Reinstatement of Rigid (Granite) Pavement After Trenching

This document outlines the reinstatement requirements specific to rigid (granite) paving within the City of Perth. Along with the information specified in this document, reinstatement of trenches must comply to the appropriate specifications outlined in the Design and Construction Note: 102.06 - Reinstatement of Block and Asphalt Pavements After Trenching, such as general information and information regarding the installation and backfilling of pipes and conduits.

Where the reinstatement of rigid (granite) paving in footpath areas is required, the concrete slab and granite pavers must be installed to comply with the specifications in this document, to the satisfaction of the City of Perth supervisor and the details given in Design and Construction Note: Book 300.

All structures that are removed during the works must be reinstated, this includes expansion joints, isolation joints, steel reinforcement and gas vents.

1) Concrete

Prior to laying Concrete, ensure that the underlying sub-grade is compacted to 95% MMDD.

All reinstated concrete to be Fibre Reinforced Concrete, fibres as stated below. Concrete strength to be C40 with a maximum 20mm aggregate with 80mm slump.

Fibre Name: Dramix   Fibre Type: RC 65 / 60 BN   Fibre Dosage: 20kg/m3.

Mix concrete until all materials are uniformly dispersed and every particle of aggregate is coated with mortar. Place concrete into final position by conveyor, skip, chute or shovelling within 90 minutes of the cement placed into the mixer, so segregation and loss of fluids does not occur.

Once placed, the concrete must be fully compacted by mechanical vibrator. Vibrators shall be withdrawn from the concrete slowly at a speed not exceeding 25mm per second so that the void created by the vibrator closes behind it. Care shall be taken that vibrators be kept out of contact with reinforcement and formwork. Concrete shall be cured for seven days by covering with an approved sealed waterproof membrane kept in contact with the concrete, which is kept moist at all times.

2) Concrete Curing

Concrete shall be cured continuously for a minimum duration of 7 days, until the minimum compressive strength is achieved as per table 4.4 of AS3600-2018. Allow for sufficient ponding/sprinkling of the concrete with water prior to installing an impermeable membrane over the concrete. Maintain concrete at a constant temperature and prevent moisture loss during curing period. Other curing methods can be submitted to the City of Perth for consideration and approval.

3) Granite Paving

The granite paving to be used is called Austral Verde. Finish to be exfoliated. Stone type to be confirmed by Geological Survey of Western Australia as being the correct stone type. The applicant shall be liable for any additional costs associated with allowing for the correct stone type. For details of laying pavers and correct paving unit size refer Design and Construction Note: Book 300.