

NOTE: ALL SETOUT DIMENSIONS SUPPLIED BY THE BUILDER OR CLIENT. SETOUT DIMENSIONS TO BE CONFIRMED ON SITE PRIOR TO EXCAVATION.

NOTE: WHERE TREE ROOTS ARE ENCOUNTERED AT OR BELOW POOL BASE DURING EXCAVATION, NEWPORT CONSULTING ENGINEERS ARE TO BE CONTACTED FOR FURTHER ADVICE IN RESPECT TO THE TREE EFFECTS ON THE POOL

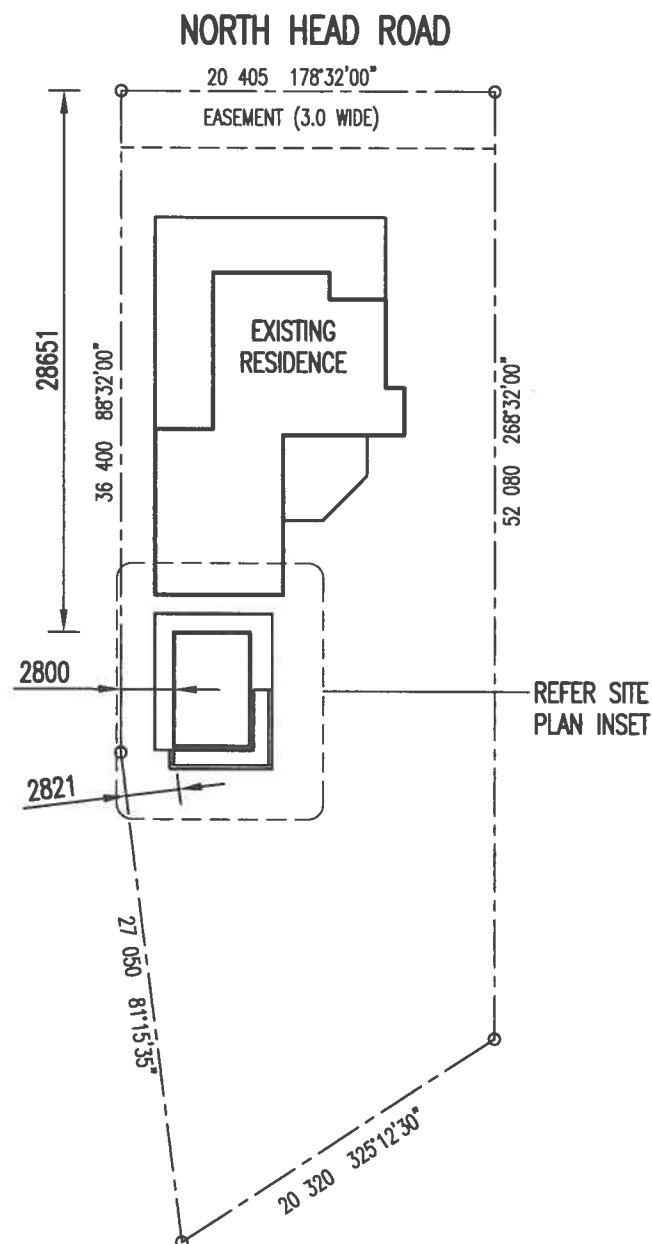
NOTE: BUILDER MUST CONFIRM THAT EXISTING RESIDENCE DOES NOT PLACE ANY LOAD ON (AND IS FOUNDED BELOW INVERT OF) THE SWIMMING POOL STRUCTURE.

NOTE: BUILDER TO ENSURE HOUSE FOOTINGS ARE NOT COMPROMISED BY POOL CONSTRUCTION & VICE VERSA

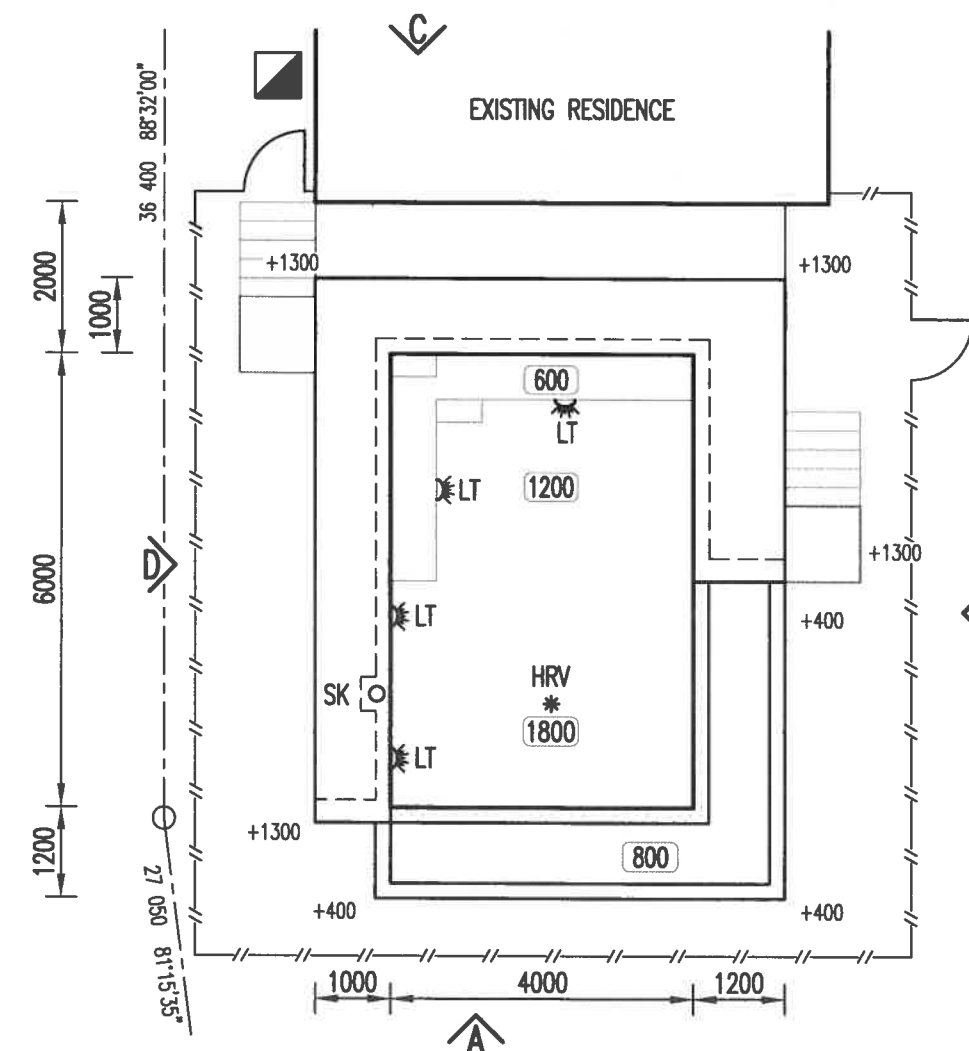
NOTE: ENSURE EXISTING FOUNDATIONS ARE PROTECTED & AVOID DAMAGE DURING POOLS CONSTRUCTION

