APPENDIX G: PHOTOS

Photo G.1: Shuttering

Photo G.2: Casting concrete – crack inducer and crack former in place in mould
Photo G.3: Beam and air-cured cubes

Photo G.4: Forming crack within 24 hours after casting beam
Photo G.5: Determining shrinkage of 100 x 100 x 300 mm beam

Photo G.6: Modulus of elasticity test on cylinder
Photo G.7: Determining compressive strength of concrete in cube press

Photo G.8: Determining modulus of rupture of concrete in two-point loading press
Photo G.9: Determining modulus of rupture of concrete in two-point loading press

Photo G.10: Crack face of modulus of rupture test beam - 37.5 mm dolomite aggregate
Photo G.11: Data logging equipment

Photo G.12: Pressing down ends of beam to break aggregate interlock bond for testing at different crack widths – Experiment 1
Photo G.13: Initial crack opening/closing system

Photo G.14: Dynamic loading and crack opening/closing system – Experiment 2
Photo G.15: Pressing down ends of beam to break crack open for testing at different crack widths – Experiment 3

Photo G.16: 40 kN static loading with two actuators at one side of joint (Spider measuring temperature in beam in foreground) – Experiment 3
Photo G.17: Thin, 0.1 mm crack at start of testing

Photo G.18: Clearly visible crack after completion of testing
Photo G.19: Crack face of 19 mm granite aggregate test beam – Experiment 1

Photo G.20: Crack face of 37.5 mm granite aggregate test beam – Experiment 2
Photo G.21: Crack face of 19 mm dolomite aggregate test beam – Experiment 3

Photo G.22: Crack face of 37.5 mm dolomite aggregate test beam – Experiment 4
Photo G.23: Pre-deformed plastic joint with edge of plastic sticking out on top of concrete surface — Experiment 5

Photo G.24: Smooth face of pre-deformed plastic joint with plastic sheet in foreground — Experiment 5
Photo G.25: Laser measuring unit mounted on a milling machine to obtain Volumetric Surface Texture (VST) measurement of concrete sample