

BASED ON REVISION 1.1 OF TYP-03-00001 DRAWING SET

1.1

SAW DWG No.	DRAWING TITLE
TYP-03-00001-01	DRAWING INDEX
TYP-03-00001-02	SINGLE LINE DIAGRAM
TYP-03-00001-03	RTU PANEL 230VAC POWER DISTRIBUTION
TYP-03-00001-04	SPARE
TYP-03-00001-05	RTU PANEL 12VDC POWER DISTRIBUTION
TYP-03-00001-06	SPARE
TYP-03-00001-07	SPARE
TYP-03-00001-08	SPARE
TYP-03-00001-09	SPARE
TYP-03-00001-10	RTU PANEL DIGITAL I/O
TYP-03-00001-11	RTU PANEL ANALOGUE INPUTS
TYP-03-00001-12	RTU PANEL ANALOGUE OUTPUTS
TYP-03-00001-13	RTU PANEL COUNTER INPUTS & PLC COMMS
TYP-03-00001-14	SPARE
TYP-03-00001-15	400VAC METERING ENCLOSURE ELECTRICAL SCHEMATIC
TYP-03-00001-16	400VAC POWER DISTRIBUTION
TYP-03-00001-17	400VAC POWER DISTRIBUTION
TYP-03-00001-18	230VAC POWER DISTRIBUTION
TYP-03-00001-19	SPARE
TYP-03-00001-20	SPARE
TYP-03-00001-21	230VAC TO 24VDC POWER DISTRIBUTION
TYP-03-00001-22	COMMON CONTROL 24VDC SCHEMATIC
TYP-03-00001-23	SPARE
TYP-03-00001-24	SPARE
TYP-03-00001-25	PUMP 1 POWER AND CONTROL SCHEMATIC
TYP-03-00001-26	PUMP 2 POWER AND CONTROL SCHEMATIC
TYP-03-00001-27	PUMP 1 SEAL LEAKAGE DETECTION RELAY SCHEMATIC
TYP-03-00001-28	PUMP 2 SEAL LEAKAGE DETECTION RELAY SCHEMATIC
TYP-03-00001-29	SPARE
TYP-03-00001-30	SPARE
TYP-03-00001-31	SPARE
TYP-03-00001-32	SPARE
TYP-03-00001-33	SPARE

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SAW DWG No.	DRAWING TITLE
TYP-03-00001-34	SPARE
TYP-03-00001-35	SPARE
TYP-03-00001-36	SPARE
TYP-03-00001-37	SPARE
TYP-03-00001-38	SPARE
TYP-03-00001-39	SPARE
TYP-03-00001-40	PLC DIGITAL INPUTS
TYP-03-00001-41	PLC DIGITAL OUTPUTS
TYP-03-00001-42	PLC ANALOG INPUTS
TYP-03-00001-43	SPARE
TYP-03-00001-44	SPARE
TYP-03-00001-45	SPARE
TYP-03-00001-46	SPARE
TYP-03-00001-47	SPARE
TYP-03-00001-48	SPARE
TYP-03-00001-49	SPARE
TYP-03-00001-50	FLOWMETER TRANSMITTER CONNECTION DIAGRAM
TYP-03-00001-51	LEVEL TRANSMITTER CONNECTION DIAGRAM
TYP-03-00001-52	SPARE
TYP-03-00001-53	SPARE
TYP-03-00001-54	SPARE
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TYP-03-00001-57	SPARE
TYP-03-00001-58	SPARE
TYP-03-00001-59	SPARE
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TYP-03-00001-62	SPARE
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TYP-03-00001-64	SPARE
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TYP-03-00001-66	SPARE


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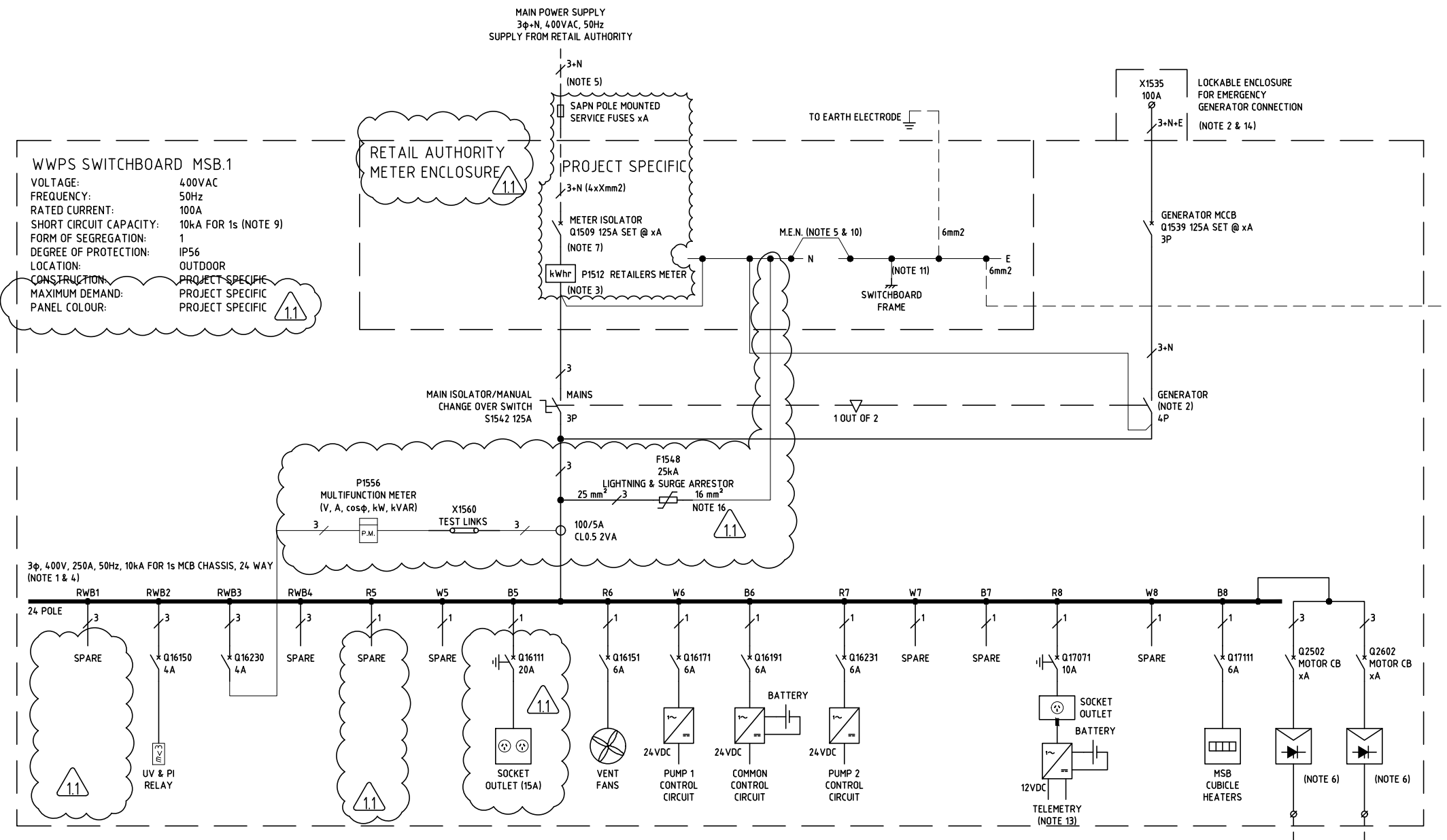
SAW DWG No.	DRAWING TITLE
TYP-03-00001-67	SPARE
TYP-03-00001-68	SPARE
TYP-03-00001-69	SPARE
TYP-03-00001-70	SWITCHBOARD LAYOUT - FRONT VIEW
TYP-03-00001-71	SWITCHBOARD LAYOUT - FRONT VIEW LESS DOORS
TYP-03-00001-72	SWITCHBOARD LAYOUT - FRONT VIEW LESS ESCUTCHEONS
TYP-03-00001-73	SWITCHBOARD LAYOUT - LHS & RHS VIEW
TYP-03-00001-74	SWITCHBOARD LAYOUT - BOTTOM VIEW
TYP-03-00001-75	SWITCHBOARD LAYOUT - GENERATOR CONNECTION BOX & CONSTRUCTION NOTES
TYP-03-00001-76	WET WELL JUNCTION BOX - GENERAL ARRANGEMENT
TYP-03-00001-77	SERVICE FUSE ENCLOSURE - GENERAL ARRANGEMENT
TYP-03-00001-78	SWITCHBOARD LAYOUT - REAR SUN SHIELD
TYP-03-00001-79	SPARE
TYP-03-00001-80	SPARE
TYP-03-00001-81	SPARE
TYP-03-00001-82	SPARE
TYP-03-00001-83	SPARE
TYP-03-00001-84	SPARE
TYP-03-00001-85	SPARE
TYP-03-00001-86	SPARE
TYP-03-00001-87	SPARE
TYP-03-00001-88	SPARE
TYP-03-00001-89	SPARE
TYP-03-00001-90	NETWORK ARCHITECTURE
TYP-03-00001-91	SPARE
TYP-03-00001-92	SPARE
TYP-03-00001-93	SPARE
TYP-03-00001-94	SPARE
TYP-03-00001-95	BILL OF MATERIALS (CONTRACTOR SHALL POPULATE BILL OF MATERIALS)
TYP-03-00001-96	LABEL SCHEDULE (CONTRACTOR SHALL POPULATE LABEL SCHEDULE)
TYP-03-00001-97	SPARE
TYP-03-00001-98	CABLE SCHEDULE
TYP-03-00001-99	DRAWING CONVENTION AND WIRING STANDARD

1.1

SWITCHBOARD SITE ID:  
SITE ADDRESS:  
GPS CO-ORDINATES: LATITUDE, LONGITUDE

1.1

REVISION PANEL					DESIGN PANEL			 This drawing is the property of the SOUTH AUSTRALIAN WATER CORPORATION and shall not be copied or modified in part or in whole without authorization.	SWITCHBOARD 0 - 100A MAIN SWITCHBOARD		A3 SHT SIZE TOTAL SHEETS: 45 PROJECT No:		1.1 REVISION
REV	DATE	DRN	DETAILS	APR	CURRENT REV	DESIGNED:	AUTHORISED:		MAXIMO ID:		SUPERSEDES: 5003-00001-01		
1.1	28/01/22	WS	UPDATED WITH SA WATER REVIEW REQUIREMENTS	SS	28/01/22	14/02/2019	14/02/2018	DRAWING NUMBER		TYP-03-00001_01			
0.1	03/11/20	PAN	UPDATED TITLE BLOCK & MINOR UPDATES	SS		14/02/2018		DRAWING NUMBER		TYP-03-00001_01			
CURRENT REV CONTRACTOR:					CURRENT REV PROJECT:					CONTRACTOR:			



**WWPS SWITCHBOARD MSB.1**  
 VOLTAGE: 400VAC  
 FREQUENCY: 50Hz  
 RATED CURRENT: 100A  
 SHORT CIRCUIT CAPACITY: 10kA FOR 1s (NOTE 9)  
 FORM OF SEGREGATION: 1  
 DEGREE OF PROTECTION: IP56  
 LOCATION: OUTDOOR  
 CONSTRUCTION: PROJECT SPECIFIC  
 MAXIMUM DEMAND: PROJECT SPECIFIC  
 PANEL COLOUR: PROJECT SPECIFIC

**RETAIL AUTHORITY METER ENCLOSURE**  
 1.1

**PROJECT SPECIFIC**  
 3-N (4xXmm2)  
 METER ISOLATOR Q1509 125A SET @ xA (NOTE 7)  
 kWh P1512 RETAILERS METER (NOTE 3)

LOCKABLE ENCLOSURE FOR EMERGENCY GENERATOR CONNECTION (NOTE 2 & 14)  
 X1535 100A  
 3+N+E

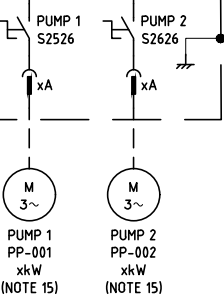
GENERATOR MCCB Q1539 125A SET @ xA 3P

GENERATOR (NOTE 2) 4P

P1556 MULTIFUNCTION METER (V, A, cosφ, kW, kVAR)  
 X1560 TEST LINKS  
 F1548 25kA LIGHTNING & SURGE ARRESTOR 16mm<sup>2</sup>  
 100/5A CL0.5 2VA

3φ, 400V, 250A, 50Hz, 10kA FOR 1s MCB CHASSIS, 24 WAY (NOTE 1 & 4)

**WET WELL LOCAL J/BOX JB.1** (NOTE 8)  
 DEGREE OF PROTECTION: IP56  
 LOCATION: OUTDOOR  
 CONSTRUCTION: MARINE GRADE ALUMINIUM (INCLUDING FRAME)  
 PANEL COLOUR: PROJECT SPECIFIC



- NOTES:**
- ALL CB'S SHALL BE LOCKABLE USING A PERMANENTLY FIXED LOCKING DEVICE.
  - ALTERNATE SUPPLY CONNECTION SHALL COMPLY WITH AS/NZS3010. REQUIREMENT OF TERMINAL OR PLUG AND SOCKET ARRANGEMENT WILL BE SITE SPECIFIC. MANUAL CHANGE OVER SWITCH SHALL HAVE MECHANICAL INTERLOCKING.
  - LOCATION OF SAPN METER WILL BE SITE SPECIFIC.
  - MINIMUM 20% SPARE CAPACITY.
  - REFER TO SUPPLY AUTHORITY REQUIREMENTS INCLUDING HARMONIC MITIGATION REQUIREMENTS IF VSIDS ARE INCLUDED IN DESIGN.
  - SOFT STARTER/VSD/DOL AS PER PROJECT SPECIFICATIONS.
  - CIRCUIT BREAKER RATING AND PROTECTION SETTINGS TO BE CONFIRMED BY CALCULATIONS.
  - LOCATION OF ENCLOSURE WILL BE SITE SPECIFIC.
  - SHORT CIRCUIT CAPACITY SHALL BE MINIMUM 10kA BASED ON SITE REQUIREMENT AND INVESTIGATION FROM SAPN.
  - MEN LINK CONDUCTOR TO BE SAME SIZE AS CONSUMER MAINS NEUTRAL CONDUCTOR AS PER AS/NZS 3000.
  - FRAME EARTH CONDUCTOR TO BE SAME SIZE AS CONSUMER MAINS NEUTRAL CONDUCTOR AS PER AS/NZS 3000.
  - COPIES OF FUNCTIONAL DESCRIPTION SPECIFICATION AND PLC/HMI PROGRAMS SHALL BE OBTAINED FROM SA WATER.
  - 24VDC POWER SUPPLY PREFERRED FOR RTU PANEL.
  - PLUG AND SOCKET TO BE CONSIDERED IN CONSULTATION WITH OPERATIONS AND MAINTENANCE STAFF.
  - PUMP SIZES LIMITED TO 22kW FOR 100A, SA WATER PUMP STATIONS.
  - SURGE PROTECTION DEVICE WIRING TO BE MADE AS SHORT AND STRAIGHT AS POSSIBLE. PEN WIRE TO BE 16mm<sup>2</sup> BLACK INSULATED AND CONNECTED TO THE NEUTRAL BAR.