NOTE: POOL BASE TO FOUND ON MINIMUM BEARING CAPACITY MATERIAL OF 100KPa. TO BE CONFIRMED ON SITE

NOTE: REFER TO GEOTECHNICAL SITE INVESTIGATION BY AUSTRALIAN SOIL AND CONCRETE TESTING PTY LTD (ASCT) ON REF NO: H23-3588  
DATED: 23/03/2023  
SOIL CLASS: 'P(M)'



SITE PLAN  
SCALE 1:400



SITE PLAN INSET  
SCALE 1:200

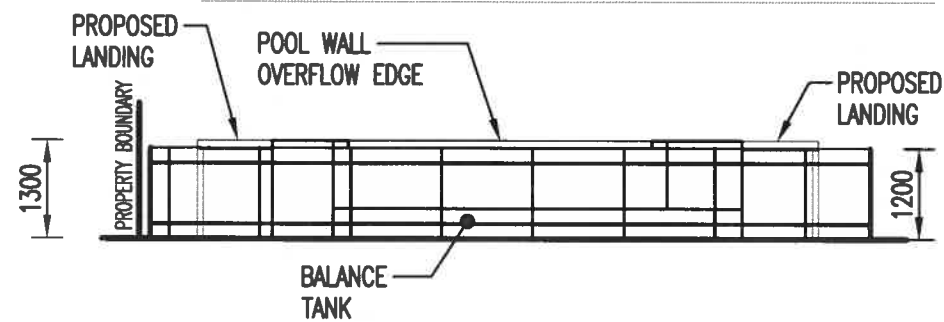
POOL LEGEND	
SYMBOL	DESCRIPTION
LT	INDICATES UNDERWATER LIGHT
SK	INDICATES SKIMMER BOX
RTP	INDICATES POOL RETURN (2 MIN, IF NOT SHOWN BUILDER TO CONFIRM ON SITE)
HRV *	INDICATES HYDROSTATIC RELIEF VALVE
→	INDICATES FALL OF POOL FLOOR
—//—	INDICATES FENCE LINE
1200	INDICATES POOL DEPTH
+1200	INDICATES APPROXIMATE HEIGHT OF POOL WALL OUT OF GROUND.
■	INDICATES SAND FILTER LOCATED 300 MIN. FROM POOL FENCE, 1200 MIN. FROM TOP OF BOUNDARY POOL FENCE & ENCLOSED IN A SOUND PROOF BOX IF REQUESTED BY COUNCIL.

### NOTES

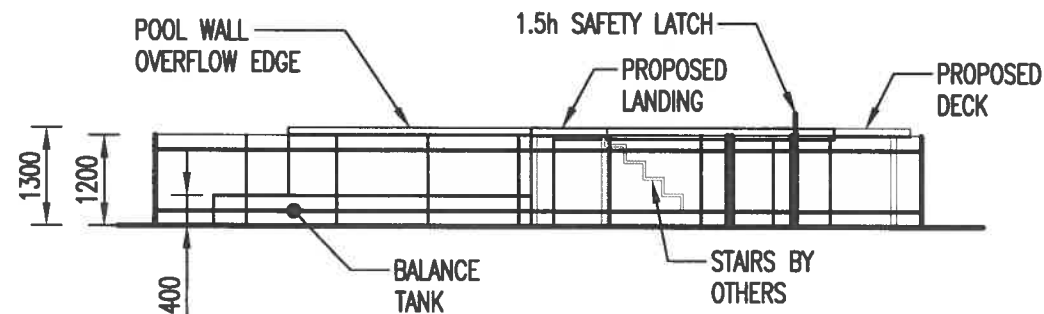
- P1 POOL BUILDER TO ENSURE ANY FOOTINGS OR ADJOINING STRUCTURES ARE NOT UNDERMINED BY POOL EXCAVATION. ANY UNDERPINNING REQUIRED SHALL BE DONE BEFORE EXCAVATION.
- P2 POOL WATER TO BE TREATED IN ACCORDANCE WITH AS 3633.
- P3 POOL AREA TO BE FENCED IN ACCORDANCE WITH AS 1926.1-2012 & POOL WATER RETICULATION SYSTEM TO COMPLY WITH AS 1926.3-2010.
- P4 EMPTY POOL BY DISCHARGING TO STORMWATER, OR SEWER (AS DIRECTED BY COUNCIL).
- P5 FIX EARTHSTRAP TO REINF. BESIDE SKIMMER AND WIRE TO HOUSE CIRCUIT EARTHING SYSTEM.
- P6 IF POOL FOUNDED ON FILL ENGINEERS TO BE CONSULTED FOR PIER DESIGN.
- P7 ANY UNDERGROUND SERVICES SHOWN ON THIS PLAN ARE LOCATED IN GOOD FAITH FROM INFORMATION SUPPLIED TO US BY OTHERS. N.C.E. CARRIES NO RESPONSIBILITY FOR ACCURACY OF THE LOCATION OF SERVICES WHICH MUST BE LOCATED ON SITE BY OWNER.
- P8 IT IS THE BUILDERS RESPONSIBILITY THAT WHEN POOL EXCAVATION EXCEEDS 1500 DEEP, RISK TO ANY PERSON ARISING FROM THE COLLAPSE OF THE EXCAVATION / TRENCH OR ENGULFMENT MUST BE MINIMISED BY THE FOLLOWING, BUT NOT LIMITED TO : SHORING BY SHIELDING OR OTHER COMPARABLE MEANS (eg. BOXING) BATTERING OR BENCHING.

