

## **SPECIFICATION FOR THE REPAIR OF EDGE BREAK**

### **1. SCOPE**

This specification sets out the requirements for repair of edge break in flexible pavements.

To achieve the long term maintenance objectives of Transit New Zealand, the following principles shall be followed:

- (a) The Contractor shall undertake a detailed inspection in order to meet the response times and shall mark on the roads the location and extent of proposed repair of edge breaks.
- (b) The Contractor shall schedule the location of all repairs required, indicating priority work, and shall submit the schedule together with the proposed method of repair, repair width and work programme to the Engineer.
- (c) The Engineer shall review the Contractor's programme, adjust for technical and budget restraints (if any) and return to the Contractor.
- (d) The Contractor shall carry out repairs in accordance with this specification and the adjusted schedule, and be responsible for subsequent maintenance of repairs during the Contract period.
- (e) The above shall be carried out within the response times specified.
- (f) Only work on the adjusted schedule will be paid for.

### **2. RESPONSE TIME**

The response time to carry out work in Clause 1 of this specification shall be as scheduled by the Engineer in the Contract documents.

### **3. WORK SCHEDULE**

All work scheduled shall be in terms of Transit New Zealand State Highway Route Positions and shall list priority work for particular road groups.

No claims for extras will be considered if the Contractor does not work off the Engineer's schedule or carries out work not scheduled or work in excess of the schedules areas unless authorised by the Engineer.

### **4. DEFINITION**

#### **4.1 Edge Break**

Edge Break is defined as fretting or breaking of the edge of a bituminous surface, such that seal loss encroaches into the carriageway by more than 100 mm from the nominal seal edge or onto the white edge line.

### **5. REPAIR**

#### **5.1 Shoulder Preparation**

In areas of edge break repair, there may be a need to prepare the shoulder before repair of the edge break can start.

Repairs to these conditions shall comply with the requirements of the TNZ Specification C10 "Maintenance of Unsealed Shoulders".

#### **5.2 Preparation of Edge Break Repair Area**

Before edge break is repaired, firm support shall be provided on each side of the repair area including tapers, to the depth specified in the schedule supplied by the Engineer. A firm foundation and a vertical face of not less than 25 mm where the edge break fill material abuts the existing seal, are required.

#### **5.3 Construction of Edge Break Fill Material**

The edge break fill material shall be premix.

To ensure bond between existing and fill material including the vertical seal face, a light tackcoat of emulsion shall be applied before any fill material is placed.

Upon completion, the outer edge of the repair shall present a uniform line lying between zero and 70 mm outside the nominal edge of the seal being repaired. At the end of the repair proper, any required transition between the existing seal edge and the repair edge shall be effected by a flat taper.

#### **5.4 First Coat Chip Sealing**

Where required by the Engineer, sealing of the repair shall be applied so that upon completion the work has a tidy appearance of rectangular shape without ragged edges. Any taper shall be sealed to follow the tapered line to form a tidy triangular shape.

The edge break repair area plus an overlap of 70 mm  $\pm$  20 mm onto the existing seal shall be sealed.

### **6. SURFACE SHAPE**

Edge break repairs shall be carried out so that upon completion of the work a stable repair which does not wave or creep under the action of compaction equipment or road traffic is produced. The finished surface shall be a continuation of the adjacent sealed surface and shall not hold surface water.

The surface shape of repairs shall be such that the existing road crossfall is maintained, the deviation when measured with a two metre straightedge shall not be greater than 10 mm, both along the repair and between the existing pavement and the repair and there shall be no sharp ridges.

### **7. TRAFFIC CONTROL**

All at times during the work or activities included in this specification the Contractor shall take responsibility to ensure all traffic control is carried out in accordance with the Specification for Temporary Traffic Control, TNZ G/1.

### **8. PERFORMANCE CRITERIA**

The performance of the Contractor during the contract period will be measured by the following criteria:

- (a) That all work is carried out in accordance with the Specification within the response times stated.

- (b) That completed work maintains a smooth riding surface within the surface deviation specified until the end of the defects liability period.
- (c) No flushing or bleeding of the completed surfacing.
- (d) That the repair remains an integral part of the pavement structure within the specified tolerance.

## **9. BASIS FOR PAYMENT**

The tendered rates shall include allowances for all costs associated with the work, including maintenance of the repair. Payment will be made at the unit scheduled rate for each metre of edge break, completed as specified, within the range 0 - 200 mm and 200 - 400 mm.

Where chip sealing of the edge break is required payment will be made at the unit scheduled rate for each metre of edge break.