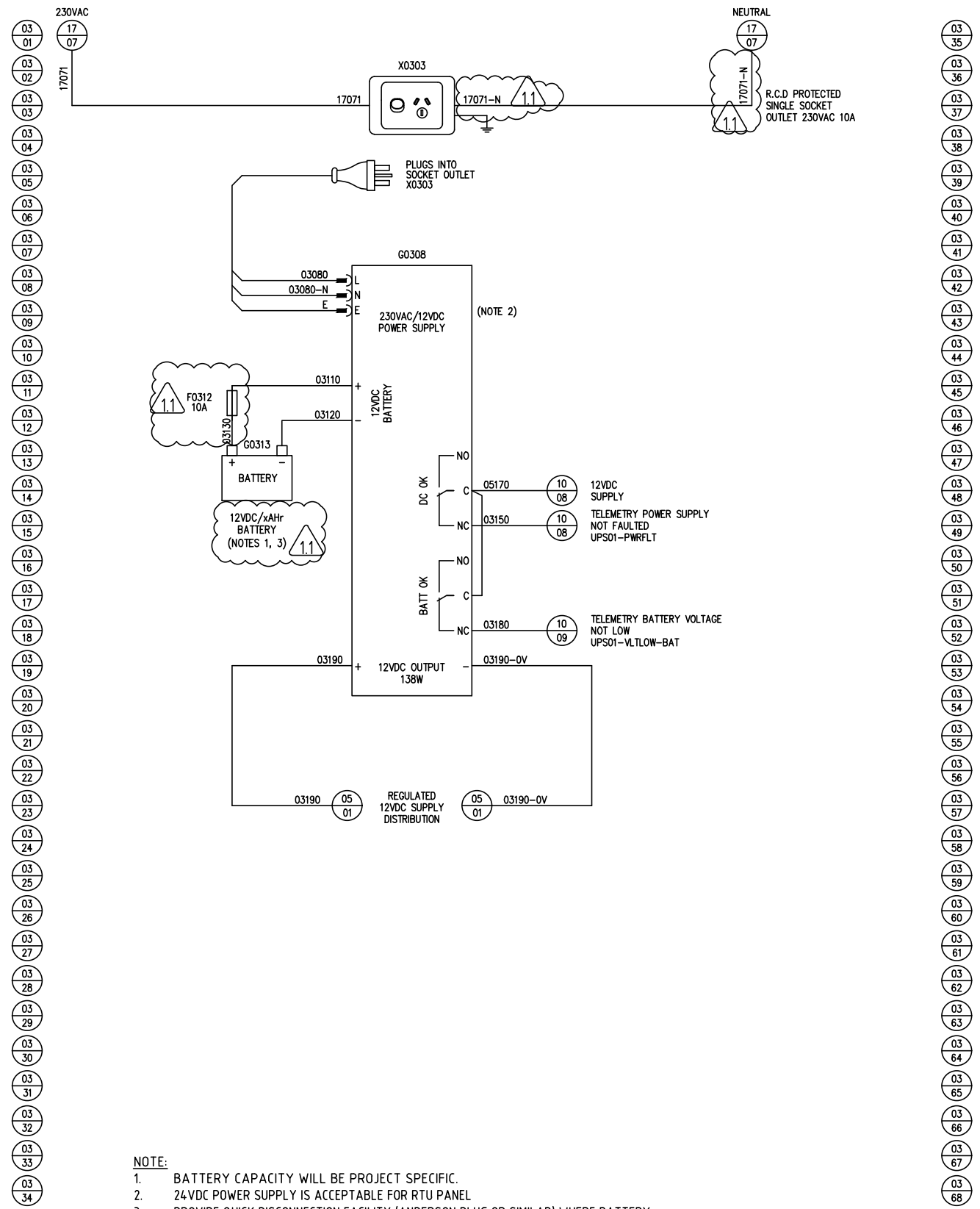
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REV	DATE	DRN	DETAILS
1.1	28/01/22	WS	UPDATED WITH SA WATER REVIEW REQUIREMENTS
0.1	03/11/20	PAN	UPDATED TITLE BLOCK & MINOR UPDATES

DESIGN PANEL			
DESIGNED:	AUTHORISED:	DATE	REVISION
SACHIN PANDEY	JUSTIN HAMRA	14/02/2018	14/02/2018
TROY O'BRIEN	ORIGINAL SIGNED	14/02/2018	
JONATHON NICHOLLS			

Government of South Australia  
**SA Water**  
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**SWITCHBOARD 0 - 100A MAIN SWITCHBOARD**  
 ELECTRICAL SINGLE LINE DIAGRAM

A3	TOTAL SHEETS:	1.1
SHT SIZE	PROJECT No:	REVISION
MAXIMO ID:		
SUPERSEDES: 5003-00001-02		
DRAWING NUMBER		
TYP-03-00001_02		



**NOTE:**  
 1. BATTERY CAPACITY WILL BE PROJECT SPECIFIC.  
 2. 24VDC POWER SUPPLY IS ACCEPTABLE FOR RTU PANEL  
 3. PROVIDE QUICK DISCONNECTION FACILITY (ANDERSON PLUG OR SIMILAR) WHERE BATTERY TERMINALS DO NOT ALLOW QUICK DISCONNECTION (E.G. SLIDE ON SPADE LUGS).

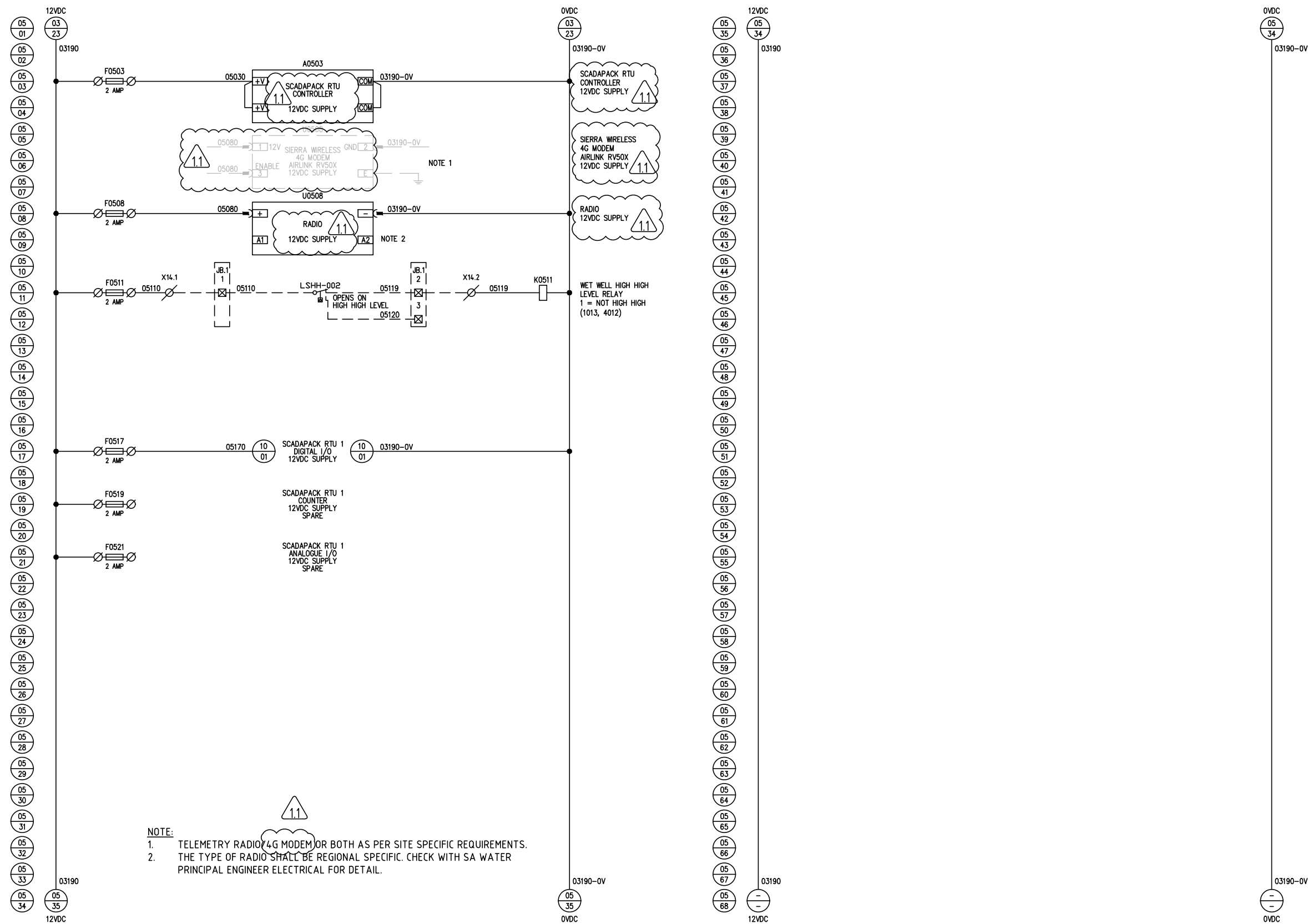
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REV	DATE	DRN	DETAILS
1.1	28/01/22	WS	UPDATED WITH SA WATER REVIEW REQUIREMENTS
0.1	03/11/20	PAN	UPDATED TITLE BLOCK

DESIGN PANEL		
DESIGNED:	14/02/2018	AUTHORISED: 14/02/2018
SACHIN PANDEY		JUSTIN HAMRA
DRAWN:	14/02/2018	SIGNATURE:
TROY O'BRIEN		ORIGINAL SIGNED
REVIEWED:	14/02/2018	
JONATHON NICHOLLS		

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SWITCHBOARD 0 - 100A  
 MAIN SWITCHBOARD  
 RTU 230VAC POWER DISTRIBUTION  
 ELECTRICAL  
 SCHEMATIC DIAGRAM

A3	TOTAL SHEETS:	1.1
SHT SIZE	PROJECT No:	REVISION
MAXIMO ID:		
SUPERSEDES: 5003-00001-03		
DRAWING NUMBER		
TYP-03-00001_03		