					Newport		CLIENT		BUILDER		JOB NO.	
					Consulting Engineers		BELL		LIVING POOLS & SPAS		23-0485	
							32 NORTH HEAD ROAD				DWG NO.	
							NEW BRIGHTON				P02	
							NSW 2483					
							LOT NUMBER 4		DP 1035885		DRAWN	
											DPB	
											DESIGNED	
											MY	
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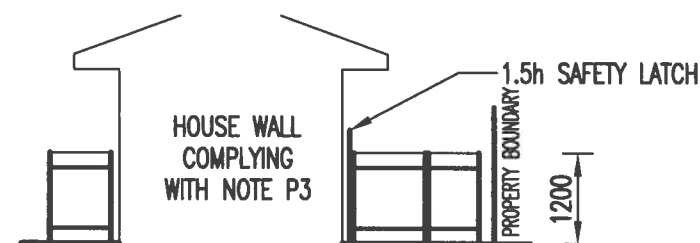




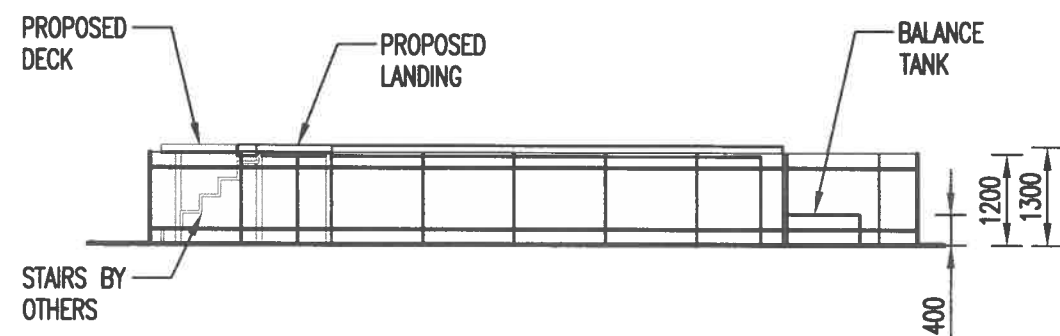
**FENCE ELEVATION A** SCALE 1:100  
12.0m REFER NOTE P3 ON SHEET 1.



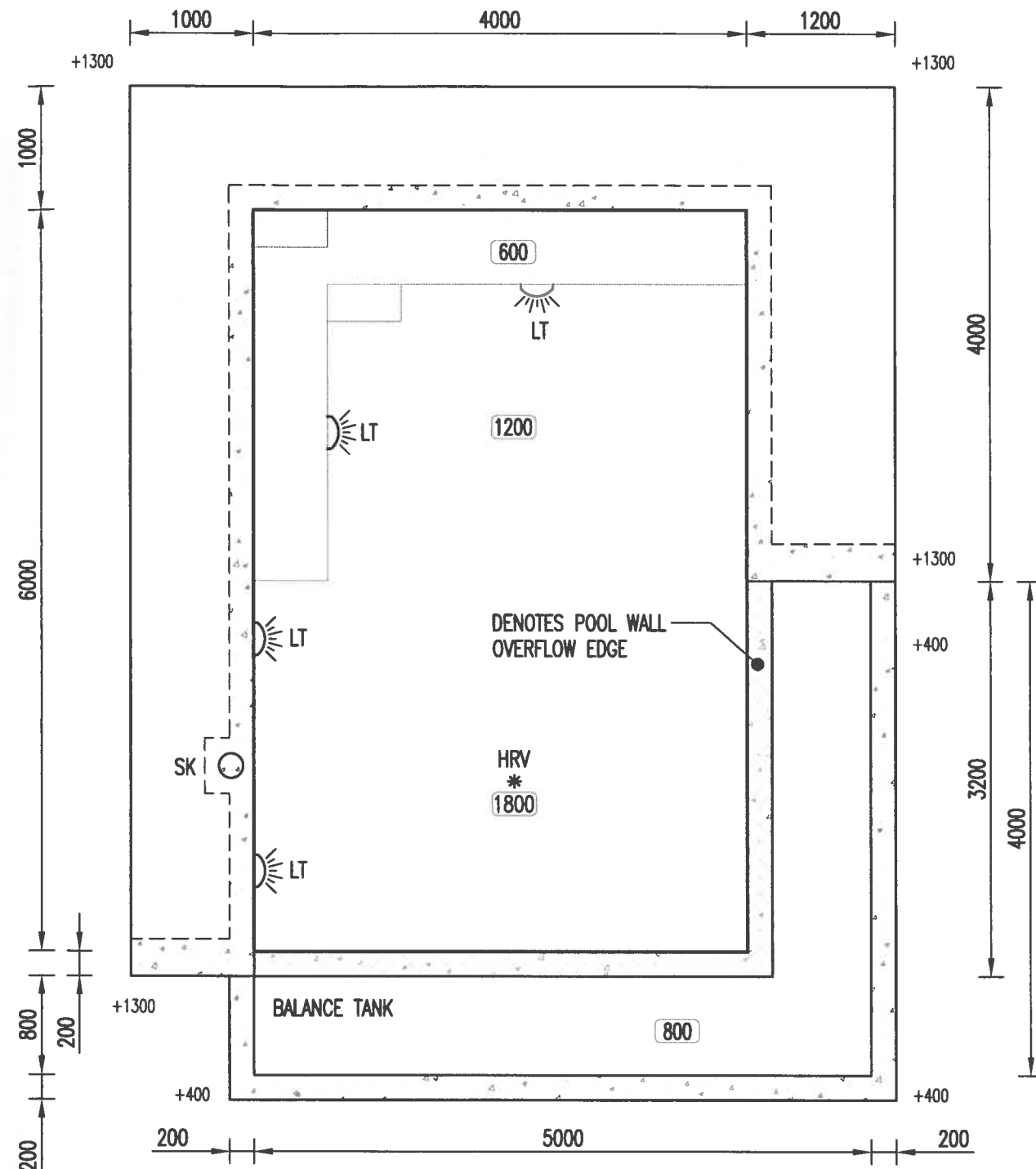
**FENCE ELEVATION B** SCALE 1:100  
10.1m REFER NOTE P3 ON SHEET 1.



**FENCE ELEVATION C** SCALE 1:100  
5.3m REFER NOTE P3 ON SHEET 1.



**FENCE ELEVATION D** SCALE 1:100  
10.1m REFER NOTE P3 ON SHEET 1.



**POOL LAYOUT PLAN**  
SCALE 1:50

POOL LEGEND	
SYMBOL	DESCRIPTION
LT	INDICATES UNDERWATER LIGHT
SK	INDICATES SKIMMER BOX
RTP	INDICATES POOL RETURN (2 MIN, IF NOT SHOWN BUILDER TO CONFIRM ON SITE)
HRV *	INDICATES HYDROSTATIC RELIEF VALVE
1200	INDICATES POOL DEPTH
+1200	INDICATES APPROXIMATE HEIGHT OF POOL WALL OUT OF GROUND.

