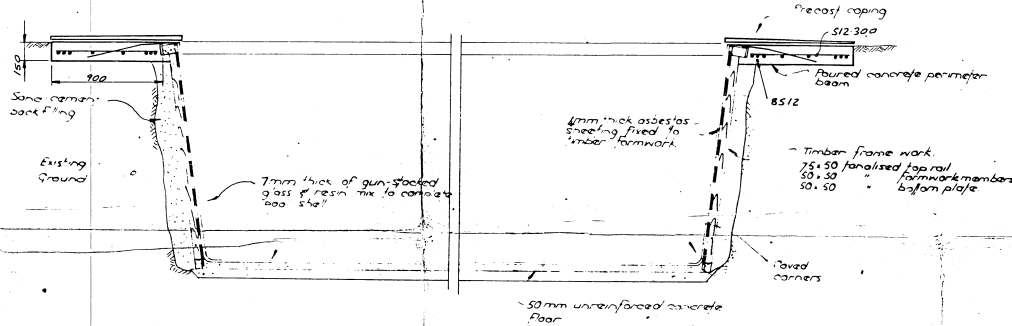
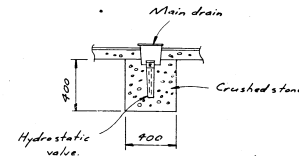


SECTION A-A

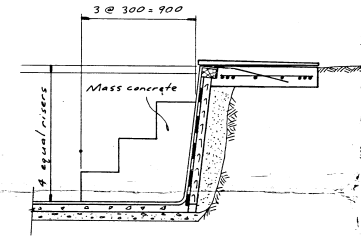


SECTION TYPICAL CONSTRUCTION DETAILS

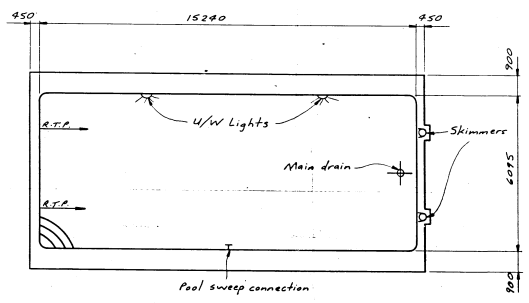
Brick ties at 600 c/c to be placed between layers of fibreglass and set into concrete lean.



MAIN DRAIN DETAIL



SECTION THRU STEPS



POOL PLAN

For site plan refer architects drawing no. 10.

SITE PLAN

G.R.P Swimming Pool Calculations  
 Assumptions - (1)  $f_b = 200 \text{ MPa}$  (ie 822)  
 (2)  $E = 27573 \text{ N/mm}^2$   
 (3) Wall thickness 63mm  
 (4) Slab of ground level is 100mm above ground level

41450/0  
 Received Building Section  
 - 4 MAR 1982

152 \* 1001/2 \* 3/81 = 1493 N/m  
 1066 \* 1001/2 \* 3/81 = 10470 N/m  
 Max B.M. =  $\frac{1493 * 3/4^2}{2} + \frac{128 * 8 * 3/4 * 3/4}{2}$   
 = 166 \* 480  
 = 636 KN/m = 636 \* 10^3 N/mm  
 Z =  $\frac{1000 * 63^3}{6}$  = 6615 mm^3  
 $f_b = \frac{636 * 10^3}{6615} = 96 \text{ N/mm}^2 \ll 200 \text{ MPa}$   
 I =  $\frac{1000 * 63^3}{12}$  E = 27573 N/mm^2  
 Total pressure = 1493 + 10470 = 314  
 = 5467 KN  
 = 5467 \* 10^3 N  
 $\delta = \frac{0.13 * 5467 * 10^3 * 3/4^2 * 12}{27573 * 10^3 * 63^3}$   
 = 34.4 mm

Full height ground water conditions neglecting any surcharge  
 152 \* 1001/2 \* 3/81 = 1493 N/m  
 1066 \* 1001/2 \* 3/81 = 10470 N/m  
 3/4 \* 1001/2 \* 3/81 + 3 \* 301 \* 3/81 = 11562 N/m  
 Reaction of slab  
 =  $\frac{1493 * 152 + 10470 * 3/4 + 8 * 3/4 * 3/4}{2}$   
 = 113 \* 682 + 1367 = 1761  
 = 2162 = 1761 KN +ve

These figures should be read in conjunction with the brief 'Notes' section submitted to R.C.P. Plans with the original figures.

Glass Fibre Reinforced Plastic Swimming Pool  
 Tensile Strength 551 to 827 MPa  
 Compressive Strength 411 to 482 MPa  
 Density 2.0 g/cm<sup>3</sup> (Specifically 2753 N/mm<sup>2</sup>)  
 100% fibre used  
 Wall thickness 70mm

- Notes
- Provide continuous drainage layer under pool floor being 30mm of blue metal bladed with sand provide membrane between bit of concrete pour slab
  - Provide hydrostatic relief valve & main drain
  - Not required
  - Sand, cement backfilling to be compacted to provide continuous support to pool walls. Min 10%
  - The pool deck to be designed for surcharge loadings ie traffic, sloping ground
  - Engineering calculations are by Leves, Phillips, Chapple & Pines
  - Floor profile post & aligners not shown
  - All concrete F20 MPa

BUILDING WORKS BEING OR TO BE CONSTRUCTED IN CONFORMANCE WITH THE APPROVED PLANS THE BUILDING ACT, THE NOTATIONS MADE ON THE PLANS AND ANY MATTERS SPECIFIED ON THE BUILDING PERMIT, THE APPROVAL OF PLANS OR THE GRANT OF A BUILDING PERMIT DOES NOT AFFECT THE CREATION OF ANY OTHER LAW IN THE TERRITORY, NOR DOES IT AUTHORISE THE USE OF THE LAND CONTRARY TO A PROVISION, COVENANT OR CONDITION OF LEASE.

APPROVED FOR CONSTRUCTION BY THE HOLDER OF A "CLASS LICENSE" UNDER THE BUILDING ACT 1975  
 DEPUTY BUILDING CONTROLLER UNITED BUILDING CHURCHILL 1975

NO.	AMENDMENT	DATE	APPROVED
1			
2			
3			
4			
5			
6			
7			
8	Main drain wall thickness walkways	27/182	S.P.

MONARO & BROOKS  
 AQUARIUS POOLS A.C.T.  
 P.O. BOX 22 SPA POOLS MITCHELL  
 KAMBAH 2002 ACT 125 NAMATJURA DRIVE RD 413343  
 PH. 88 4455 FISHER A.C.T. 2011  
 TEL. (0621) 88 4648

PROPOSED SWIMMING POOL FOR URAMBI CO-OPERATIVE COMMUNITY ADVANCEMENT SOCIETY LTD, CROZIER CIRC. KAMBAH, A.C.T.  
 DESIGNED AND DRAWN BY  
 SWIMMING POOL CONSULTANTS PTY LTD  
 CONSULTING ENGINEERS  
 22 Hill John Young Drive, Ayrton Queensland 4071 Tel. 388 1111  
 APPROVED B.L. 9/10/81 SCALE 1:100, 20, 500 DRAWING No. SP 1001 1116