

## **EAST AYRSHIRE COUNCIL**

### **CABINET 23 JUNE 2010**

#### **REPAVE PROCESS – A71 MOORFIELD TO NORTH AYRSHIRE BOUNDARY**

##### **Report By Executive Director Of Neighbourhood Services**

#### **1. PURPOSE OF REPORT**

- 1.1 The purpose of the report is to seek Cabinet's approval to enter into negotiations with Colas Ltd for the use of the Repave Process to repair the westbound carriageway of the A71 between Moorfield Roundabout and North Ayrshire Boundary.

#### **2. BACKGROUND**

- 2.1 The surface of the westbound carriageway of the A71 deteriorated significantly following the severe weather in December 2009 and January 2010. As a result, a temporary speed restriction has been in operation, reducing the speed limit from 70mph to 50mph, to reduce the incidence of vehicle damage from loose stone chippings.
- 2.2 The existing surface is a 20mm thick thin surfacing material laid around ten years ago over the existing 40mm thick hot rolled asphalt wearing course. Areas of chippings in the thin surfacing have stripped resulting in 20mm deep potholes, creating an uneven surface. The severe weather during the winter has accelerated this process.
- 2.3 The problem is limited to the surface material with no evidence of structural failure of the underlying pavement.
- 2.4 Council at its meeting of 11 February 2010 approved an allocation of £2M to repair roads damaged as a result of the severe winter weather.

#### **3. REPAIR OPTIONS**

- 3.1 The section of road is approximately 3.7km long and 7.3m wide. The channels are kerbed and there are side entry gullies, which means that the new surface has to be laid to the existing levels, it cannot be overlain. There are safety barriers on this section of road and again this removes the option of an overlay as the safety barrier would require to be raised.
- 3.3 The existing surface therefore has to be removed and a new surface laid. Using conventional methods this would require the removal of the failed 20mm surface course and the underlying 40mm original surface course. A new regulating course would then be laid followed by the laying of a new 40mm hot rolled asphalt (HRA) surface course.

- 3.4** This requires the removal of 3,500 tonnes of bituminous material (over 200 lorry loads) and the importing of 3,200 tonnes of new material (again over 200 loads). The cost of these measures is estimated at £25/sqm equates to £675,000.
- 3.5** Due to the cost involved in undertaking the work using the above traditional methods and the large carbon footprint associated with it, other more environmentally acceptable options were considered.
- 3.6** The Design Manual for Roads and Bridges (DMRB) and the Specification for Highway Works (SHW) approve the use of In-Situ Recycling: The Repave Process (SHW, Clause 926) as a method for replacing worn-out or damaged road surfacing. This is a process whereby the existing material is re-heated, scarified, re-shaped, compacted and overlain by a new surface. The new surface can be thinner than conventional methods as it is laid while the existing surface is still hot, thereby ensuring that the new and existing materials are bonded together.
- 3.7** Extensive investigations have been undertaken and it has been established that only one company within the UK has invested in the specialist plant required to undertake the Repave process to Clause 926, namely Colas Limited, Wallage Lane, Rowfant, Crawley, West Sussex, RH10 4NF. Colas Ltd were contacted and have surveyed the site. Their recommendation is to remove the top 30mm of the existing surface, repave the underlying material then overlay with a 25mm thick HRA. The quotation also includes for traffic management but does not include for road markings and studs ('cats-eyes'). Colas have quoted a rate of £10.08 per sqm, giving a total cost of £272,260, a potential saving of over £400,000. Colas would carry out all of the works apart from the previously mentioned road markings and studs, which would be carried out by East Ayrshire Council's term contractor.
- 3.8** The carbon footprint for the works will also be substantially reduced as only 1,780 tonnes of material will require to be taken off-site and less than 1,500 tonnes of new material will be required. In addition to the cost savings identified and the sustainability benefits, the final product will be as effective as resurfacing using traditional methods.
- 3.9** Other Roads Authorities including Glasgow City Council, South Lanarkshire Council and North Ayrshire Council have successfully used this process.

#### **4. COMMUNITY PLAN IMPLICATIONS**

**4.1** Resurfacing the road using recycled material and thereby reducing vehicle movements will lead to improved traffic management and a reduced carbon footprint, which addresses the following themes:-

- Improving Community Safety
- Delivering Community Regeneration

#### **5. LEGAL IMPLICATIONS**

**5.1** The Council's standing orders in relation to contracts (paragraph 20(1)) require Cabinet approval to be sought before tender negotiations can take place with a single contractor. Colas Ltd are the only company that can carry out the repave works to Clause 926 of the Specification for Highway Works.

#### **6. FINANCIAL IMPLICATIONS**

**6.1** The repave process is significantly cheaper than the alternative traditional method. The cost of the works will be met from the £2M approved by Council at the meeting of 11 February 2010 for the repair of severe weather damaged roads.

#### **7. RECOMMENDATIONS**

**7.1** It is recommended that Cabinet :-

- (i) authorises the Head of Roads and Transportation to enter into negotiations with Colas Ltd to carry out repave works to Clause 926 of the Specification for Highway Works on the A71 Moorfield to North Ayrshire Council boundary.

**Elizabeth Morton**

**Depute Chief Executive/Executive Director of Neighbourhood Services**

**JB/KA**

**17 June 2010**

#### **BACKGROUND PAPERS**

**None**

For further information on this report contact John Bryson Head of Roads and Transportation, telephone 01563 576310

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