					Newport		CLIENT <b>BELL</b> 32 NORTH HEAD ROAD NEW BRIGHTON NSW 2483		BUILDER <b>LIVING POOLS &amp; SPAS</b>		JOB NO. <b>23-0485</b>	
					Consulting Engineers		Ground Floor 349 Coronation Drive Milton, QLD 4064				DWG NO. <b>P03</b>	
A	ISSUE FOR CONSTRUCTION	03/05/2023	DPB	MY	PH: (07) 3252 9822 FAX: (07) 3252 9844 info@newportengineers.com.au		LOT NUMBER 4 DP 1035885					
SUFF	REVISION	DATE	DRAWN	CHECKED					DRAWN DPB DESIGNED MY APPROVED MY		SHEET 3	



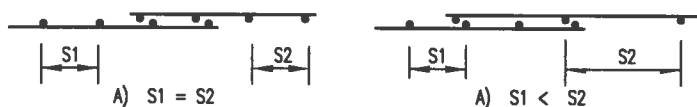
## CONCRETE NOTES

- C1 ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH A.S. 3600-CURRENT EDITION  
C2 CONCRETE PROPERTIES IN ACCORDANCE WITH A.S. 3600- CURRENT EDITION WITH AMEND.

ELEMENT	EXP. CLASS	CONC. GRADE	MAX. SLUMP (mm)	MAX. AGG. SIZE	COVER
FOOTINGS	A1	N20	100	20	50
SLAB ON GROUND - INTERNAL	A1	N20	100	20	30 TOP 30 BTM
SLAB ON GROUND - EXTERNAL	B2	N32	100	20	30 TOP 30 BTM
SUSPENDED SLAB - EXTERNAL	B2	N32	80	20	65 TOP 55 BTM

ALL CONCRETE FOR SLABS SHALL HAVE DRYING SHRINKAGE TEST RESULTS TO AS1012.13 - 1992 SHOWING A MAXIMUM INCLUDING TOLERANCE OF 600 MICROSTRAIN.

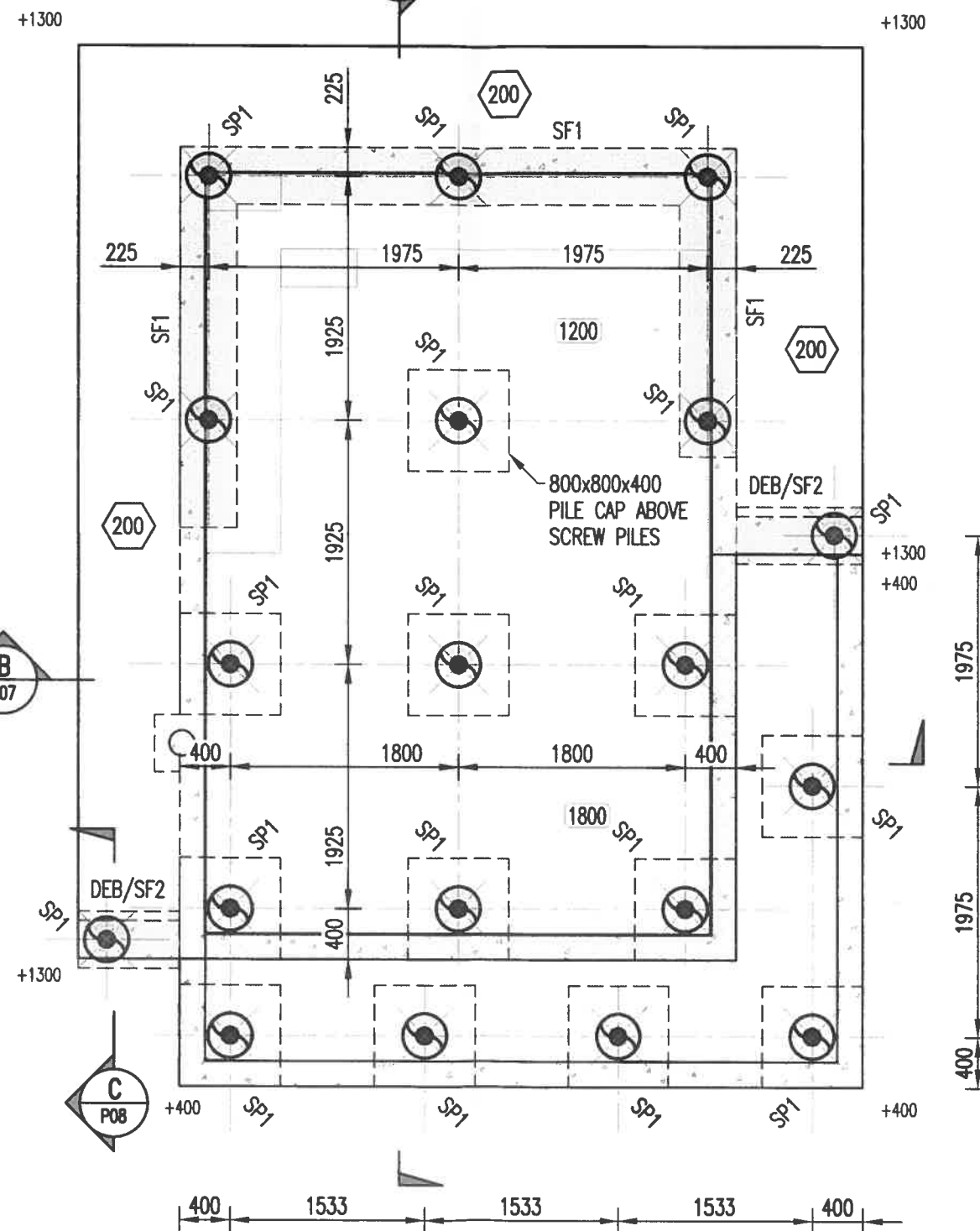
- C3 SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.  
C4 BEAM DEPTHS ARE WRITTEN FIRST AND INCLUDE SLAB THICKNESS WHERE POURED INTEGRALLY WITH THE BEAM  
C5 PROVIDE ALL EXPOSED EDGES AND CORNERS WITH 25MM CHAMFERS OR FILLETS. DRIP GROOVES ARE REQUIRED TO THE UNDERSIDE OF OVERHANGING CONCRETE SLABS. MAINTAIN REINFORCEMENT COVER AT THESE LOCATIONS.  
C6 FORM ALL CONSTRUCTION JOINTS AND PLACE WHERE SHOWN ON DRAWINGS.  
C7 NO HOLES, CHASES OR EMBEDMENT OF PIPES OTHER THAN THOSE SHOWN ON THE STRUCTURAL ENGINEERS DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT ENGINEERS APPROVAL. CONDUITS, PIPES ETC. SHALL ONLY BE LOCATED IN THE MIDDLE ONE THIRD OF THE SLAB DEPTH AND SPACED AT NOT LESS THAN THREE DIAMETERS.  
C8 ALL CONCRETE SHALL BE EFFECTIVELY VIBRATED (UNO)  
C9 REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY AND IS NOT NECESSARILY SHOWN IN TRUE PROJECTION.  
C10 ALL REINFORCEMENT SHALL BE IN ACCORDANCE WITH AS4671 AND REINFORCING BARS DESIGNATED AS FOLLOWS:-  
N NORMAL DUCTILITY DEFORMED BAR  $f_{sy}=500\text{MPa}$   
L LOW DUCTILITY PLAIN OR WELDED WIRE MESH  $f_{sy}=500\text{MPa}$   
R STRUCTURAL GRADE PLAIN ROUND BAR  $f_{sy}=250\text{MPa}$   
S STRUCTURAL GRADE DEFORMED BAR  $f_{sy}=250\text{MPa}$   
THE NUMBER FOLLOWING THE SYMBOL FOR THE BAR IS THE DIAMETER OF BAR IN MILLIMETER  
C11 SPLICES IN REINFORCEMENT SHALL BE MADE ONLY IN THE POSITIONS SHOWN ON THE STRUCTURAL DRAWINGS.  
C12 WELDING OF REINFORCEMENT WILL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS.  
C13 REINFORCEMENT SHALL BE SUPPORTED ON SUFFICIENT CHAIRS TO ENSURE THAT THE SPECIFIED COVER IS ACHIEVED.  
C14 LAP SPLICES FOR FABRIC (MESH) IN TENSION SHALL BE MADE SO THAT THE OUTER MOST TRANSVERSE WIRES OF ONE SHEET OF FABRIC OVERLAP THE TWO OUTERMOST TRANSVERSE WIRES OF THE SHEET BEING LAPPED, AS SHOWN IN REINF.T. LAP FIGURE BELOW. ALL FABRIC (MESH) SHALL BE  $f_{sy} = 500 \text{ MPA}$ .



