



## **Department of Works and Engineering**

### **CONCRETE REPAIR METHODS**

This document is intended to give contractors context of what concrete repairs may be required. The final methodology will be dependent on the site conditions and product(s) selected.

At this time, no concrete repairs have been scoped. A provisional sum is included in the Fixed Price Schedule. The contractor should only apply prices to the Schedule of Unit Rates, which will be used to value the actual works completed.

#### Concrete crack repair by epoxy/polyurethane injection

Preparation and repair should be in accordance with the product manufacturers directions. The expected methodology would include:

- Clean crack and surface ~1" on either side to remove oil, grease, and other contaminants
- Blowout the crack with oil-free compressed air
- Adhere injection ports
- Paste-over the crack, with particular care to cover injection ports
- Inject the bottom-most port until refusal, closing any ports that show material
- Open and inject the last port to show material
- Continue for the length of the repair

#### Concrete patch repair by mortar

Preparation and repair should be in accordance with the product manufacturers directions. The expected methodology would include:

- Sawcut edge of patch minimum 1/2" deep, and breakout to sound concrete
- Prepare substrate by exposing aggregate surfaces (high pressure water or scabblor)
- Remove all dirt, oil, grease etc from area to be repaired
- Clean exposed steel, and prime substrate
- Apply product, scrubbing into substrate, forcing into edges and working towards the center
- Allow product to stiffen, and finish with sponge float

#### Concrete sealing by coating

Preparation and repair should be in accordance with the product manufacturers directions. The expected methodology would include:

- Remove all dirt, oil, and other contaminants from concrete surface
- Ensure surface dry conditions
- Apply product to the required film thickness
- Re-coat as needed to build to final thickness