#### GENERAL NOTES:

1 ... These drawings shall be read in conjunction with the site specific Geotechnical Engineers report that must accompany all pool installations.

2 ... No building works shall be constructed on or over any allotment boundary or easement or other similar such property title without the necessary permits and/or approvals. These drawings do not constitute such permits and/or approvals irrespective of whether building works are so indicated on or over such property titles.

3 ... Setting-out dimensions shall be verified by the Builder prior to commencement of work. Dimensions shall not be obtained by scaling the drawings. Dimensions are in millimetres, unless indicated otherwise. Drawing practice is to AS 1100.

4 ... During construction all structures and structural elements shall be maintained in a stable condition and no part shall be overstressed.
5 ... All workmanship and materials shall be in accordance with the requirements of the Australian Standards, the Building Code of Australia, and the by-laws and ordinances of the relevant Building Authority.

6 ... References to Australian Standards refer to the current edition unless specifically noted otherwise.

7 ... Excavations must be shored/propped to ensure the excavation is maintained in a safe and stable condition.

#### FOUNDATIONS & SITE DRAINAGE:

1 ... Footings have been designed for an allowable bearing pressure of  $\underline{200}_{\ \ \ }kPa.$ 

2 ... Piers have been designed for an allowable bearing pressure of  $\underline{300}_{}$  kPa.

3 ... The Builder shall obtain written approval from the site specific Geotechnical Engineer for the foundation in accordance with the requirements of these plans and relevant Australian Standards prior to pool installation.

4 ... The site shall be excavated so as to ensure adequate surface drainage away from the excavation in such a manner to prevent ponding beside any new works.

5 ... The site shall be drained in accordance with clause 5.2 of AS 2870, "Residential Slabs and Footings".

6 ... Piers shall be taken to strata approved by the site specific

Geotechnical Engineer and shall only be filled with concrete with the written approval of the Engineer.

#### CONCRETE:

1 ... All workmanship and materials shall be in accordance with AS 3600 except where varied by the contract documents.

 $2 \hdots$  ... The quality of concrete shall be maintained in accordance with TABLE 'CQ'.

3 ... Concrete above ground shall be moist cured for minimum of 7 days, except where fully protected from direct sunlight, in which case, a minimum of 3 days. Alternatively, curing may be by spraying with an approved curing compound to Manufacturer's recommendations within 1 hour of finishing.

4 ... Clear concrete cover to reinforcement shall in accordance with TABLE 'CCC', unless indicated otherwise on the drawings.

 $5 \hdots$  ... Reinforcement shall be lapped in accordance with TABLE 'RL' for bars.

#### TABLE 'CQ' - CONCRETE QUALITY

Element	Slump	Max. Agg Size	Cement Type	Concrete Grade
Piers	80	20	Blended	N25
Pool	80	20	Blended	N40

TABLE 'RL' - REINFORCEMENT LAPS for BARS							
Reinforcement	Vertical Lap	Horizontal Lap					
N12	550	550					
N16	700	700					

TABLE 'CCC' - CLEAR CONCRETE COVER TO REINFORCEMENT.												
Exposure Class	A1			A2			B1			B2		С
Concrete Quality	N20	N25	N32	N25	N32	N40	N25	N32	N40	N32	N40	N50
Pool									45			

#### FOOTINGS AND SLABS:

1 ... A geotechnical investigation will be required to establish the site classification prior to bulk excavation.

2 ... All soil containing vegetable matter is to be stripped from the site.

3 ... Sand fill over 100mm deep is to be placed in layers not exceeding 150mm and compacted, without the addition of water, using a vibrating plate compactor. Sand fill must not be placed under footings or slab-on-ground edge beams.

4 ... Concrete shall be poured on a 0.2mm High impact resistant polyethylene membrane, placed over well-consolidated packing sand. Polyethylene shall be lapped a minimum of 300 and taped at all joints and penetrations.

5 ... Finished pool/slab levels and edge beam treatments are not to infringe the BCA & Building Authority's requirements.

#### SCREW PILES:

1 ... Install Screw Piers to achieve a minimum Safe Working Load of 70kN/pier - see details.