- C15 LAP SPLICES FOR BARS SHALL BE 50 x DIAMETER UNO BY ENGINEER. REFER TABLE BELOW

LAP LENGTH SCHEDULE	
BAR TYPE	LAP LENGTH
N12	600
N16	800
N20	1000

NOTE: POOL TO BE FOUND INTO THE SAME STIFFNESS MATERIAL ACROSS THE WHOLE POOL BASE.



**SURROUNDS, FOOTING AND PIER LAYOUT PLAN**  
SCALE 1:50

## LEGEND

SYMBOL	DESCRIPTION
200	DENOTES 200 THICK CANTILEVERED POOL COPING. S12-150 EACH WAY TOP REINFORCEMENT, 40 TOP COVER. S12-200 EACH WAY BOTTOM REINFORCEMENT, 50 BOTTOM COVER.
SF1	DENOTES STRIP FOOTING: 600 MIN. DEEP x 450 WIDE. 3-S12 BOTTOM REINFORCEMENT
SF2	DENOTES STRIP FOOTING: 600 MIN. DEEP x 450 WIDE. 3-N12 TOP & BOTTOM REINFORCEMENT WITH R10-600 LIGS
DEB	DENOTES DROPPED EDGE BEAM - REFER DETAILS
SP1	DENOTES: SCREW PILES WITH A WORKING LOAD LIMIT (W.L.L.) CARRYING CAPACITY OF 10.0t AND A PROVISIONAL LENGTH OF 2000 BELOW POOL BASE. 800 x 800 x 400 (O/A) PILE CAP. PILES ARE SPECIFIED BY W.L.L. ONLY. IT IS THE PILING SUBCONTRACTORS RESPONSIBILITY TO DESIGN AND INSTALL PILES ON A GUARANTEED PERFORMANCE BASIS. POOL FLOOR 200 THICK WITH S12-150 REINFORCING PLACED CENTRALLY.

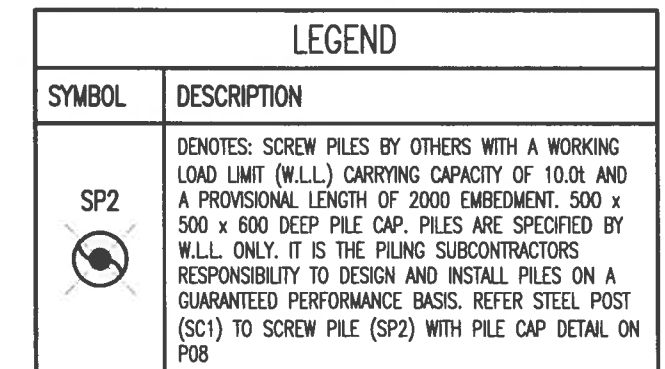
EXPOSURE	MIN. REQUIRED COVER (mm)
	CHARACTERISTIC STRENGTH ( $f'_c$ ) MPa
	25MPa
POOL WATER FACE	65mm
POOL EXTERNAL EXPOSED FACE	50mm

## SCREW PILE NOTES


- ALL SCREW PILES TO BE SUPPLIED AND INSTALLED BY A QUALIFIED CONTRACTOR.
- SCREW PILE MATERIALS ARE TO COMPLY WITH THE REQUIREMENTS OF AS 2159 SECTION 7.
- TESTING OF SCREW PILES ARE TO BE CARRIED OUT IN ACCORDANCE WITH AS 2159 SECTION 8, WITH ACCEPTABLE DEFLECTION CRITERIA AS SET OUT IN TABLE 8.4.3.1.
- SCREW PILES SHALL HAVE A MINIMUM DESIGN LIFE OF 50 YEARS.
- SCREW PILES SHALL HAVE SUFFICIENT DURABILITY SO AS TO COMPLY WITH AS 2159 CLAUSE 6.5 SOIL pH LEVELS, CHLORIDE CONTENT AND RESISTANCE IS TO BE BASED ON SITE TESTING. (DO NOT ASSUME SOIL PARAMETERS).
- PILES ARE TO BE INSTALLED SO AS TO ACHIEVE THE MINIMUM WORKING LOAD LIMITS. REFER TO FOUNDATION PLANS FOR THESE VALUES. THE INSTALLER IS TO PROVIDE CERTIFICATION (COMPLETED BY A QUALIFIED RPEQ.) CONFIRMING ALL SCREW PILES HAVE BEEN INSTALLED IN ACCORDANCE WITH RELEVANT STANDARDS AND THAT MINIMUM WORKING LOAD LIMITS HAVE BEEN MET.

