

WESTHUMBLE STREET – WEIGHT LIMIT RESTRICTION AT ‘BOXHILL AND BURFORD’ BRIDGE

MOLE VALLEY LOCAL COMMITTEE 23 JULY 2003

KEY ISSUE:

Members are asked to approve the statutory advertisement and consultation of a new weight limit order in Westhumble Street at the ‘Boxhill and Burford’ Bridge. The new weight limit order would exclude all vehicles with a gross weight exceeding 7.5 tonnes from crossing the bridge.

SUMMARY:

A structural assessment of the ‘Boxhill and Burford’ bridge in Westhumble Street has indicated that the structural capacity of the bridge is 7.5 tonnes maximum gross weight. The existing weight limit order on the bridge is 7.5 tonnes but only applies to heavy commercial vehicles, and exempts such vehicles when used for emergency, maintenance or local authority purposes. This situation risks possible structural failure to the bridge and is therefore unsafe for users of both the highway and railway networks. A new weight limit order is required to prohibit all vehicles over 7.5 tonnes from crossing the bridge. Members are asked to give authorisation to advertise a new order, and, if no objections are maintained, for the order to be made.

REPORT BY:

ROGER ARCHR-REEVES
LOCAL TRANSPORTATION DIRECTOR

SURREY ATLAS REF:

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MOLE VALLEY DISTRICT WARD:

MICKLEHAM, WESTHUMBLE
AND PIXHAM

COUNTY ELECTORAL DIVISION:

DORKING NORTH

OFFICER RECOMMENDATIONS:

The Committee is asked to agree: -

- (i) that a new weight limit order is advertised to prohibit all vehicles over 7.5 tonnes from crossing the Boxhill and Burford Bridge in Westhumble Street, and, if no objections are maintained, the order be made.
- (ii) that authority is delegated to the Chairman and Vice-Chairman of this Committee, and to the Local Transport Director, to look at the findings of the Structures Team in respect of the temporary overdeck option outlined in this report, and to investigate whether any further funding options are available in order to feedback to a future meeting of this Committee if deemed appropriate.

1.0 INTRODUCTION and BACKGROUND

- 1.1 The 'Boxhill and Burford' bridge carries Westhumble Street over the railway line running between Dorking and Leatherhead. The road is an important access road from the A24 London Road into the village of Westhumble, and then continues into Chapel Lane and the Ranmore Common area. The 'Boxhill and Burford' bridge is located approximately 430m west of the A24 immediately adjacent to Boxhill Railway Station.
- 1.2 The bridge has recently been structurally assessed in accordance with current codes and the structural capacity of the bridge has been found to be 7.5 tonnes maximum gross weight. Although the bridge is currently subject to a weight limit of 7.5 tonnes, the limit only applies to heavy commercial vehicles. This allows other vehicles, in excess of 7.5 tonnes, to cross the bridge risking possible structural failure to the bridge. Due to the high risk of failure to the bridge an emergency order was recently made to prohibit all vehicles over 7.5 tonnes from crossing the bridge. This has since been replaced by a temporary order that has been made for a maximum period of 18 months.

2.0 ANALYSIS AND COMMENTARY

- 2.1 A structural assessment of the 'Boxhill and Burford' bridge was first carried out during the 1960's. This assessment resulted in an 8-ton weight limit restriction being implemented on the bridge in 1967, with the exception of public service vehicles that had a restriction of 10.9-tons.
- 2.2 The current weight limit order was introduced in 1989 to metricate the original order to comply with new signing regulations governing the signing of weight restrictions. A number of exemptions were included within this order which allows all non-heavy commercial vehicles over 7.5 tonnes to cross the bridge, and heavy commercial vehicles over 7.5 tonnes to cross when used for emergency, maintenance or local authority purposes. . A recent re-assessment of the bridge by Network Rail in accordance with assessment code BD21/01, The Assessment of Highway Bridges and Structures, published by the Highways Agency, has found the structural capacity of the bridge to be 7.5 tonnes maximum gross weight. Due to the change in the type and number of exemptions, Network Rail consider that the County Council have not maintained the status of the exemptions as originally introduced in 1967, and have requested that a new order is made to protect the bridge.

