

SUMMARY OF APRIL 2001 REVISIONS – VERSION 3.4

The Continuous Beam Analysis (CBA) program has been revised for the following:

1. Use the axle weight of 110 kN (25 kips) for the design tandem pair of the PHL93 loading for the calculation of negative moments and the positive reaction at the pier. The axle weight of the PHL93 design tandem for all other calculations remains 140 kN (31.25 kips). See table below.
2. Calculate the reaction at interior supports due to PHL-93 loading using 100% of the effect due to design tandem pair plus design lane load instead of the previous 90% of the effect. See table below.
3. Apply a rounding technique so that the results of a symmetrical problem are not unsymmetrical.
4. Correct a problem where a 24 axle special live load was causing an error.

CBA Version Comparisons – Tandem/Truck Pair

Version	Loading	Effect	Tandem Pair %	Truck Pair %	Comments
2.4	PHL93	Reaction	100	100	140kN (31.25K) for tandem axle load
		Moment	100	100	140kN (31.25K) for tandem axle load
	HL93	Reaction	90	90	
		Moment	90	90	
3.0	PHL93	Reaction	100	100	140kN (31.25K) for tandem axle load
		Moment	100	100	140kN (31.25K) for tandem axle load
	HL93	Reaction	100	90	
		Moment	100	90	
3.3	PHL93	Reaction	90	90	140kN (31.25K) for tandem axle load
		Moment	100	100	140kN (31.25K) for tandem axle load
	HL93	Reaction	100	90	
		Moment	100	90	
3.4	PHL93	Reaction	100	90	110kN (25K) for tandem axle load
		Moment	100	100	110kN (25K) for tandem axle load
	HL93	Reaction	100	90	
		Moment	100	90	

New PHL93 Loading Codes in Version 3.4

1 – TANDEM + LANE GOVERNS

2 – TRUCK + LANE GOVERNS

3 – TANDEM PAIR + LANE GOVERNS

4 – TRUCK PAIR+ LANE GOVERNS

5 – TRUCK ALONE GOVERNS

6 – 25% TRUCK + LANE GOVERNS

7 – 90% (TRUCK PAIR + LANE) GOVERNS