					<div>Newport Consulting Engineers</div>		<div>CLIENT <b>BELL</b> <b>32 NORTH HEAD ROAD</b> <b>NEW BRIGHTON</b> <b>NSW 2483</b></div>		<div>BUILDER <b>LIVING POOLS &amp; SPAS</b></div>		<div>JOB NO. <b>23-0485</b></div>	
											<div>DWG NO. <b>P04</b></div>	
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SUFF	REVISION	DATE	DRAWN	CHECKED			<div>LOT NUMBER 4 DP 1035885</div>				<div>DRAWN DPB DESIGNED MY APPROVED MY SHEET 4</div>	

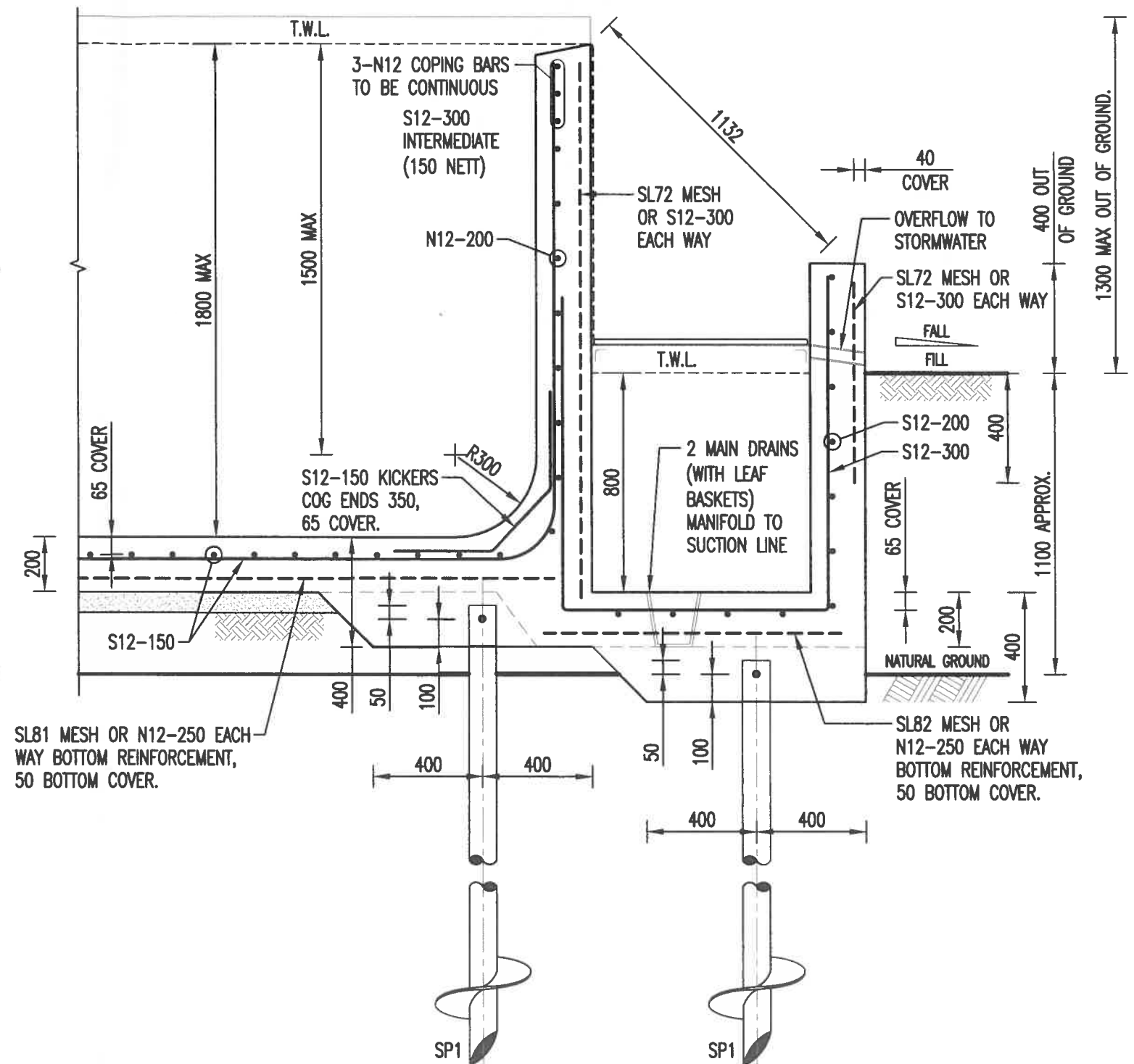
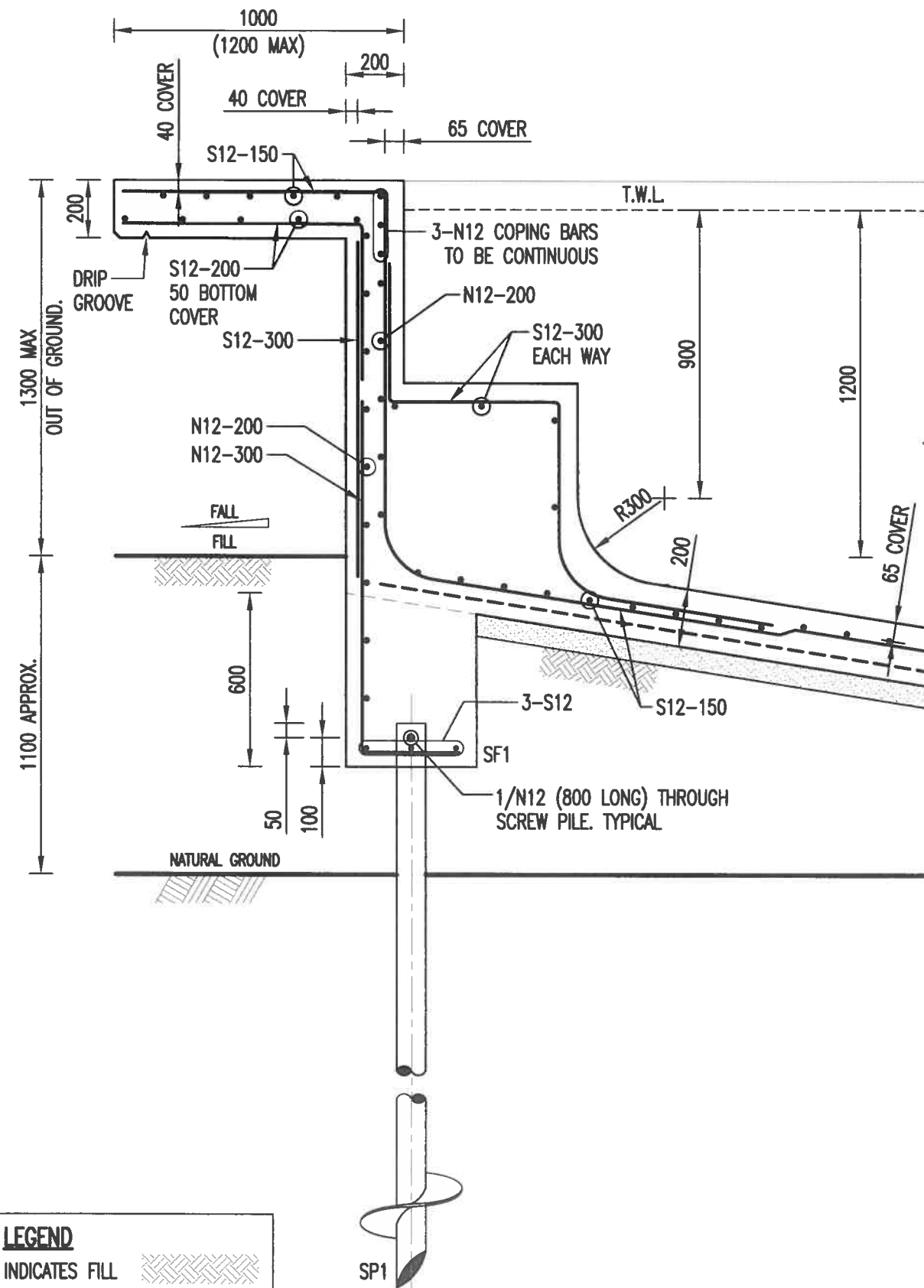