- 2.3 Following the request from Network Rail to implement a new weight limit order, local officers met with the Structures Team to assess the current risk to the bridge. It was considered that a high risk of failure to the bridge existed with the allowance of non-heavy commercial vehicles in excess of 7.5 tonnes being able to cross the bridge. Therefore, an emergency order was made to prohibit all vehicles in excess of 7.5 tonnes from crossing the bridge and this was imposed at the end of March 2003, and has since been replaced with a temporary order made for a maximum period of eighteen months which is due to expire at the start of October 2004.
- 2.4 The County Council and Network Rail have received numerous complaints from local residents in recent years regarding the abuse of the weight restriction on the bridge. The enforcement process is carried out by Surrey Police in conjunction with Trading Standards. Trading Standards have indicated that they consider the existing order to be difficult to enforce, as the current wording in the order requires vehicles to be taken to a weighbridge to be assessed, rather than using photographic evidence alone that could be used if the wording in the order was to be changed.
- 2.5 The introduction of a new weight limit order at the bridge will require vehicles in excess of 7.5 tonnes to use alternative roads such as Chapel Lane, site of the Quiet Lanes project, and Ranmore Common Road to access Westhumble village. These are both minor access roads of narrow width and with alignments that larger vehicles find difficult to negotiate. In view of this, Surrey County Council bridge engineers are in contact with Network Rail regarding the possibility of strengthening the bridge.
- 2.6 Any proposal to strengthen the 'Boxhill and Burford' bridge, to enable vehicles in excess of the current structural capacity of the bridge to cross, would require discussion with Network Rail, who are responsible for the maintenance of the bridge. An Act of Parliament limits the railway authority's responsibility for bridge strengthening to bridge loading requirements introduced in 1968, which equates to approximately 24 tonnes. Financial responsibility for funding the strengthening of a bridge beyond these requirements to the full 40 tonnes limit lies with the County Council. However, it is not clear whether Network Rail would agree funding to the 1968 bridge loading requirements as the County Council have previously accepted the permanent weight restriction. Advice from Surrey County Council Legal Services is that Surrey County Council will have to pay for all strengthening works.
- 2.7 It may be possible to provide an interim solution at the bridge by providing a temporary overdeck. This would increase the structural capacity of the bridge to enable the crossing of a maximum legal permitted heavy goods vehicle of 40 tonnes, under the exemptions of the existing order.

- 2.8 Structures Team are carrying out investigations in respect of the placement of a temporary overdeck in order to ascertain whether this is a technically feasible option. It is thought that the works to install the deck would be in the region of £100,000 and may incur significant ongoing maintenance costs. This option could be funded from the Local Transport Plan allocation from the current financial year should Members wish to re-prioritise the schemes detailed in the Projects Capital report included in this meetings agenda. Alternatively, authority could be delegated to the Chairman and Vice-Chairman of the Committee, and the Local Transport Director, to look at the findings of the Structures Team in respect of this option, and whether any further funding options are available in order to bring a further report to a future meeting of this Committee if deemed appropriate.
- 2.9 At the current time the bridge is not on the County Council's bridge strengthening programme as the weight restriction has been in force since 1967 and it has in the past been considered that this situation is acceptable. Structures Team have indicated that strengthening of the bridge is likely to cost in the region of £500,000.

3.0 CONSULTATIONS

- 3.1 A copy of this report has been sent to the local District and County Council Members, Mole Valley District Council, Mickleham Parish Council, Westhumble Residents Association and Surrey Police, Fire and Ambulance emergency services. Any comments received will be presented verbally at this meeting.

4.0 FINANCIAL IMPLICATIONS

- 4.1 It is estimated that the approximate cost of a new permanent traffic regulation order will be in the region of £5000. It is recognised that Members have given an indication as to their agreement for funding various Local Transport Plan (L.T.P.) schemes from the L.T.P. capital allocation (report presented to the Local Committee in April 2003) and as such, officers will if possible, assign a sum of approximately £5,000 from the aids to movement budget. It should be noted however that this may not be possible during the current financial year and the new traffic order may need to be progressed during 2004/5.

5.0 SUSTAINABLE DEVELOPMENT IMPLICATIONS

- 5.1 The existing weight limit order allows non-heavy commercial vehicles in excess of the structural capacity of the bridge to cross, risking the structural failure of the bridge.

6.0 CRIME & DISORDER IMPLICATIONS

- 6.1 There are no crime and disorder implications associated with this report.

7.0 EQUALITIES IMPLICATIONS

7.1 There are no equalities implications associated with this report.

CONCLUSION AND REASONS FOR RECOMMENDATIONS

The structural assessment carried out following current codes indicates that the structural capacity of the bridge is 7.5 tonnes maximum gross weight. A new order is required to exclude all vehicles in excess of the structural capacity of the bridge from crossing to protect the structural integrity of the bridge. The order will maintain safety for users of both the public highway and the railway network, and prevent the use of the bridge by inappropriate vehicles. At this time, it is considered that temporary bridge overdeck works or permanent strengthening works are not financially viable. However, it is considered prudent to further investigate the funding possibilities in this regard.

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BACKGROUND PAPERS: None

Version No.

Date:

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Initials:

No of annexes: