



The structural work shown on this drawing is considered to be structurally sound, and suitable for the design loads.

All construction to be as per current Australian Standards and Building Codes, in accordance with MBRC requirements, and in a professional and tradesmanlike manner.

IAN BARNES & ASSOCIATES P/Ltd
 CONSULTING ENGINEERS
 P.O. Box 1378
 CABOOLTURE 4510
 ABN 70 057802490
 Office : 07 5495 8444
 Mobile : 0415 873 320
 RPEQ 3333 Date : 13/09/2017

NOTES:

1. Fauna rail or fauna shelf provides predator-prey separation for small mammals. It may be used where elevated post and rail cannot be constructed i.e. stormwater culverts. It is also suited to smaller culverts.
2. Adequate culvert size is influenced by target fauna species and geographical location. Designers should consult an ecologist or suitably qualified professional with regards to appropriate culvert size for target species.
3. Culvert size and length influences use by wildlife. Culverts with heights of $\geq 1800\text{mm}$ cater for a greater range of native species and should be used as a minimum for koala. 3000mm culverts provide greatest advantage for fauna.
4. Fauna underpasses with a length greater than 25.0m may benefit from the inclusion of a lightwell - particularly if the height of the culvert is $\leq 1500\text{mm}$.
5. Ensure existing vegetation is retained as close as practical to both ends of the culvert to provide shelter for crossing fauna.
6. Where vegetation removal is undertaken for construction, designers should incorporate revegetation planting to support biodiversity and encourage crossing by wildlife.
7. This type of fauna underpass is not generally intended for stormwater drainage culverts refer standard drawing GI-0530 and GI-0531 for alternate details.
8. Timber sleepers shall be 200x50 pine or hardwood and treated to hazard level H5 in accordance with AS1604.
9. Pine logs to be $\varnothing 200$ and preservative treated to hazard class H5 to AS1604.1 and have a durability class 4 to AS5604.
10. Steel sections grade 300 material and hot dipped galvanised after manufacture.
11. Welds to be 6mm continuous fillet welds and effected with E48xx or W50x electrodes but not less than that required by AS4100.
12. Bolts, washers, nuts and screws to be treated with 'Zenith-Tufcote' or 'Buildex-Climacoat' or approved equivalent (unless noted otherwise). All bolts shall be fixed with one washer under the turned part.
13. Concrete anchors shall be Ramset Chemset 800 series or approved equivalent.



TYPICAL FAUNA UNDERPASS SECTION
 LOOKING THROUGH CULVERT
 Scale A

REVISIONS	INIT	DATE
E		
D		
C		
B	TC	7/17
A	RH	11/16
X	BW	07/16

SCALES
A 0mm 250 500 750 1000 1:50
B 0mm 50 100 150 200 1:10

Drawn	BW	Date	07/16
Coordinator	PP	Date	07/16
AUTHORISED			
SYD JERRAM 07/07/16			
Manager Integrated Transport Planning & Design RPEQ 6872			

FAUNA CROSSING UNDERPASS SHEET 1 OF 2

Moreton Bay Regional Council

DRG No. **GI-0540**

ORIGINAL SIZE	REVISION
A3	B