- 1 ALL CONNECTIONS TO THE SWIMMING POOL TO BE STAINLESS STEEL OR PAINTED WITH A PROTECTIVE COATING FOR CORROSIVE CATEGORY 'D', AS PER AS2312.2002.
- 2 IT IS RECOMMENDED THAT A JOIST PROTECTOR PRODUCT OR SIMILAR IS USED FOR THE TOP OF JOISTS FOR ADDITIONAL DURABILITY AND PROTECTION.
- 3 THE BUILDER IS TO ENSURE THAT THE BIMETALLIC CORROSION FROM THE CONNECTION OF DISSIMILAR METALS IS PREVENTED BY USING ONLY THE ONE TYPE OF METAL OR PROVIDE A NON-CONDUCTIVE SEPARATION BETWEEN THE METALS.
- 4 NDC2 – NATURAL DURABILITY CLASS 2 MIN.  
NA – NOT APPLICABLE  
HGD – HOT DIP GALVANISED  
HWD – HARD WOOD  
UNS – UNSEASONED

							<b>CLIENT</b> <b>BELL</b> <b>32 NORTH HEAD ROAD</b> <b>NEW BRIGHTON</b> <b>NSW 2483</b>		<b>BUILDER</b> <b>LIVING POOLS &amp; SPAS</b>		<b>JOB NO.</b> <b>23-0485</b>	
					PH: (07) 3252 9822 FAX: (07) 3252 9844 <a href="mailto:info@newportengineers.com.au">info@newportengineers.com.au</a>		Ground Floor 349 Coronation Drive Milton, QLD-4064				<b>DWG NO.</b> <b>P05</b>	
<b>A</b>	<b>ISSUE FOR CONSTRUCTION</b>	<b>03/05/2023</b>	<b>DPB</b>	<b>MY</b>			<b>LOT NUMBER</b>	<b>4</b>	<b>DP</b>	<b>1035885</b>	<b>DRAWN</b>	<b>DPB</b>
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											<b>SHEET</b>	<b>5</b>



