

## NOTES FOR THE SPECIFICATION FOR THE REPAIR OF SURFACE OPENINGS AND MINOR SURFACE LEVELLING

### 1. GENERAL

These notes are for the guidance of Supervising Officers only and must not be included in the contract documents.

### 2. RESPONSE TIMES

Response times required by the Engineer should be shown in a separate schedule in the Contract documents according to the particular traffic requirements and location.

Suggested response times are:

Road Group	Engineer Review	Contractor Carries out Priority Repairs
1	3 days	5 weeks
2	1 week	6 weeks
3	1 week	7 weeks
4	1 week	8 weeks

### 3. METHOD OF REPAIR

The Premix method is used for smaller surface levelling repairs.

When premix material is not available and unbound basecourse material is used to fill deformations, care needs to be exercised to ensure that the grading, and more particularly the top size of the material chosen, is compatible with the depth of deformation. Too large a stone can result in aggregate breakdown under the effect of rollers or segregation as a result of the anvil effect which is caused by compacting too shallow a thickness of

aggregate on a hard surface; the latter can be aggravated by the use of vibrating rollers, especially when the material is not kept damp.

#### **4. REMAKE MATERIAL**

The choice of basecourse aggregate, i.e. either AP40 or AP20 or an approved equivalent, has been left to the Contractor. Generally speaking, an AP20 aggregate will be suitable unless the depth of deformation is greater than 120 mm in which case for stability reasons, it is better to use AP40.

#### **5. CUTTING THE PERIMETER**

Excavators or similar are not regarded as suitable cutting equipment, neither are compressed air driven tools like jack hammers. Suitable saws or cutting wheels mounted on sufficiently heavy construction equipment are known to produce better results.

In order to provide a smooth transition from repaired to existing surface, especially where it concerns wheelrutting, it is recommended that the ends be cut at approximately 70° to centreline of the road rather than at 90°.

#### **6. SURFACE OPENINGS - CUTTING OF PAVEMENT SURFACE**

Where the pavement surface is severely cracked, the perimeter of the surface opening shall be cleanly cut before repair.

In order to reduce the likelihood of settlement, the width of the opening in the pavement surfacing shall be the larger of:

- (a) Two times the width of the trench, or
- (b) 300 mm.

Where the surface opening is less than 500 mm from the edge of the seal, the pavement surface between the opening and seal edge shall be also cut out and included in the reinstatement works.

#### **7. SECOND COAT SEALING**

Attention is drawn to the need to programme second coat seals in order to provide both waterproofing and a surface texture that is consistent with the adjacent pavement. Normally this will be within one month of first coat sealing but in special circumstances the timing may need to be varied. Second coat sealing should be separately scheduled and is covered by TNZ C6 specification.

**PAYMENT SCHEDULE**

<b>Item No.</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate</b>
<b>1.</b>	<b>Premix Reshaping Method</b>			
1.1	Premix	m <sup>2</sup>		
1.2	Grade 4 first coat chip seal	m <sup>2</sup>		
1.3	Friction course single layer	m <sup>2</sup>		
<b>2.</b>	<b>Rip and Remake Method</b>			
	<b>Existing Chip Sealed Surface</b>			
2.1	Remove existing, seal, supply makeup material and first coat seal.	m <sup>2</sup>		
	<b>Existing Premix Surfacing</b>			
2.2	Excavation, supply makeup material and compact.	m <sup>2</sup>		
2.3	Seal coat plus premix layer 25-50 mm depth	m <sup>2</sup>		

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