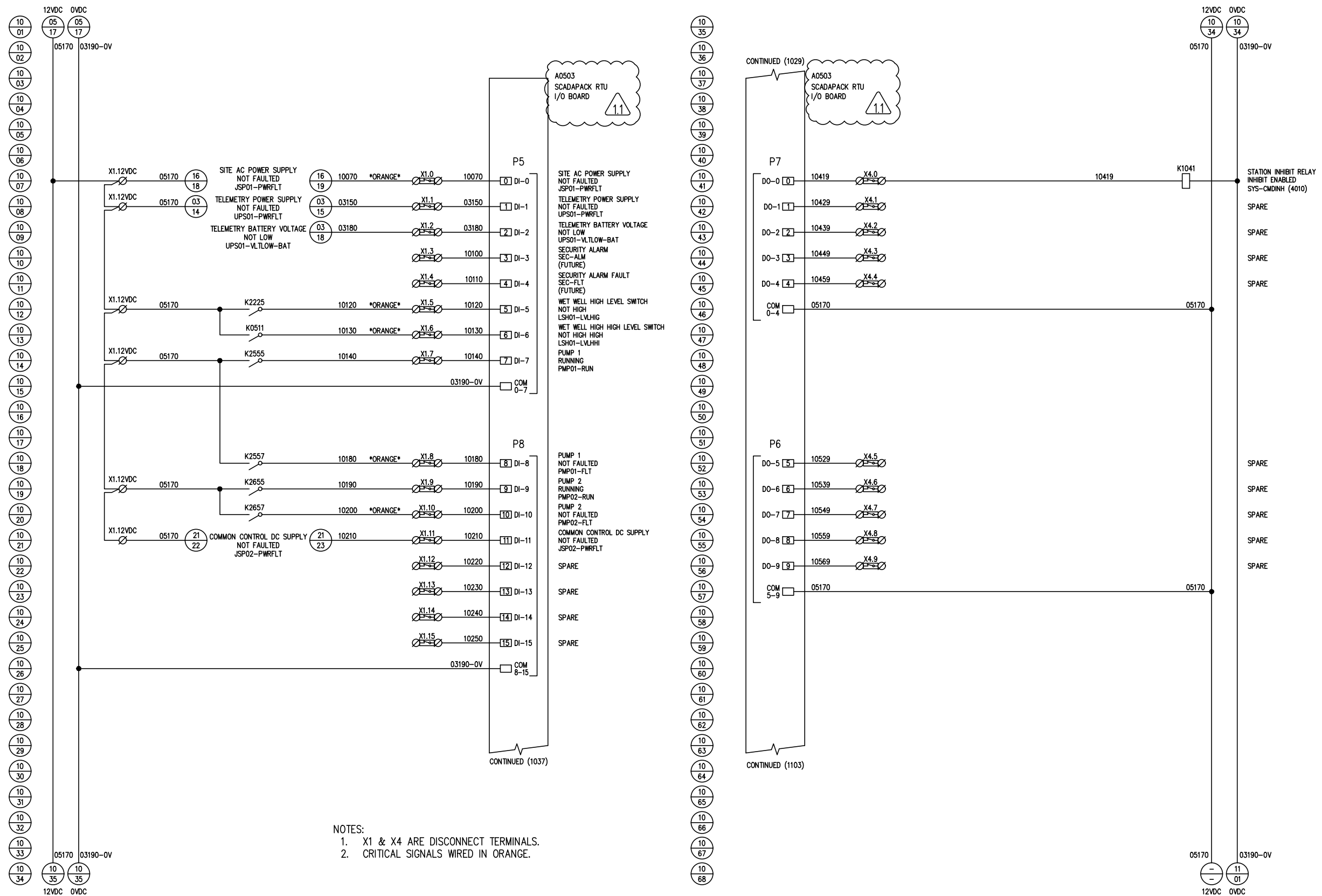
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0.1	03/11/20	PAN	UPDATED TITLE BLOCK	SS
CURRENT REV CONTRACTOR:			CURRENT REV PROJECT:	

DESIGN PANEL		
DESIGNED:	AUTHORISED:	DATE
SACHIN PANDEY	JUSTIN HAMRA	14/02/2018
DRAWN:	SIGNATURE:	DATE
TROY O'BRIEN	ORIGINAL SIGNED	14/02/2018
REVIEWED:		DATE
JONATHON NICHOLLS		14/02/2018
CONTRACTOR:		


  
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SWITCHBOARD 0 - 100A  
 MAIN SWITCHBOARD  
 RTU 12VDC POWER DISTRIBUTION  
 ELECTRICAL  
 SCHEMATIC DIAGRAM


A3 SHT SIZE	TOTAL SHEETS:	1.1 REVISION
	PROJECT No:	
MAXIMO ID:		
SUPERSEDES: 5003-00001-05		
DRAWING NUMBER		
TYP-03-00001_05		



- NOTES:
1. X1 & X4 ARE DISCONNECT TERMINALS.
  2. CRITICAL SIGNALS WIRED IN ORANGE.

REVISION PANEL			
REV	DATE	DRN	DETAILS
1.1	28/01/22	WS	UPDATED WITH SA WATER REVIEW REQUIREMENTS
0.1	03/11/20	PAN	UPDATED TITLE BLOCK

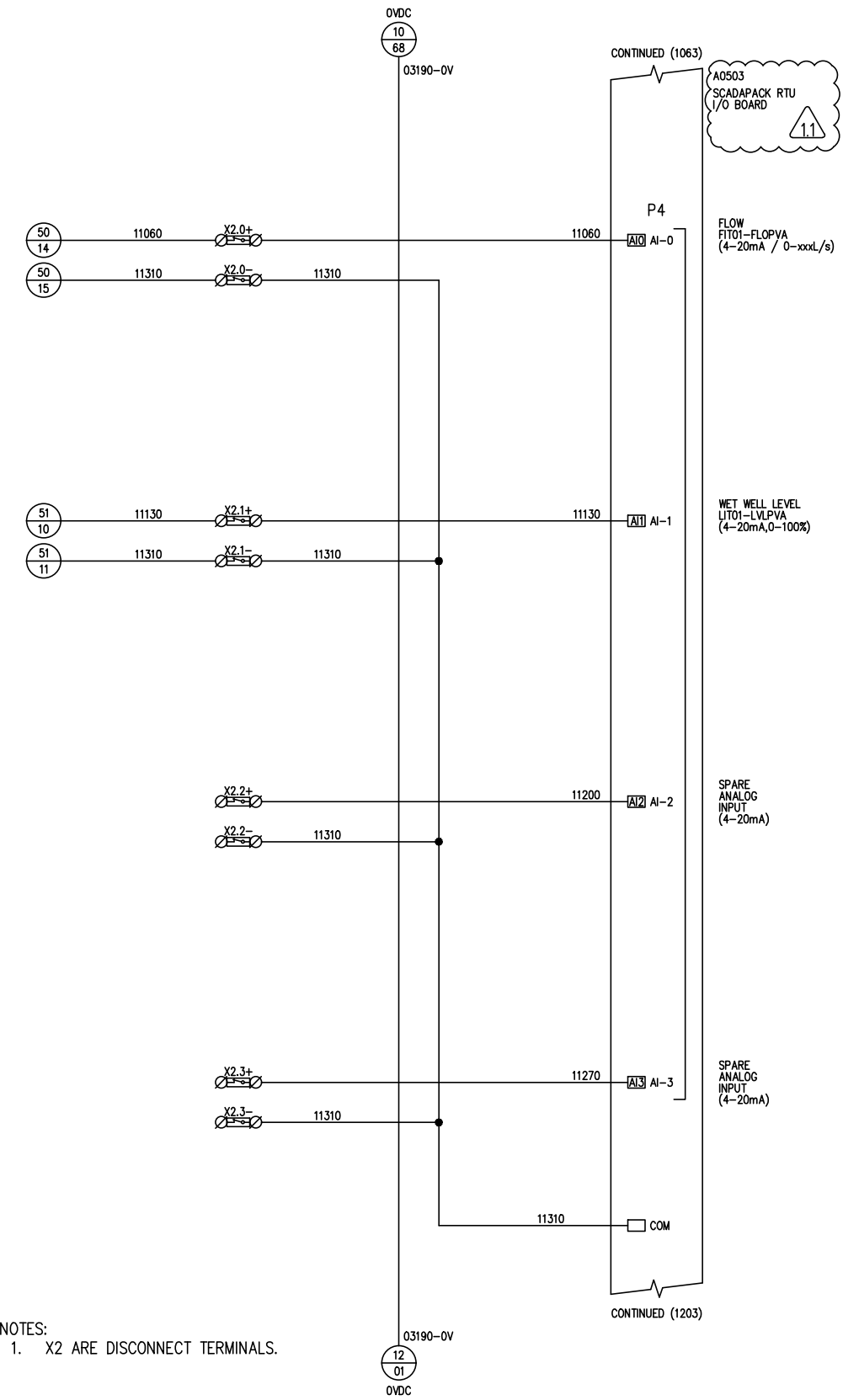
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DESIGNED:	14/02/2018	AUTHORISED:	14/02/2018
SACHIN PANDEY		JUSTIN HAMRA	
DRAWN:	14/02/2018	SIGNATURE:	
TROY O'BRIEN		ORIGINAL SIGNED	
REVIEWED:	14/02/2018		
JONATHON NICHOLLS			


  
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SWITCHBOARD 0 - 100A  
 MAIN SWITCHBOARD  
 RTU DIGITAL I/O  
 ELECTRICAL  
 SCHEMATIC DIAGRAM

A3	TOTAL SHEETS:	1.1
SHT SIZE	PROJECT No:	REVISION
MAXIMO ID:		
SUPERSEDES: 5003-00001-10		
DRAWING NUMBER		
TYP-03-00001_10		

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NOTES:  
1. X2 ARE DISCONNECT TERMINALS.

REVISION PANEL				
REV	DATE	DRN	DETAILS	APR
1.1	28/01/22	WS	UPDATED WITH SA WATER REVIEW REQUIREMENTS	SS
0.1	03/11/20	PAN	UPDATED TITLE BLOCK & MINOR UPDATES	SS

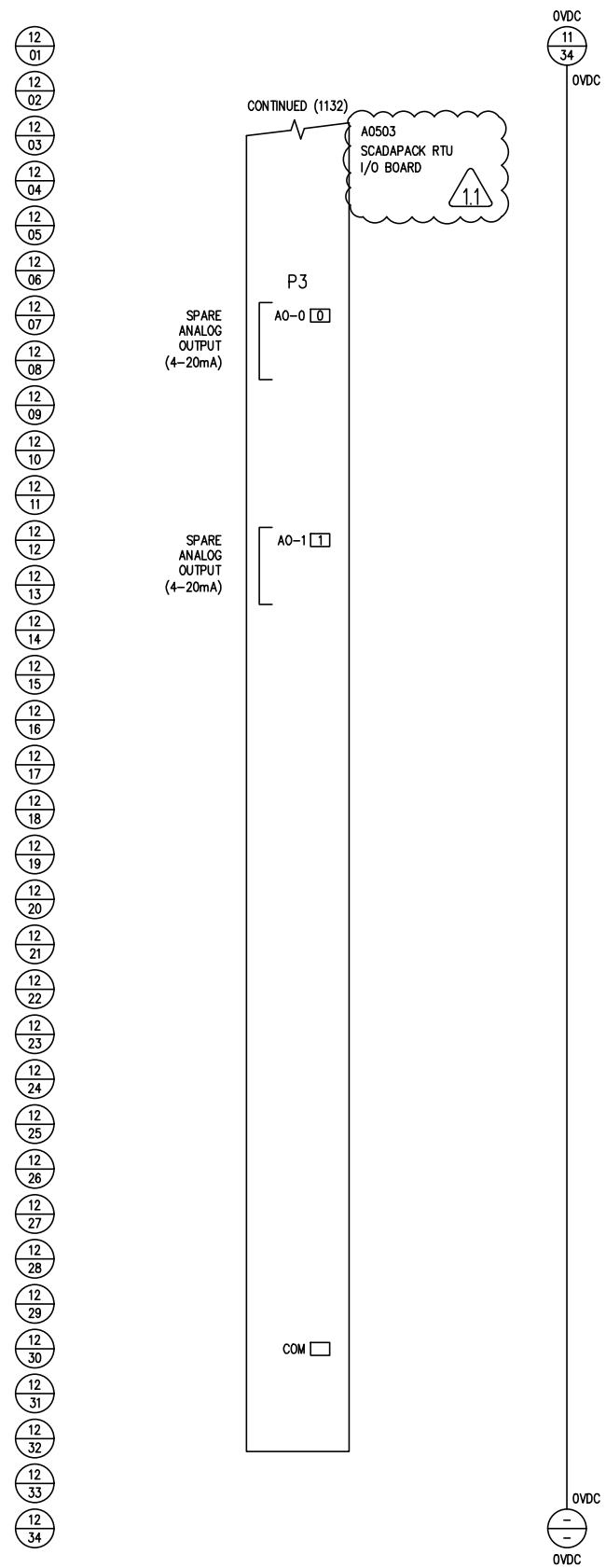
CURRENT REV CONTRACTOR: \_\_\_\_\_ CURRENT REV PROJECT: \_\_\_\_\_

DESIGN PANEL			
DESIGNED: 14/02/2018	AUTHORISED: 14/02/2018		
SACHIN PANDEY	JUSTIN HAMRA		
DRAWN: 14/02/2018	SIGNATURE:		
TROY O'BRIEN	ORIGINAL SIGNED		
REVIEWED: 14/02/2018			
JONATHON NICHOLLS			

  
 Government of South Australia  
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SWITCHBOARD 0 - 100A  
 MAIN SWITCHBOARD  
 RTU ANALOG INPUTS  
 ELECTRICAL  
 SCHEMATIC DIAGRAM

A3 SHT SIZE	TOTAL SHEETS:	1.1 REVISION
	PROJECT No:	
MAXIMO ID:		
SUPERSEDES: 5003-00001-11		
DRAWING NUMBER		
TYP-03-00001_11		



REVISION PANEL				
REV	DATE	DRN	DETAILS	APR
1.1	28/01/22	WS	UPDATED WITH SA WATER REVIEW REQUIREMENTS	SS
0.1	03/11/20	PAN	UPDATED TITLE BLOCK & MINOR UPDATES	SS
CURRENT REV CONTRACTOR:			CURRENT REV PROJECT:	

DESIGN PANEL			
DESIGNED: 14/02/2018	AUTHORISED: 14/02/2018		
SACHIN PANDEY	JUSTIN HAMRA		
DRAWN: 14/02/2018	SIGNATURE:		
TROY O'BRIEN	ORIGINAL SIGNED		
REVIEWED: 14/02/2018			
JONATHON NICHOLLS			
CONTRACTOR:			