2 ... Piers to be finished below the level of the under side of the proposed footings - see details.

3 ... Screw piling contractors Engineer to review and approve pier record prior to placement of reinforcement.

4 ... Pier records to include : pier locations, driven depths, set or torque and Safe Working Loads achieved for each pier. Engineering certification of Safe Working Loads achieved to be provided by the piering contractor.

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### **DESIGN NOTES**

DN1 ... The pool constructed in accordance with the details will be structurally adequate for a 20 year design life.

DN2 ... The pool has not been designed to prevent drying shrinkage cracks.

DN3 ... We have not inspected the site prior to design of the pool. Site specific geotechnical requirements must be provided by the geotechnical engineer prior to pool installation.

DN4 ... We have not been provided with a geotechnical report on the subsurface foundation profile.

DN5 ... The pool has not been designed to support any loads from adjacent structures. All adjacent structures must be piered or underpinned to min. 300 below the zone of influence of the pool excavation.

#### STRUCTURAL SPECIFICATION

#### DIMENSIONS

DM1 ... Concrete sizes indicated are nett exclusive of finish and shall not be varied nor shall holes be cut through without approval from the engineer.

#### FOUNDATION

F1 ... Foundation materials must be approved by the site specific Geotechnical Engineer prior to pool installation.

F2 ... Foundation material must be 200kPa or better of piers installed in accordance with the piering details.

#### REINFORCEMENT

R1 ... Generally : Reinforcement shall be structural grade deformed bar (N12) lapped 550mm at joints, welded and shall be accurately maintained in position by approved abairs at 900mm max controls.

maintained in position by approved chairs at 900mm max. centres. R2 ... Concrete Cover : Clear concrete cover to reinforcement 45mm to water face & top of bondbeam or walkway. 45mm to Soil.

R3 ... Skimmer Box : Minimum reinforcement around skimmer box shall be 3/N12 vertical splices from wall to back of skimmer and 2/N12 horizontal splices from wall around back of skimmer plus each bond beam bar to be spliced around back of skimmer.

#### CONCRETE

C1 ... Concrete shall have a minimum compressive strength of f'c 40MPa at 28 days using max.10mm angular coarse aggregate, clean sharp sand, and 280kg/m<sup>2</sup> effective cement content. Slump, 80mm. C2 ... Concrete to be cured for min 7 days after placement.



				V	
	/	r	500	2	35
	•				
			-	105	
(	•				
S P	<sup>?ool Type</sup> THE A	RC	TIC (7.0	)	
RECAST PLUNGE RIVE	E POOL				
)5	Drawing No. P2 O	F	5	lssue B	Size A3





## PRECAST POOL FOUNDATION DETAILS

THE ARTIC (7.0) SITE CLASS 'A', 'S', 'M', 'H1 OR 'H2' WITH SITE BEARING CAPACITY ≥ 200kPa

ENSURE FOUNDATION IS LEVEL WITH OPTIONAL 20mm COMPACTED GRAVEL BELOW POOL. BACKFILL AROUND POOL TO BE SAND/CEMENT MIX OR COMPACTED ROAD BASE WITH SITEWON 400 THICK CLAY CAPPING TOP OR CONCRETE CAPPING.

TYPICAL SECTION IN-GROUND N.T.S SITE BEARING CAPACITY ≥ 200kPa

SITE BEARING CAPACITY < 200kPa





- 70kN SCREW PILES WITH 450Ø x 500 DEEP 25MPa CONCRETE PILE CAP @ MAX. 1500c/c TO BE CONFIRMED BY SITE SPECIFIC GEOTECHNICAL ENGINEER

PLUNGE POOL SLAB PLAN N.T.S

THE ARTIC (7.0) ALL SITE CLASSES WITH A SITE BEARING CAPACITY < 200kPa

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Issue	Drn	Des'd	Description	Date	A.C.N. 608 365 760	Approved by B.E. CPEng. NER	23-09

# TYPICAL SECTION ABOVE GROUND N.T.S



RIVE					
	Drawing No.			lssue	Size
5	P5	OF	5	В	A3

Pool Type THE ARCTIC (7.0)

000 -N12 HORIZ. U-BARS @ 100c/c