Project Title: C-06-17: Test Box Beam Stiffening of Unanchored Temp. Concrete Barriers

PIN:
Responsible Unit: Engineering Division, Design Office
Project Manager: Hale, Terry

Project Goal:
This project is to test the box beam stiffening of unanchored temporary concrete barrier (TCB). Sections of box beam guide rail will be fastened to the back of TCB to determine maximum deflection of the system under NCHRP TL3 condition. Stiffening the TCB system and reducing the deflection without the need to anchor the barrier to the road or bridge will result in improved safety in work zones since it is anticipated that less travel lane width would have to be taken to accommodate the barriers deflection.

Actions Proposed:
Two tests with pick up truck at 25° angle hit and speed of 100 kph.
Test 1 – Single line of box beam bolted to back face of TCB.
Test 2 – Double line of box beam bolted to back face of TCB.

Details of the testing and bolt pattern available from Pratip Lahiri.

Anticipated Work Products and Accomplishments:
Stiffer TCB system without the need to anchor to road or bridge.

Proposed Budget: $100,000