



**C141/1798 ST JOHNS HILL ROAD  
RAILWAY BRIDGE**

**LOCAL COMMITTEE FOR WOKING  
6 APRIL 2005**

**KEY ISSUE:**

The implementation of mitigation measures against vehicle incursion onto the railway at St Johns Hill Road Railway Bridge in accordance with Government guidance.

**SUMMARY:**

Following the road/rail accident at Great Heck, Selby in February 2001, the Secretary of State for Transport agreed to recommendations made by the Health and Safety Commission and the Highways Agency about how to mitigate as far as possible against similar incursions in future.

St Johns Hill Railway Bridge is one of three sites in the County identified as being at high risk for vehicle incursion onto the railway.

This bridge is owned and maintained by Network Rail. In conjunction with Network Rail, the County has now developed a scheme to provide mitigation measures against incursion onto the railway from vehicles using the bridge approaches and to reduce the risk of vehicle impact on the bridge parapets. The opportunity has also been taken to include in

the scheme, measures to improve traffic and pedestrian safety. Temporary interim measures to reduce the risk of vehicle incursion were installed by the County Council in February 2005, pending a permanent solution.

The work is expected to take 12 weeks (*to be confirmed*) to complete and would be jointly funded centrally by the County Council and Network Rail.

### **CONSULTATIONS:**

The following are aware of the proposals:

1. Woking Borough Council.
2. The Utility Companies.
3. SCC Local Transportation Service - Woking.
4. Network Rail.
5. Borough Ward and County Divisional Members, including Vice Chairman.
6. Emergency Services

### **OFFICER RECOMMENDATIONS:**

**The Committee is asked to agree**

**that the proposals shown on drawings 3386/111 and 3386/316 be implemented to reflect Government advice.**

## **INTRODUCTION and BACKGROUND**

1. After the road/rail accident at Great Heck in February 2001, the Secretary of State for Transport agreed to recommendations made by the Health and Safety Commission and the Highways Agency about how best to mitigate as far as possible against similar incursions in future.
2. This mitigation included a joint programme of work by highway authorities and Network Rail to assess and prioritise the risk of vehicles leaving the road and getting onto the railway at sites for which they were responsible. Network Rail and the highway authorities would jointly fund measures at those sites identified as high risk.
3. In conjunction with Network Rail, the County Council has completed the risk ranking exercise of all roads over rail sites in Surrey. St Johns Hill Railway Bridge is one of three sites identified in the County as being at high risk.
4. A scheme has been developed by the County Council in association with Network Rail, to mitigate against the high risk of incursion at the St John Hill Railway Bridge site.
5. The risk ranking and the proposed mitigation measures are in accordance with the Government's guideline: "Managing the accidental obstruction of the railway by road vehicles" published by the Department for Transport, February 2003.

## **ANALYSIS AND COMMENTARY**

6. St John's Hill Road Bridge is a single carriageway brick arch structure carrying a 30-mph 'C' classified road over the London – Bournemouth railway line between Brookwood and Woking Stations. The railway runs approximately East/West and the road North/South. A footbridge attached to the eastern parapet provides pedestrian facilities on one side only.
7. The brick parapets to this structure are particularly susceptible to vehicle impacts due to the narrow carriageway (6m). The carriageway over the bridge currently has priority signing for vehicles approaching from the Southeast.
8. Pending development of permanent mitigation measures, the County Council installed temporary traffic signal control and safety barriers on the approaches in February 2005 to reduce the risk of incursion and vehicle impact on the bridge parapets.
9. A proposal to mitigate against incursion onto the railway from vehicles via the bridge approaches and reduce the risk of vehicle impact on the bridge parapets is ready for implementation. The opportunity has also been taken to enhance pedestrian crossings in the vicinity of the bridge.
10. The work proposals include:

- Modification of the road junction layouts at each end of the bridge with associated pedestrian crossing alterations.
  - Installation of safety barrier on the approaches.
  - Installation of traffic signal control (shuttle working) at the bridge.
  - Application of high friction surfacing to the carriageway on both approaches.
11. The traffic signal control operates on shuttle working arrangement, i.e. only one approach will be on green at any point in time, subject to demand. In the absence of demand from either approach, signal heads at both approaches will be on red. Mode of operation for this system will be microprocessor optimise vehicle actuation (MOVA), which is on line with the ability to respond to traffic change (flow/demand).
12. A load assessment of the bridge structure is currently underway and is expected to be completed by May 2005. A programme for the works will not therefore be determined until the assessment result is known. This would allow for any strengthening works, if required, to be carried out concurrently with the vehicle incursion mitigation works.

### **FINANCIAL IMPLICATIONS**

13. The estimated cost of the scheme is £215,000 (excluding Statutory Undertakers works). This would be funded jointly by Network Rail and the County Council. The County Council has made funds available for mitigation measures from the County's budget for Bridge Strengthening.

### **SUSTAINABLE DEVELOPMENT IMPLICATIONS**

14. There are no specific sustainable development implications.

### **CRIME & DISORDER IMPLICATIONS**

15. There are no specific crime and disorder implications.

### **EQUALITIES IMPLICATIONS**

16. The proposals should raise no equalities implications.

### **CONCLUSIONS AND REASONS FOR RECOMMENDATIONS**

17. The Secretary of State for Transport agreed a process to mitigate, as far possible, vehicle intrusion onto the Railway. The County Council has identified that the St Johns Hill Road railway bridge is a high risk site and requires intervention.
18. The proposal shown on drawings 3386/111 and 3386/316, developed jointly by Network Rail and the County Council, is ready for implementation and reflects Government guidance.

**Report by: Geoff Wallace, Acting Local Transportation Director,  
Woking**

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**BACKGROUND PAPERS: “Managing the accidental obstruction of  
the railway by road vehicles” published by  
the Department for Transport, February 2003**

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