

Client Project Submission Form

To be submitted to Instructor: Stephen Bruneau, sbruneau@mun.ca, 864-2119

Civil Engineering Design Course ENGI - 8700
Memorial University
Faculty of Engineering and Applied Science
St. John's NL, Canada A1B 3X5



CLIENT

COMPANY	AMEC Earth & Environmental	address	133 Crosbie Road, P.O. Box 13216, St. John's, NL, A1B 4A5	
Client Engineer	Kevin Penney, MScEng, P Eng	phone	722-7023	email kevin.penney@amec.com
Alternate Contact (at least one P.Eng)	Tara Allison, B Eng, EIT	phone	722-5062	email tara.allison@amec.com
	Clifford Smith, P Eng		722-7023	clifford.smith@amec.com

Proposed Project Title

Utilization of Recycled Glass in Non Structural Concrete

Description of Project

Recycling of glass in Newfoundland and Labrador has many restraints particularly its collection and transportation to mainland markets. In most cases glass ends up in the local landfill sites. Alternate use locally for the glass is required. Ongoing research has shown that glass can be used as an additive in concrete to reduce the amount of required Portland cement and fine aggregate. Further study is required to investigate its potential locally.

Requirement of Student Group

Requirements for this project include: A desktop study to review literature pertaining to prior research in this area; Laboratory tests to investigate the utilization of glass at different percentages as both a substitute for cement powder and as fine aggregate; Costs benefit analysis comparing the various percentages of glass substitution with traditional concrete designs; Final report summarizing the literature review, laboratory tests, cost benefit analysis, and applicable recommendations for further study/design.

OPTIONAL: COMMENTS, CONDITIONS, RESTRICTIONS QUESTIONS

AMEC will assist with the laboratory testing, procurement of materials, and guidance.