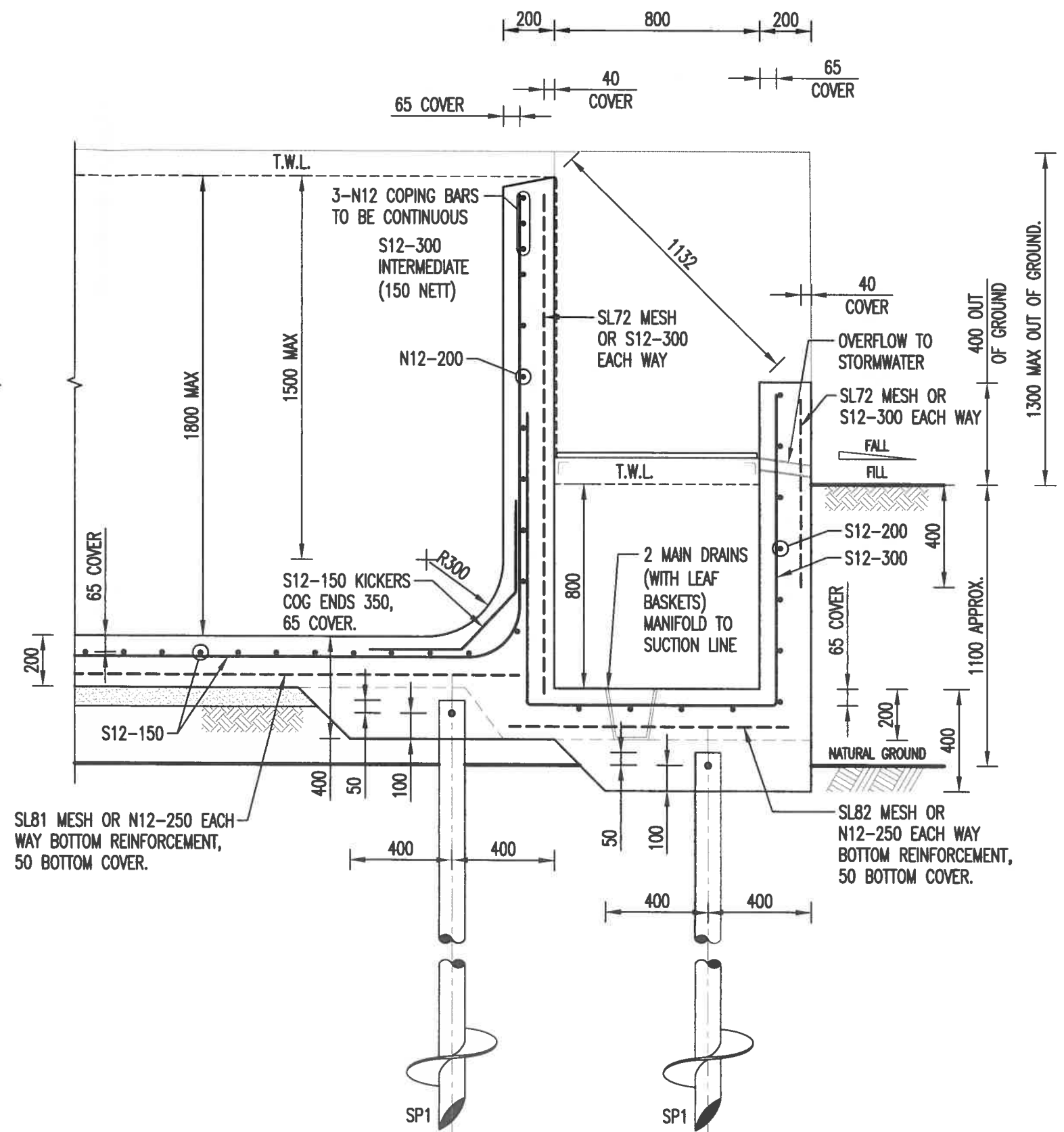
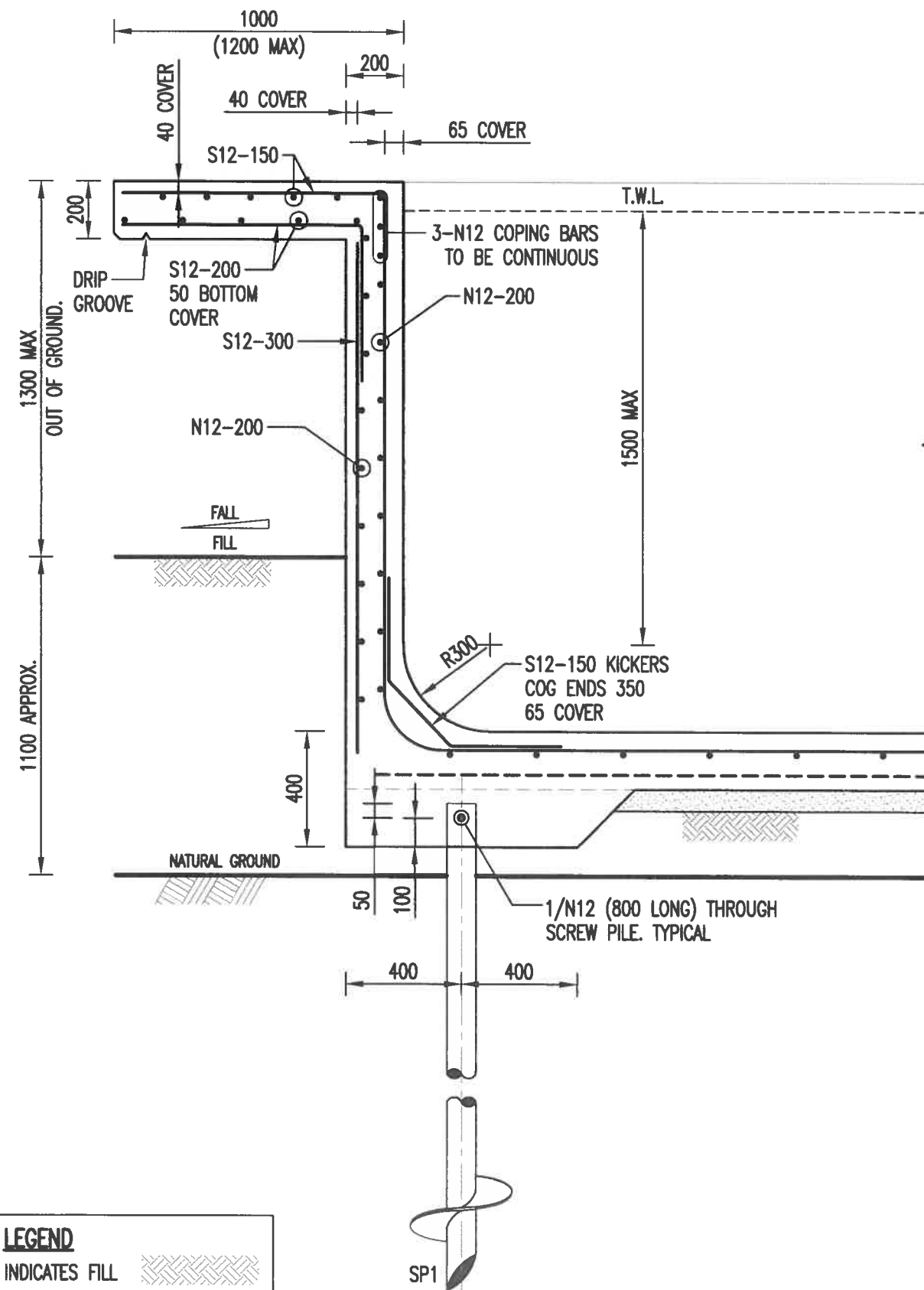


LEGEND	
INDICATES FILL	
INDICATES S.N.G	
INDICATES ROCK	

SECTION A  
SCALE 1:20  
P04

				Newport Consulting Engineers		CLIENT <b>BELL</b> 32 NORTH HEAD ROAD NEW BRIGHTON NSW 2483		BUILDER <b>LIVING POOLS &amp; SPAS</b>		JOB NO. <b>23-0485</b>	
				PH: (07) 3252 9822 FAX: (07) 3252 9844 info@newportengineers.com.au		Ground Floor 349 Coronation Drive Milton, QLD-4064				DWG NO. <b>P06</b>	
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# LEGEND

INDICATES FILL

INDICATES S.N.G

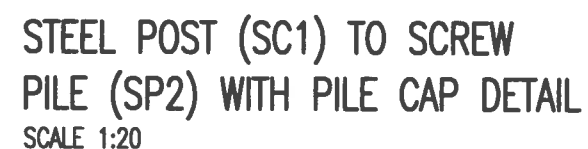
INDICATES ROCK

SECTION  
SCALE 1:20

B  
P04

					Newport		CLIENT		BUILDER		JOB NO.	
					Consulting Engineers		BELL		LIVING POOLS & SPAS		23-0485	
							32 NORTH HEAD ROAD				DWG NO.	
							NEW BRIGHTON				P07	
							NSW 2483				SHEET	
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					info@newportengineers.com.au		Milton, QLD-4064		DESIGNED		MY	
									APPROVED		MY	
											7	



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