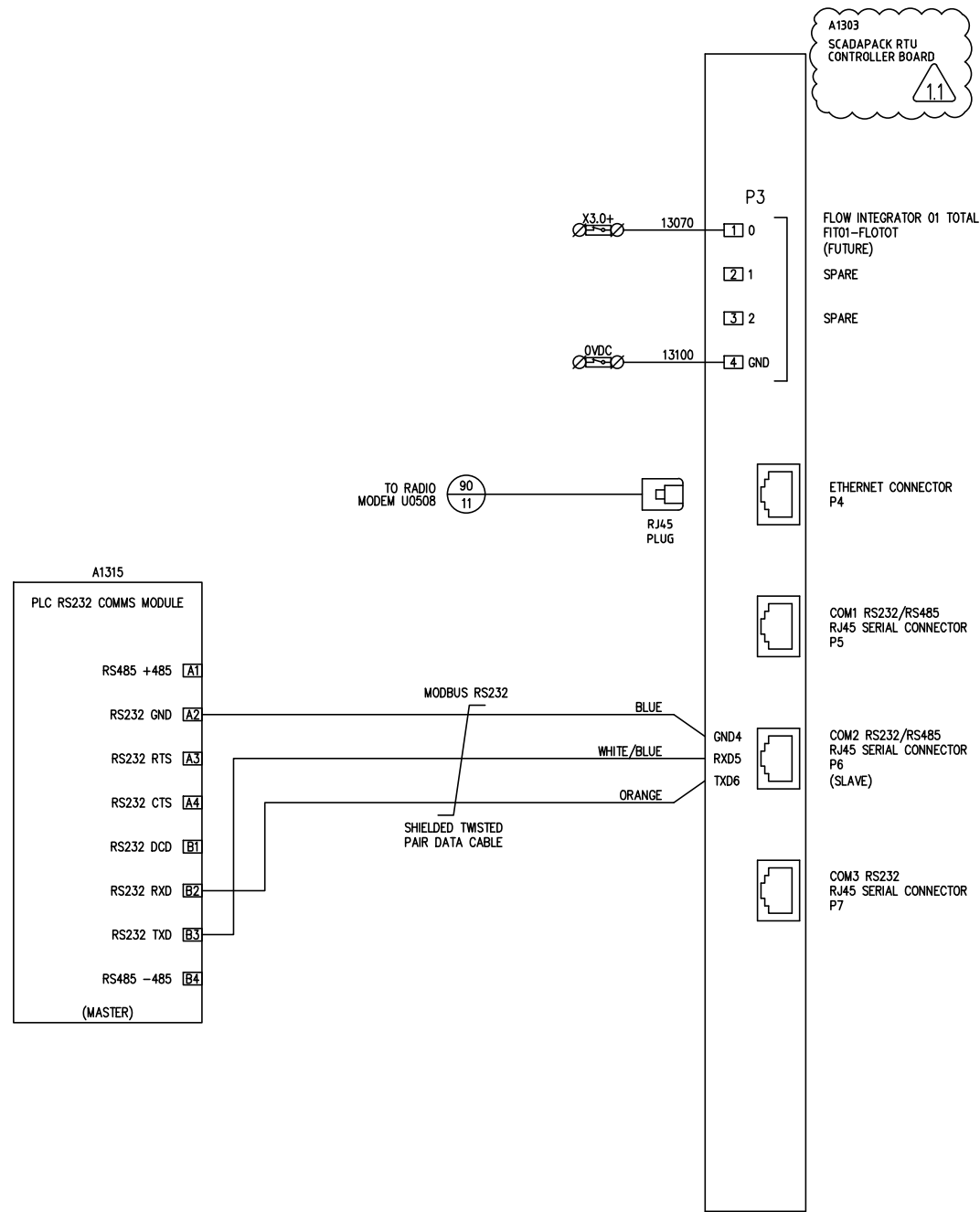
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SWITCHBOARD 0 - 100A  
 MAIN SWITCHBOARD  
 RTU ANALOG OUTPUTS  
 ELECTRICAL  
 SCHEMATIC DIAGRAM


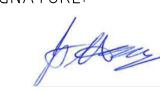
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MAXIMO ID:		
SUPERSEDES: 5003-00001-12		
DRAWING NUMBER		
TYP-03-00001_12		

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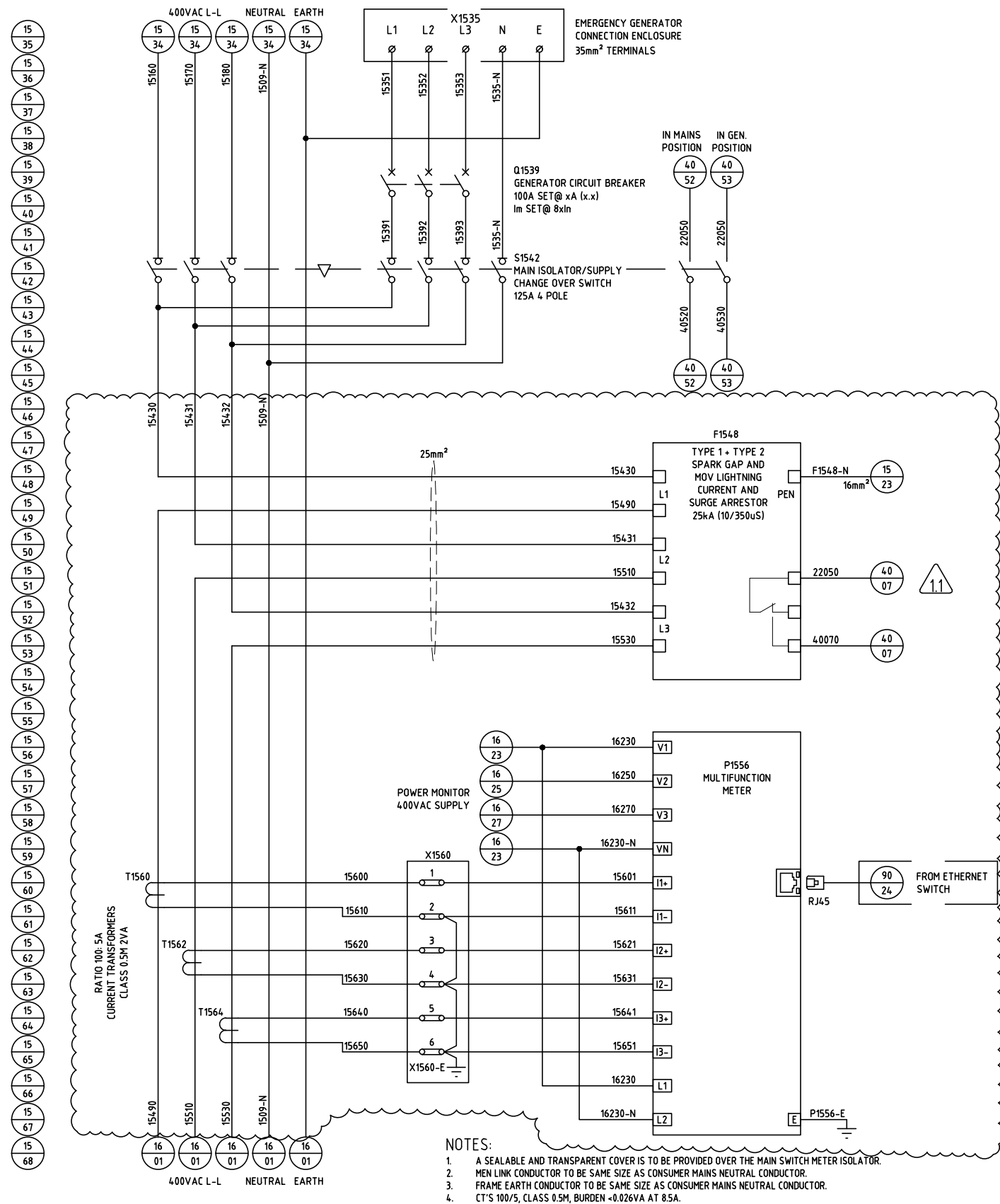
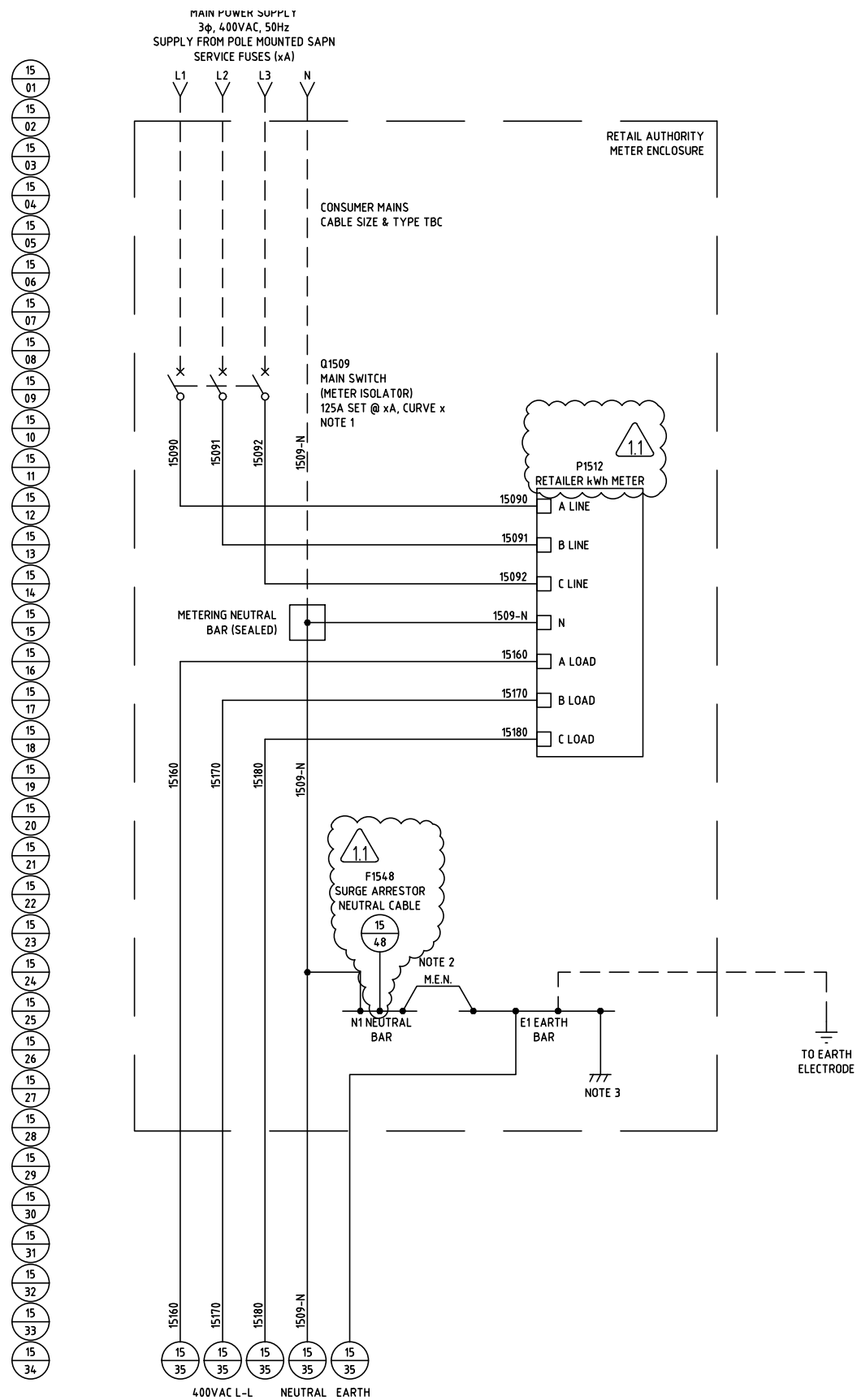
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NOTES:  
1. X3 ARE DISCONNECT TERMINALS


REVISION PANEL				DESIGN PANEL				 SWITCHBOARD 0 - 100A MAIN SWITCHBOARD RTU COUNTER INPUTS & PLC COMMS ELECTRICAL SCHEMATIC DIAGRAM		TOTAL SHEETS: 1.1 PROJECT No:	
REV	DATE	DRN	DETAILS	APR	CURRENT REV 28/01/22	DESIGNED: 14/02/2018	AUTHORISED: 14/02/2018			MAXIMO ID: SUPERSEDES: 5003-00001-13 DRAWING NUMBER TYP-03-00001_13	
					AUTHORISED: JUSTIN HAMRA SIGNATURE: 	SACHIN PANDEY	JUSTIN HAMRA	This drawing is the property of the SOUTH AUSTRALIAN WATER CORPORATION and shall not be copied or modified in part or in whole without authorization.			
					SIGNATURE:	DRAWN: 14/02/2018	SIGNATURE:				
1.1	28/01/22	WS	UPDATED WITH SA WATER REVIEW REQUIREMENTS	SS		TROY O'BRIEN	ORIGINAL SIGNED				
0.1	03/11/20	PAN	UPDATED TITLE BLOCK	SS		REVIEWED: 14/02/2018					
CURRENT REV CONTRACTOR:				CURRENT REV PROJECT:				CONTRACTOR:			






REVISION PANEL			
REV	DATE	DRN	DETAILS
1.1	28/01/22	WS	UPDATED WITH SA WATER REVIEW REQUIREMENTS
0.1	03/11/20	PAN	UPDATED TITLE BLOCK

