. Map of USA showing current position of DOT Approval Applications

### CONCLUSION

The FHWA approval for the use of EdenCrete<sup>®</sup> in federally funded projects in Georgia is considered one of the most significant advances made to date by Eden in its quest to market EdenCrete<sup>®</sup> widely into the US concrete and infrastructure industries.

Not only is it a recognition by a US national agency of the benefits that EdenCrete<sup>®</sup> delivers to concrete (which recognition is anticipated to be relevant in marketing of EdenCrete<sup>®</sup> on a global basis) but it may also be relevant to achieving future FHWA approvals of EdenCrete<sup>®</sup> in federally funded DOT projects in other US States.

The significance of the FHWA in the US concrete and infrastructure markets is highlighted in a US Geological Survey in 2005\*\* of materials used on the Interstate Highway network.

This survey stated that in 2004 there was almost 4 million miles (6.5 million kilometers) of roads in the United States, with just over 45,000 miles (73,000 kilometers) comprising the Interstate Highway System (see Figure 2), and that almost 40% of all cement used in the USA in 2005 was used on the Interstate Highway network, and for which FHWA, in conjunction with State DOTs, is responsible.

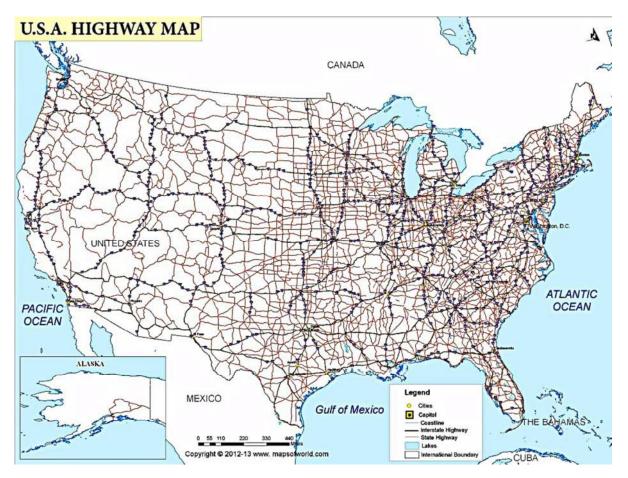


Figure 2. USA Highway Map - Interstate Highway System shown as dotted lines

#### BACKGROUND

EdenCrete<sup>®</sup> is Eden Innovations' 100% owned, proprietary carbon-strengthened concrete additive, one of the primary target markets for which is improving the performance of concrete used in the construction and maintenance of concrete roads, bridges and other infrastructure. Additionally, it has potential for use in a range of other concrete applications including high-rise building construction, marine and coastal applications, water storage and pipelines, and pre-fabricated concrete structures and products.

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**Gregory H. Solomon** Executive Chairman

\* DOT Fact Sheets Highlight Grim State of US Roads and Bridges – 9 July 2015

\*\* https://pubs.usgs.gov/fs/2006/3127/2006-3127.pdf