

CHIEF BRIDGE ENGINEER CIRCULAR

CBE 00/08

BAR SHAPES AND STEEL LISTS FOR PRECAST CONCRETE MEMBERS

No. Sketches Following	0	No. Appendix Sheets Following	0
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Background:

The RTA has traditionally provided bar shapes and steel lists for its precast concrete items. With the general abandonment of steel lists in the 1980's, the steel lists for precast items was transferred to and included on the drawings for the precast elements. The principal advantages in this providing precast concrete reinforced steel lists on the precast drawing are:

- (i) the designer is more certain that what is designed can be built;
- (ii) the pre-caster is more easily able to assure the contractor, and hence the RTA, that the design has been complied with;
- (iii) all the relevant information is provided on the one drawing.

As the precast work often on the construction critical path has significant repetition and little scope for error, the need for accuracy and avoidance of error is greater in precast work than most on-site work.

The provision of the bar shapes and steel lists on the precast drawings does impose a small additional cost in the design. Under the commercial pressures of bid design work, the designers will omit the steel list unless the client specifies and pays for the work involved.

It is in the RTA's best interest to minimise contractor difficulties and maximise the assurance of good construction practice where this can be achieved at low cost.

Action:

All bridge designs prepared for RTA works which contain precast reinforced or precast prestressed concrete members, shall include both the relevant bar shape diagrams and steel quantities on the drawings for those precast concrete members. The bar shapes design and steel list shall comply with the Structural Drafting Manual.

All design briefs for bridges shall contain a clause to this effect.



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