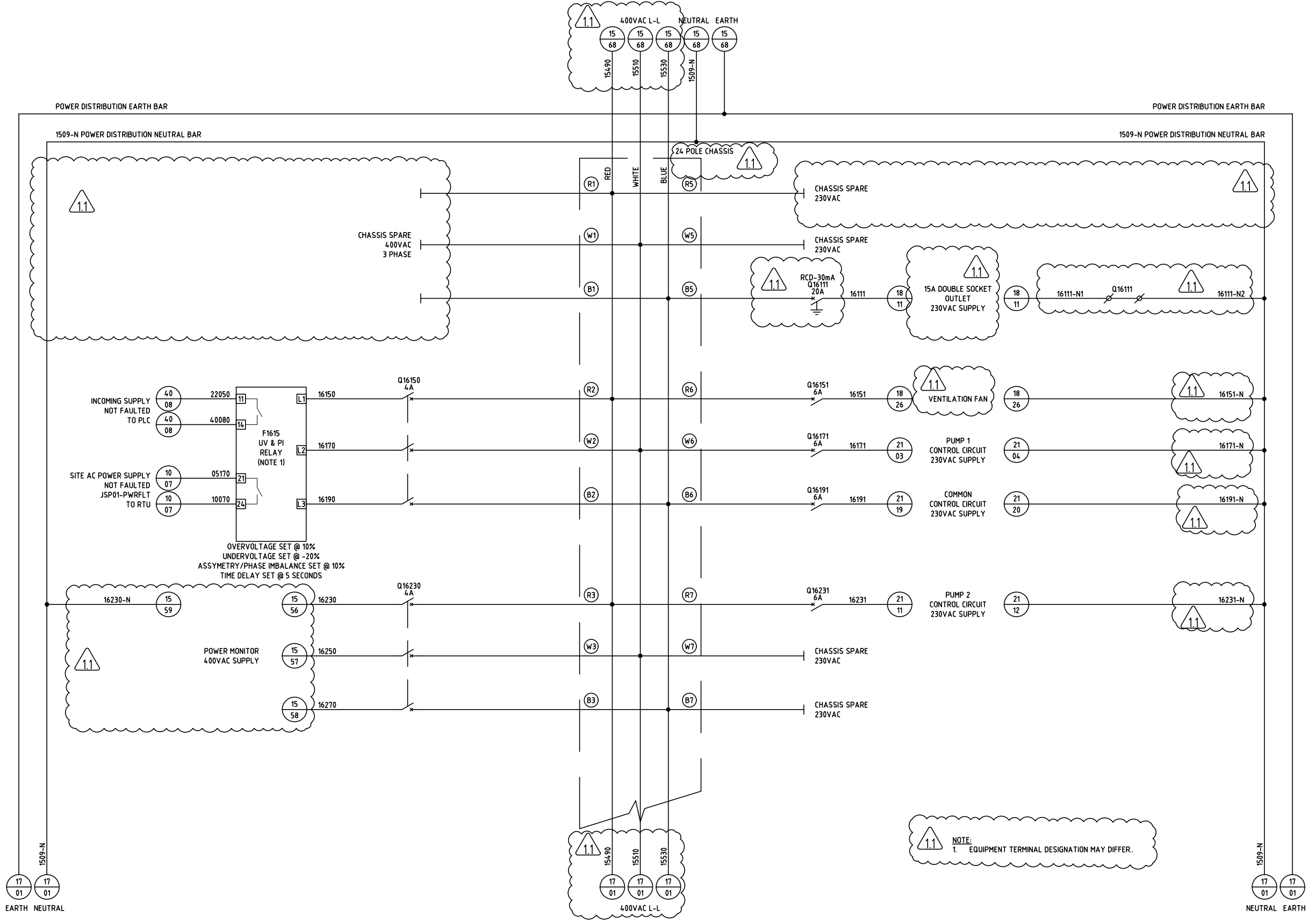
DESIGN PANEL			
DESIGNED:	14/02/2018	AUTHORISED:	14/02/2018
SACHIN PANDEY		JUSTIN HAMRA	
DRAWN:	14/02/2018	SIGNATURE:	
TROY O'BRIEN		ORIGINAL SIGNED	
REVIEWED:	14/02/2018		
JONATHON NICHOLLS			


  
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SWITCHBOARD 0 - 100A  
 MAIN SWITCHBOARD  
 400VAC METERING ENCLOSURE  
 ELECTRICAL   
 SCHEMATIC DIAGRAM

A3 SHT SIZE	TOTAL SHEETS:	1.1 REVISION
	PROJECT No:	
MAXIMO ID:		
SUPERSEDES: 5003-00001-15		
DRAWING NUMBER		
TYP-03-00001_15		

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NOTE:  
1. EQUIPMENT TERMINAL DESIGNATION MAY DIFFER.

REVISION PANEL				
REV	DATE	DRN	DETAILS	APR
1.1	28/01/22	WS	UPDATED WITH SA WATER REVIEW REQUIREMENTS	SS
0.1	03/11/20	PAN	UPDATED TITLE BLOCK & MINOR UPDATES	SS

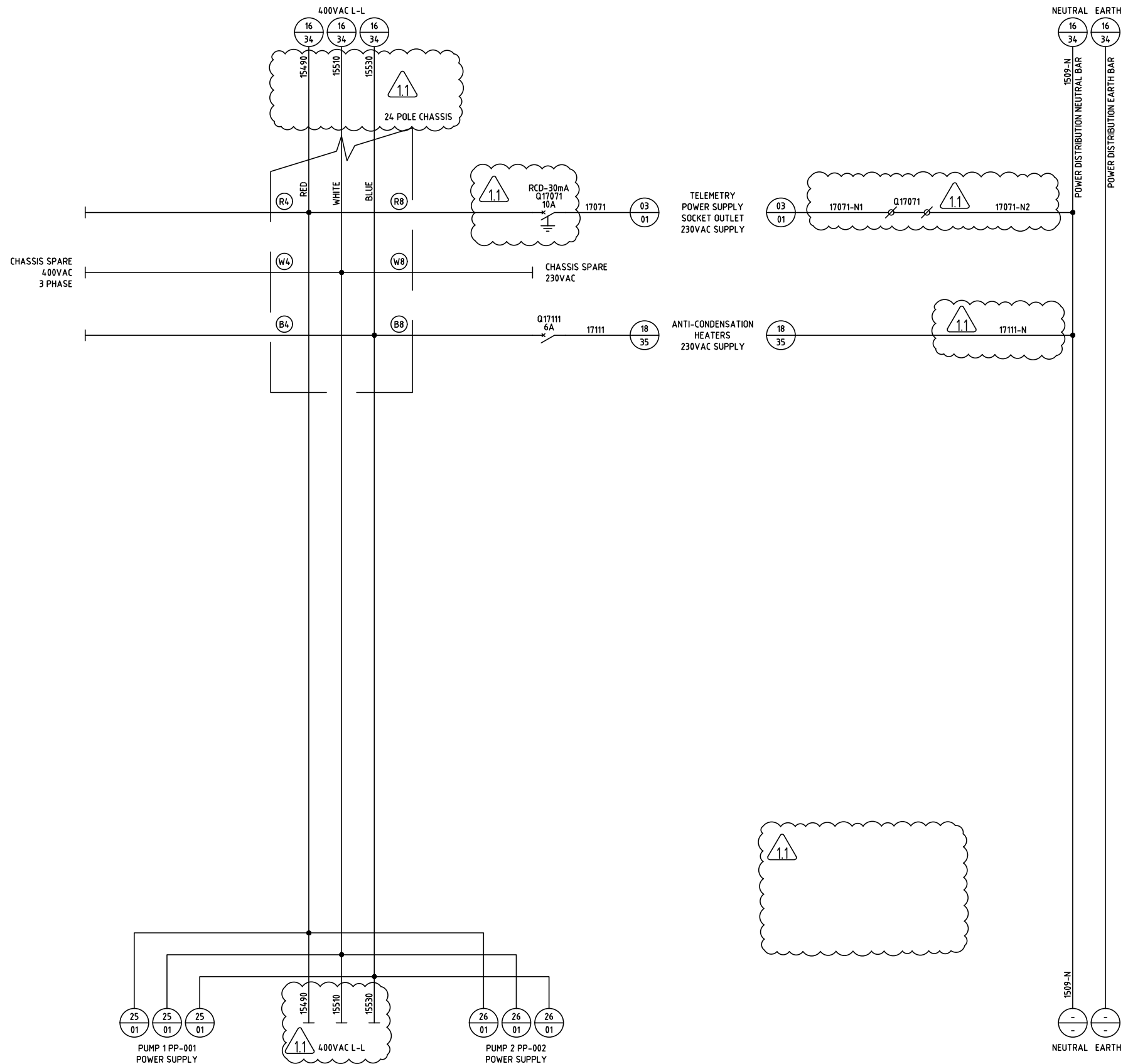
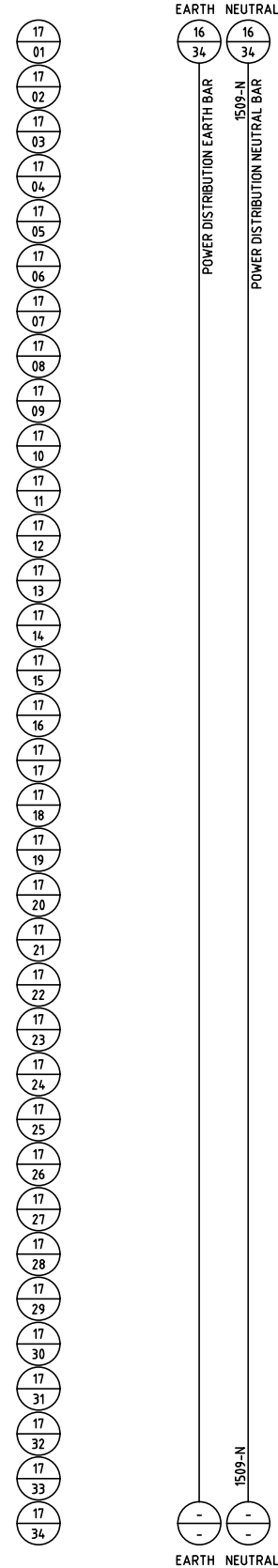
CURRENT REV CONTRACTOR: \_\_\_\_\_ CURRENT REV PROJECT: \_\_\_\_\_

DESIGN PANEL			
DESIGNED: 14/02/2018	AUTHORISED: 14/02/2018	CURRENT REV 28/01/22	
SACHIN PANDEY	JUSTIN HAMRA	AUTHORISED:	
DRAWN: 14/02/2018	SIGNATURE:	JUSTIN HAMRA	
TROY O'BRIEN	ORIGINAL SIGNED	SIGNATURE:	
REVIEWED: 14/02/2018	JONATHON NICHOLLS		
CONTRACTOR: _____			

  
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 WATER CORPORATION  
 and shall not be copied or modified  
 in part or in whole without authorization.



SWITCHBOARD 0 - 100A  
 MAIN SWITCHBOARD  
 400VAC POWER DISTRIBUTION  
 ELECTRICAL  
 SCHEMATIC DIAGRAM - SHEET 1 OF 2

A3	TOTAL SHEETS:	1.1
SHT SIZE	PROJECT No:	REVISION
MAXIMO ID:		
SUPERSEDES: 5003-00001-16		
DRAWING NUMBER		
TYP-03-00001_16		



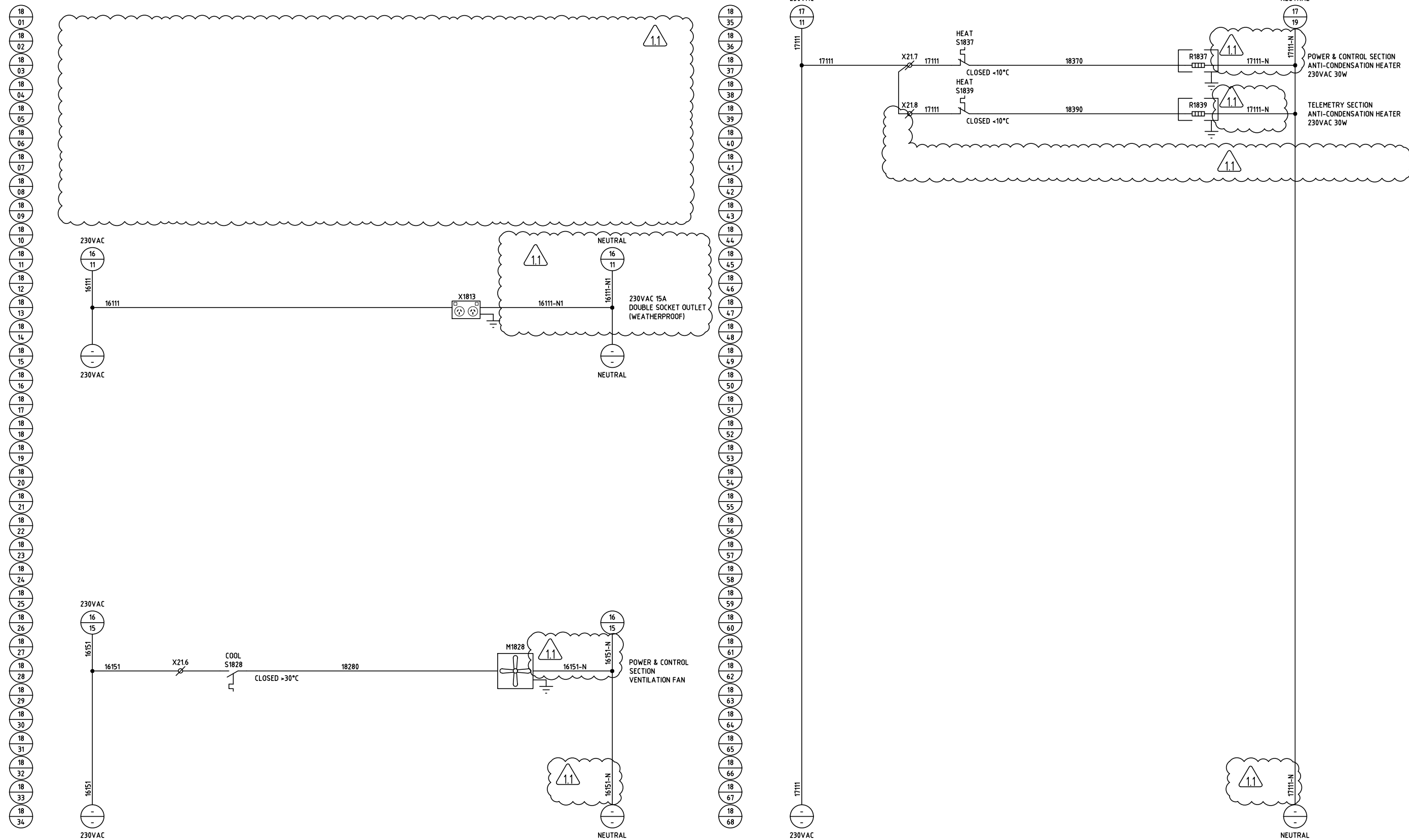
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REV	DATE	DRN	DETAILS	APR
1.1	28/01/22	WS	UPDATED WITH SA WATER REVIEW REQUIREMENTS	SS
0.1	03/11/20	PAN	UPDATED TITLE BLOCK & MINOR UPDATES	SS
CURRENT REV CONTRACTOR:			CURRENT REV PROJECT:	

