

Award Winning Delivery Solution

Majors Road – Southern Expressway

Client Name: Lend Lease

Year Completed: 2014

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Major's (cont.)

“ The surety that we realised through the delivery solution was outstanding, our installation process benefited greatly because of the flexibility that we had around crane and weather delays allowing for absolute control of our site resources without costly delay implications ”

- Kevin Shine, Project Engineer, Lend Lease



32.5m long members are not straight forward to transport to any site. To minimise traffic disruption and maximise efficiency, the decision was made to move all 8 bridge girders (total of nearly 80t) to the site in one movement. This saw the design of a purpose built transport and storage cradle to ensure a safe and damage free end result. Cradle had to allow the specific truck trailer combination enough room to reverse under the load, this heavy lift deck had the ability to hydraulically raise the trailer deck under the load which allowed the removal of the bolted legs once the load was secured on the trailer with a reverse of this methodology on site for unloading. Engineering calculations and detailed shop drawings were completed to allow for a safe, smooth and problem free execution of the plan.

The custom designed and built transport/storage cradle minimised damage to the coating system in the whole of project handling, zero double handling and maximum cure times were possible due to the methodology, this ensured a successful end result.

The delivery was coordinated so that the whole load was positioned directly adjacent to the permanent bridge site which allowed our client surety to directly unload and install the beams at their absolute convenience and without the need to double handle the heavy, yet delicate items. It proved to be a safe and efficient methodology of both transport and handling on site due to the reduced number of oversize loads on our public roads. There was an added bonus of not having the normal and often difficult coordination of site staff and expensive lifting equipment mobilisation and re-mobilisation for unloading of the items upon their immediate arrival on site on a weekend. This project won an Innovation Award through Lend Lease's National Operations.