



14 June 2013

Steven S Gikas & Associates
Structural Consulting Engineers
8 Balandra Place Kareela, NSW 2232

Your Ref: PTtank

PTtank Analysis and Design Software – Technical Opinion

Dear Steven

The above software has been reviewed by Hyder Consulting and found to provide comprehensive coverage in the structural design of normally reinforced and/or post tensioned concrete, circular tanks.

The software provides the user with a consistent approach to circular concrete tank design and analysis whilst allowing a range of solutions, including precast and cast insitu wall construction with pinned or free based details, the associated base slab and perimeter ring beam, all in a logical and integrated manner.

The design methodology follows sound engineering principles and carries out its structural engineering checks to the requirements of AS3735 Concrete Liquid Retaining Structures.

Tank designs produced by the software have been independently verified by this office and we have found good agreement; with the advantage that a complete solution can be arrived at using the software in a fraction of the time required by hand calculations.

It is our opinion that PTtank represents the current state of the art in the design of circular concrete tanks and reservoirs.

As in most specialist areas of engineering and technology, designers and users of this software should be experienced in this area of design and construction and should satisfy themselves that application of the software is appropriate and their designs are adequate for the intended application.

Yours sincerely

A handwritten signature in blue ink, appearing to read "Frank Filippone".

Frank Filippone
Technical Director - Structures