DESIGN PANEL			
DESIGNED: 14/02/2018	AUTHORISED: 14/02/2018		
SACHIN PANDEY	JUSTIN HAMRA		
DRAWN: 14/02/2018	SIGNATURE:		
TROY O'BRIEN	ORIGINAL SIGNED		
REVIEWED: 14/02/2018			
JONATHON NICHOLLS			
CONTRACTOR:			


  
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 in part or in whole without authorization.

SWITCHBOARD 0 - 100A
   
 MAIN SWITCHBOARD
   
 400VAC POWER DISTRIBUTION
   
 ELECTRICAL
   
 SCHEMATIC DIAGRAM - SHEET 2 OF 2


A3	TOTAL SHEETS:	1.1
SHT SIZE	PROJECT No:	REVISION
MAXIMO ID:		
SUPERSEDES: 5003-00001-17		
DRAWING NUMBER		
TYP-03-00001_17		



REVISION PANEL				
REV	DATE	DRN	DETAILS	APR
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0.1	03/11/20	PAN	UPDATED TITLE BLOCK & MINOR UPDATES	SS

CURRENT REV CONTRACTOR: \_\_\_\_\_ CURRENT REV PROJECT: \_\_\_\_\_

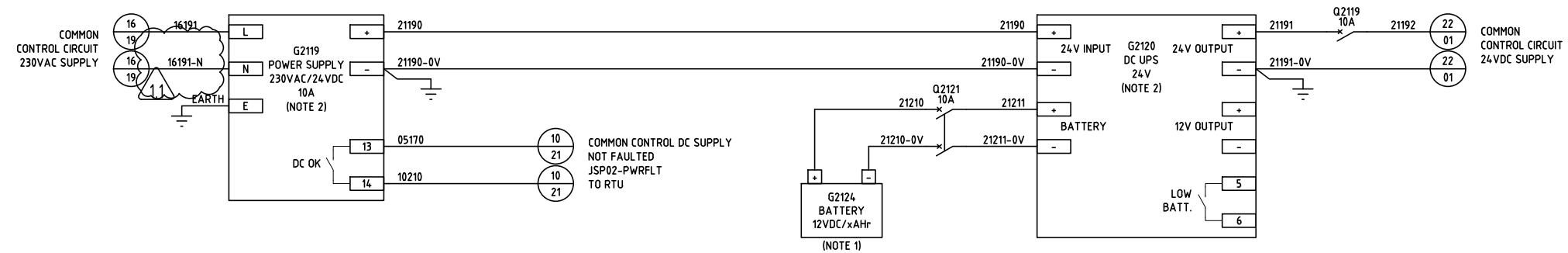
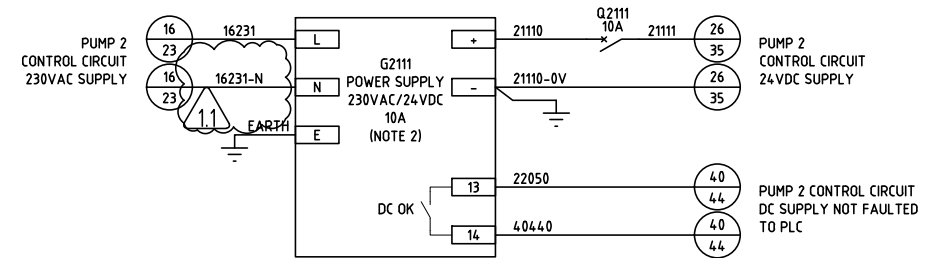
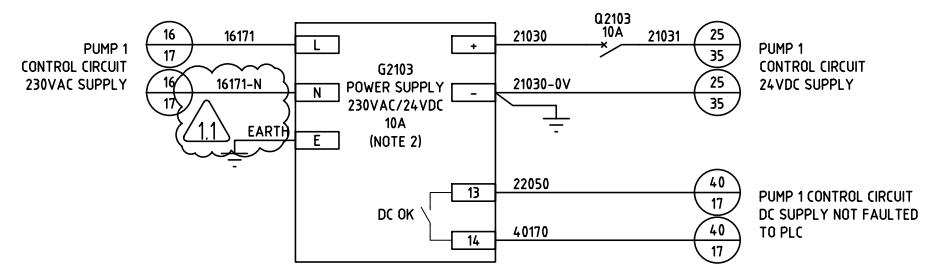
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SACHIN PANDEY	JUSTIN HAMRA	
DRAWN: 14/02/2018	SIGNATURE:	
TROY O'BRIEN	ORIGINAL SIGNED	
REVIEWED: 14/02/2018		
JONATHON NICHOLLS		


  
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SWITCHBOARD 0 - 100A  
 MAIN SWITCHBOARD  
 230VAC POWER DISTRIBUTION  
 ELECTRICAL  
 SCHEMATIC DIAGRAM

A3	TOTAL SHEETS:	1.1
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DRAWING NUMBER		
TYP-03-00001_18		

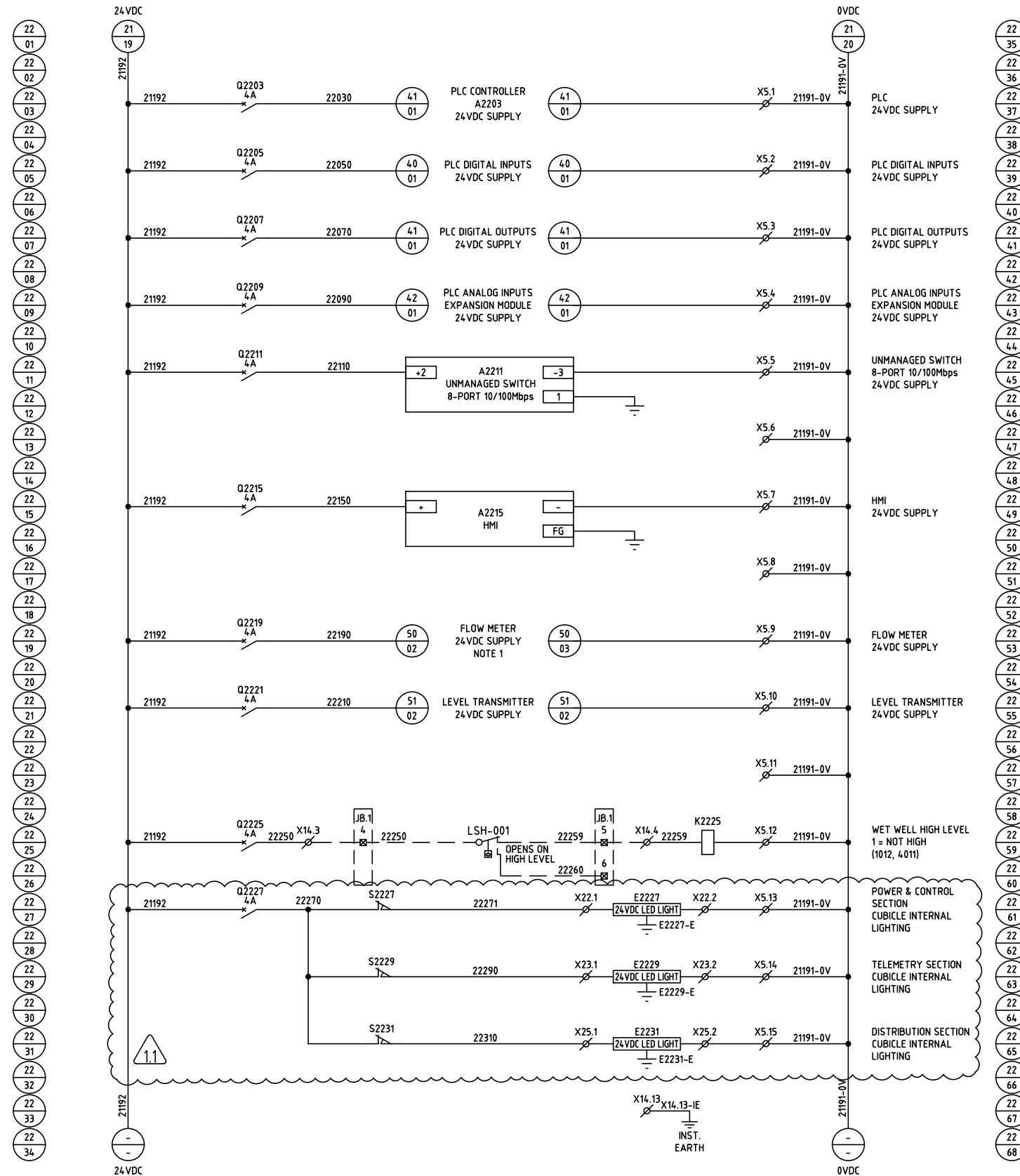
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- NOTES:
- BATTERY CAPACITY SHALL BE THE MINIMUM TIME REQUIRED AS PER TS0300, ANYTHING GREATER SHALL BE PROJECT SPECIFIC.
  - EQUIPMENT TERMINAL MAY DIFFER.

REVISION PANEL				DESIGN PANEL						SWITCHBOARD 0 - 100A MAIN SWITCHBOARD 230VAC TO 24VDC POWER DISTRIBUTION ELECTRICAL SCHEMATIC DIAGRAM		A3 TOTAL SHEETS: 1.1	
REV	DATE	DRN	DETAILS	APR	CURRENT REV 28/01/22	DESIGNED: 14/02/2018	AUTHORISED: 14/02/2018					SHT SIZE	PROJECT No:
					CURRENT REV 28/01/22	DESIGNED: 14/02/2018	AUTHORISED: 14/02/2018						
					AUTHORISED: JUSTIN HAMRA	SACHIN PANDEY	JUSTIN HAMRA						
					SIGNATURE: 	DRAWN: 14/02/2018	SIGNATURE:						
						TROY O'BRIEN	ORIGINAL SIGNED						
1.1	28/01/22	WS	UPDATED WITH SA WATER REVIEW REQUIREMENTS	SS		REVIEWED: 14/02/2018							
0.1	03/11/20	PAN	UPDATED TITLE BLOCK & MINOR UPDATES	SS		JONATHON NICHOLLS							
CURRENT REV CONTRACTOR:				CURRENT REV PROJECT:								MAXIMO ID: SUPERSEDES: 5003-00001-21 DRAWING NUMBER TYP-03-00001_21	



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NOTES:  
1. FLOWMETER REQUIREMENTS IS PROJECT SPECIFIC.

