Australasian advances in steel-concrete composite bridge and building structures

Brian UY The University of Sydney, Australia Stephen HICKS The University of Warwick, United Kingdom

ABSTRACT: This paper will address the Australasian advances in steel-concrete composite bridge and building structures. The paper will firstly provide an overview for the behaviour and design of bridge structures past, present and future. This will then be followed by an overview of the behaviour and design of building structures, past present and future. Over the last decade there have been significant developments on the development of a bridge standard for steel-concrete composite structures, namely AS/NZS 5100 Part 6 and salient elements of recent advances will be highlighted in this paper. In parallel with work being carried out on the development of a bridge standard has been work on the development over the last five years on a building standard for steel-concrete composite structures, namely AS/NZS 2327. Once again, salient features of this standard will be provided in this paper. The paper will conclude with discussions on ongoing and further research that is required in the area of steel-concrete composite structures to deal with the ongoing demands of modern bridge and building structures.