REVISION PANEL			
REV	DATE	DRN	DETAILS
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0.1	03/11/20	PAN	UPDATED TITLE BLOCK

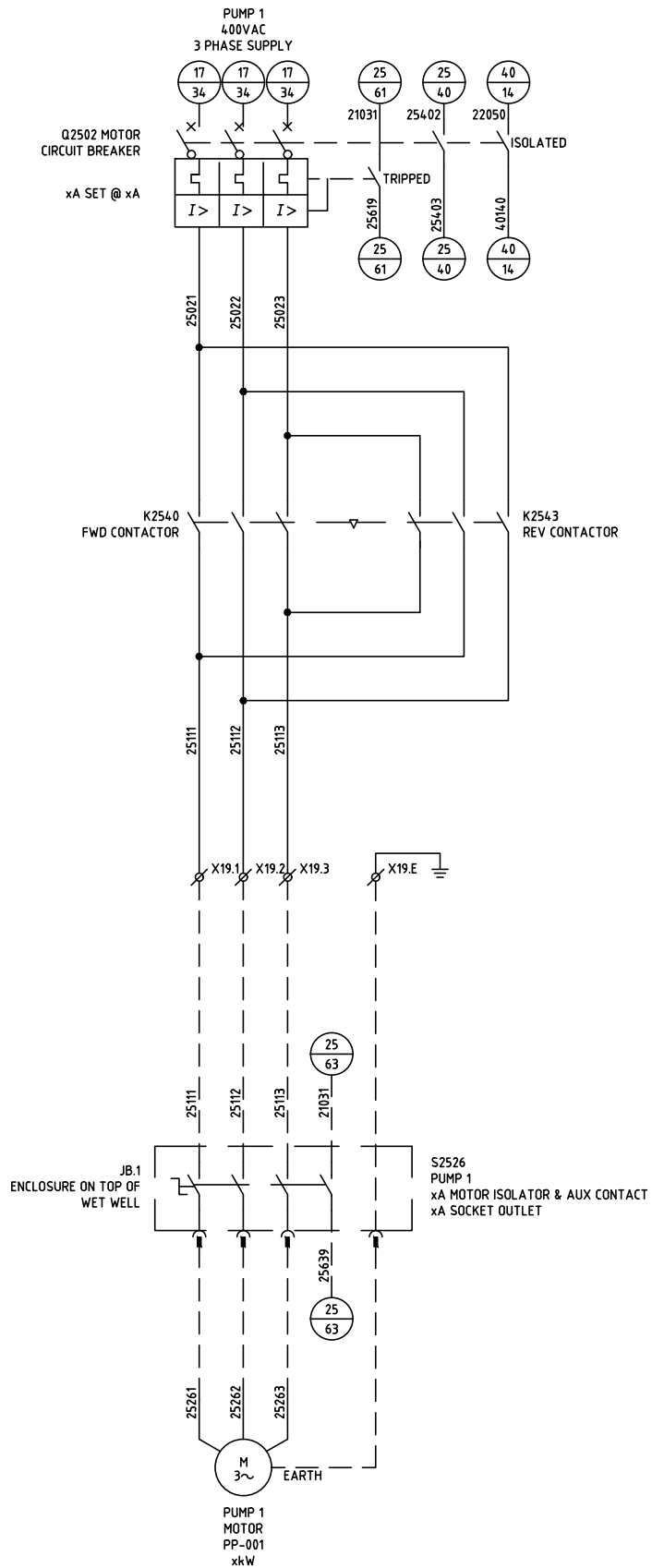
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DESIGNED:	AUTHORISED:	APPROVED:
14/02/2018	14/02/2018	14/02/2018
SACHIN PANDEY	JUSTIN HAMRA	
DRAWN: 14/02/2018	SIGNATURE:	
TROY O'BRIEN		
REVIEWED: 14/02/2018	ORIGINAL SIGNED	
JONATHON NICHOLLS		

  
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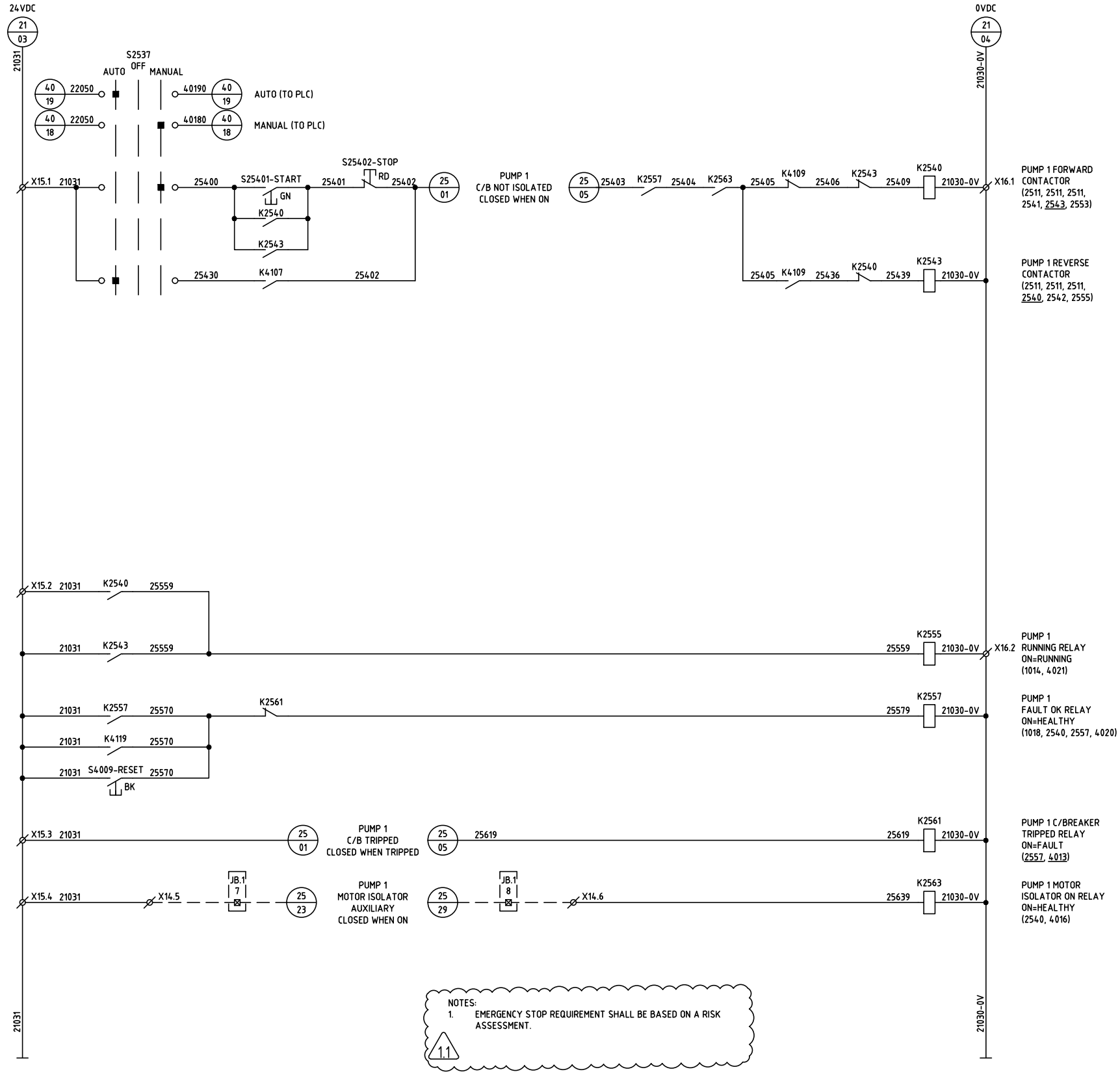
SWITCHBOARD 0 - 100A  
 MAIN SWITCHBOARD  
 24VDC COMMON CONTROL  
 ELECTRICAL  
 SCHEMATIC DIAGRAM

A3 SHT SIZE	TOTAL SHEETS:	1.1 REVISION
	PROJECT No:	
MAXIMO ID:		
SUPERSEDES: 5003-00001-22		
DRAWING NUMBER		
TYP-03-00001_22		

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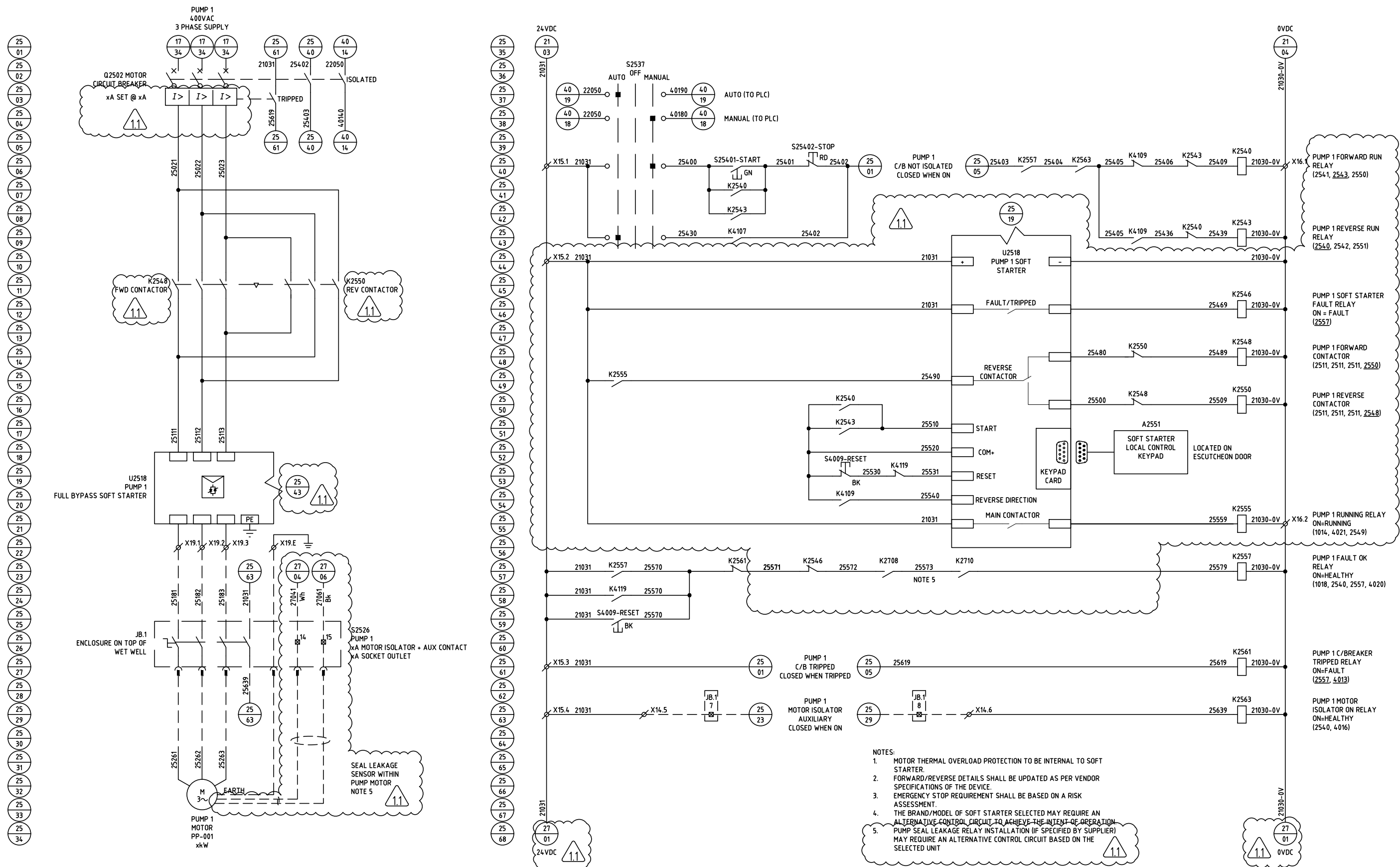
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0.1	03/11/20	PAN	UPDATED TITLE BLOCK	SS
CURRENT REV CONTRACTOR:			CURRENT REV PROJECT:	

DESIGN PANEL			
DESIGNED:	14/02/2018	AUTHORISED:	14/02/2018
SACHIN PANDEY		JUSTIN HAMRA	
DRAWN:	14/02/2018	SIGNATURE:	
TROY O'BRIEN		ORIGINAL SIGNED	
REVIEWED:	14/02/2018		
JONATHON NICHOLLS			
CONTRACTOR:			

  
 Government of South Australia  
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SWITCHBOARD 0 - 100A  
 MAIN SWITCHBOARD  
 PUMP 1 POWER & CONTROL  
 ELECTRICAL  
 SCHEMATIC DIAGRAM (DOL STARTER)

A3 SHT SIZE	TOTAL SHEETS:	1.1 REVISION
	PROJECT No:	
MAXIMO ID:		
SUPERSEDES: 5003-00001-25a		
DRAWING NUMBER		
TYP-03-00001_25a		



REV	DATE	DRN	DETAILS	APR
1.1	28/01/22	WS	UPDATED WITH SA WATER REVIEW REQUIREMENTS	SS
0.1	03/11/20	PAN	UPDATED TITLE BLOCK & MINOR UPDATES	SS

CURRENT REV CONTRACTOR: \_\_\_\_\_ CURRENT REV PROJECT: \_\_\_\_\_

DESIGNED:	AUTHORISED:
14/02/2018 SACHIN PANDEY	14/02/2018 JUSTIN HAMRA
DRAWN: 14/02/2018 TROY O'BRIEN	SIGNATURE: ORIGINAL SIGNED
REVIEWED: 14/02/2018 JONATHON NICHOLLS	

CONTRACTOR: \_\_\_\_\_

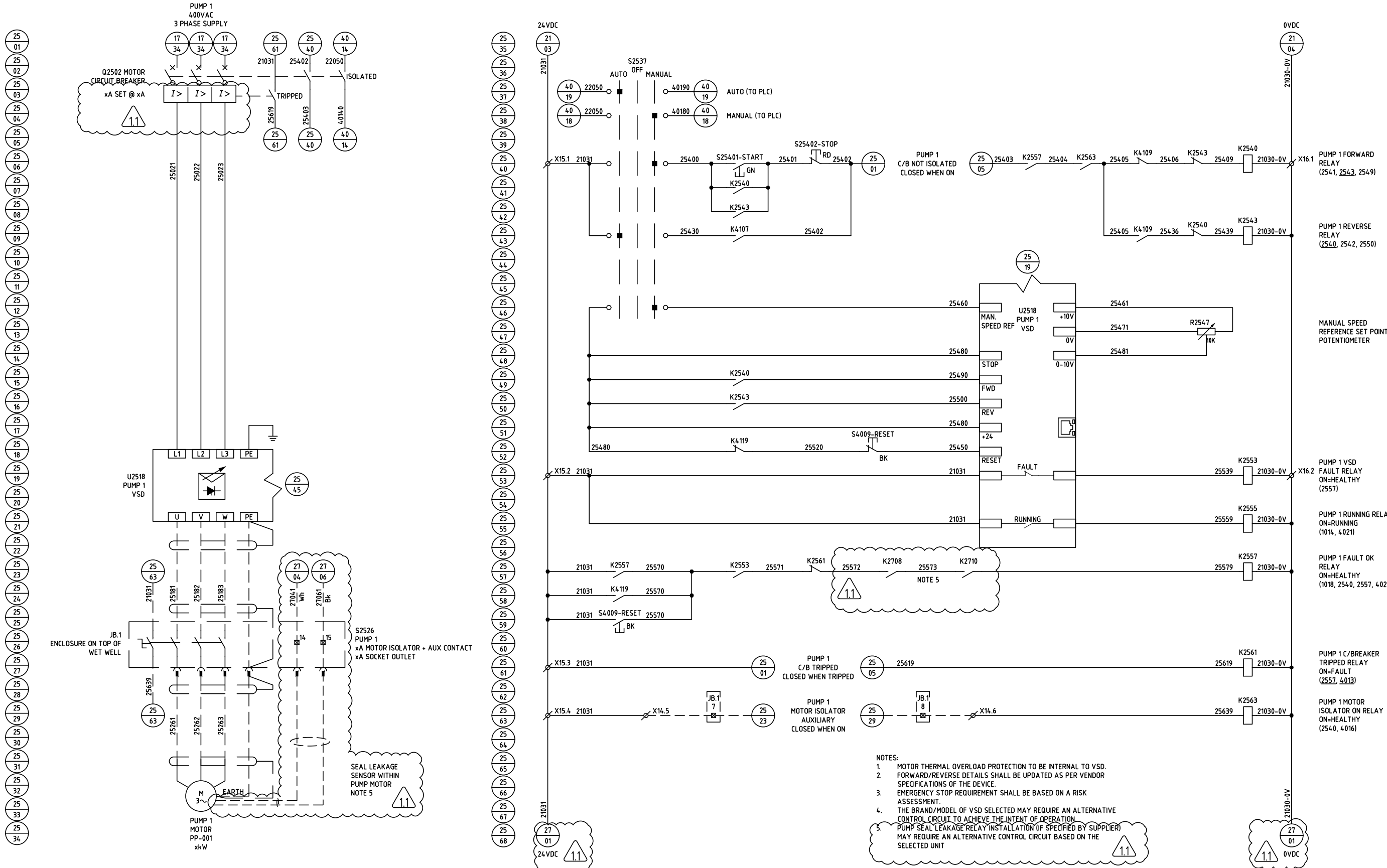
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SWITCHBOARD 0 - 100A  
 MAIN SWITCHBOARD  
 PUMP 1 POWER & CONTROL  
 ELECTRICAL  
 SCHEMATIC DIAGRAM (SOFT STARTER)

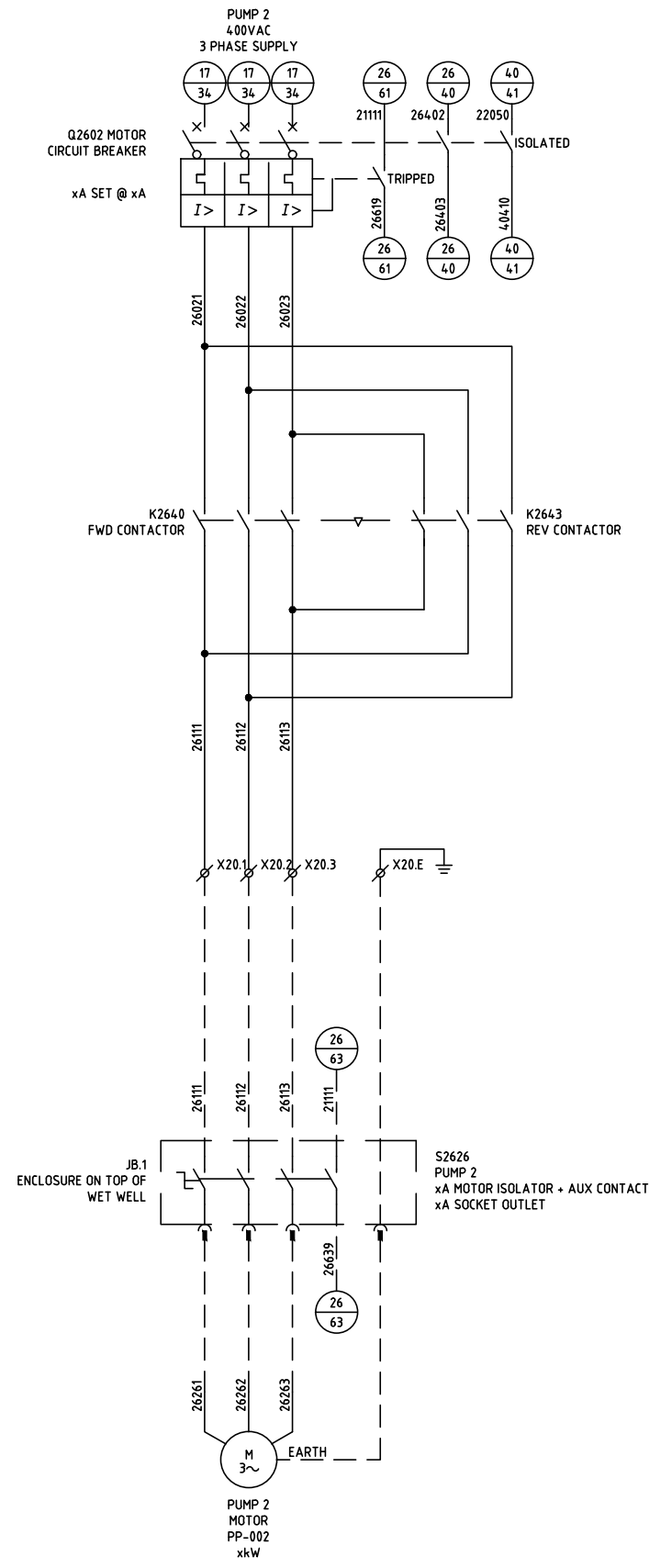
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DRAWING NUMBER		
TYP-03-00001_25b		



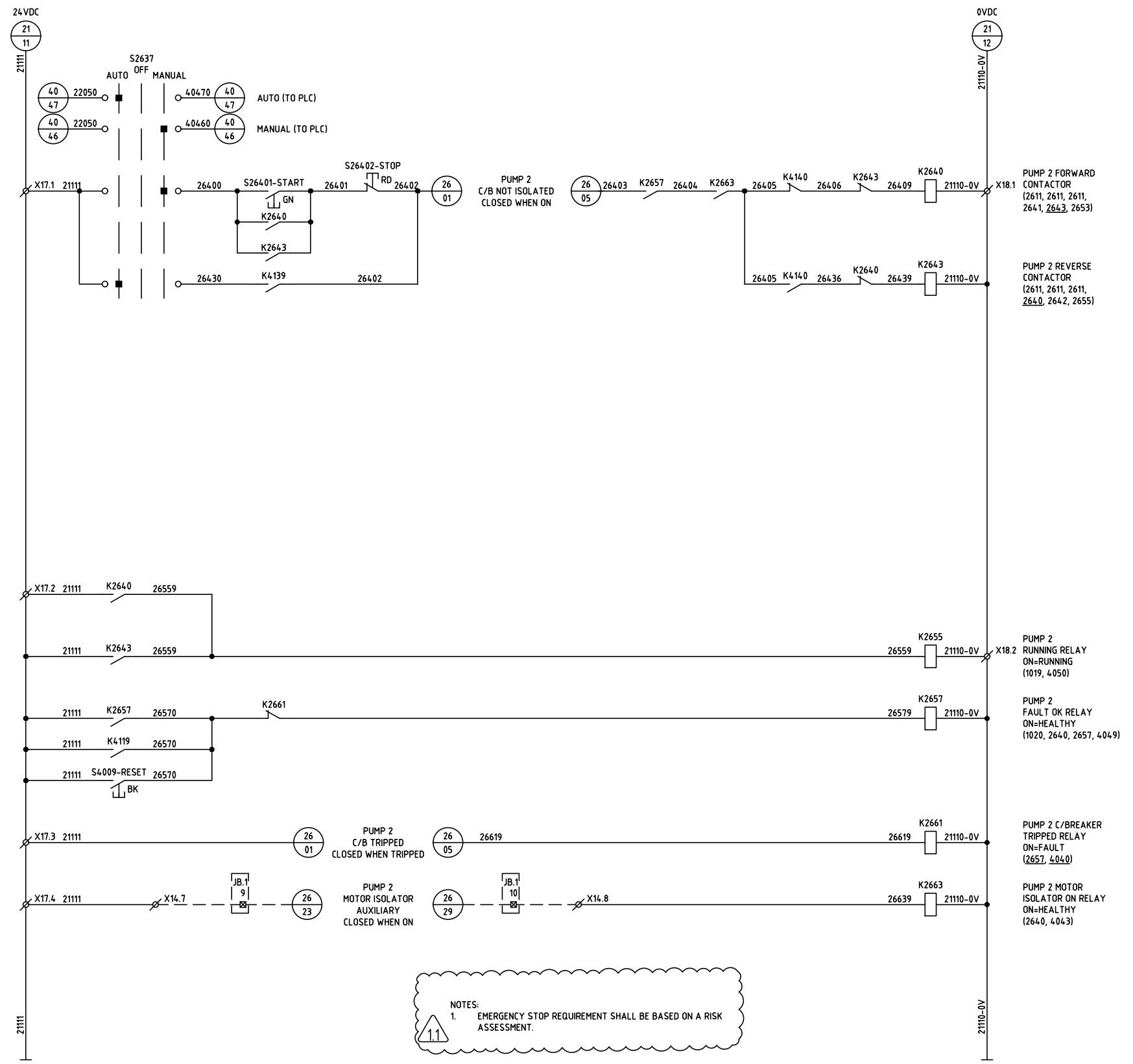


<p>REVISION PANEL</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>REV</th> <th>DATE</th> <th>DRN</th> <th>DETAILS</th> <th>APR</th> </tr> </thead> <tbody> <tr> <td>1.1</td> <td>28/01/22</td> <td>WS</td> <td>UPDATED WITH SA WATER REVIEW REQUIREMENTS</td> <td>SS</td> </tr> <tr> <td>0.1</td> <td>03/11/20</td> <td>PAN</td> <td>UPDATED TITLE BLOCK &amp; MINOR UPDATES</td> <td>SS</td> </tr> </tbody> </table> <p>CURRENT REV CONTRACTOR: _____</p>	REV	DATE	DRN	DETAILS	APR	1.1	28/01/22	WS	UPDATED WITH SA WATER REVIEW REQUIREMENTS	SS	0.1	03/11/20	PAN	UPDATED TITLE BLOCK & MINOR UPDATES	SS	<p>DESIGN PANEL</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>DESIGNED:</th> <th>AUTHORISED:</th> </tr> </thead> <tbody> <tr> <td>14/02/2018 SACHIN PANDEY</td> <td>14/02/2018 JUSTIN HAMRA</td> </tr> <tr> <td>DRAWN: 14/02/2018 TROY O'BRIEN</td> <td>SIGNATURE: ORIGINAL SIGNED</td> </tr> <tr> <td>REVIEWED: 14/02/2018 JONATHON NICHOLLS</td> <td></td> </tr> </tbody> </table> <p>CURRENT REV PROJECT: _____</p>	DESIGNED:	AUTHORISED:	14/02/2018 SACHIN PANDEY	14/02/2018 JUSTIN HAMRA	DRAWN: 14/02/2018 TROY O'BRIEN	SIGNATURE: ORIGINAL SIGNED	REVIEWED: 14/02/2018 JONATHON NICHOLLS		<p>Government of South Australia</p> <p>This drawing is the property of the SOUTH AUSTRALIAN WATER CORPORATION and shall not be copied or modified in part or in whole without authorization.</p>	<p>SWITCHBOARD 0 - 100A MAIN SWITCHBOARD PUMP 1 POWER &amp; CONTROL ELECTRICAL SCHEMATIC DIAGRAM (VSD STARTER)</p>	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="font-size: 2em; font-weight: bold;">A3</td> <td>TOTAL SHEETS: 1.1</td> </tr> <tr> <td>SHT SIZE</td> <td>PROJECT No:</td> </tr> <tr> <td colspan="2">MAXIMO ID:</td> </tr> <tr> <td colspan="2">SUPERSEDES: 5003-00001-25c</td> </tr> <tr> <td colspan="2">DRAWING NUMBER</td> </tr> <tr> <td colspan="2" style="font-size: 1.5em; font-weight: bold;">TYP-03-00001_25c</td> </tr> </table>	A3	TOTAL SHEETS: 1.1	SHT SIZE	PROJECT No:	MAXIMO ID:		SUPERSEDES: 5003-00001-25c		DRAWING NUMBER		TYP-03-00001_25c	
REV	DATE	DRN	DETAILS	APR																																			
1.1	28/01/22	WS	UPDATED WITH SA WATER REVIEW REQUIREMENTS	SS																																			
0.1	03/11/20	PAN	UPDATED TITLE BLOCK & MINOR UPDATES	SS																																			
DESIGNED:	AUTHORISED:																																						
14/02/2018 SACHIN PANDEY	14/02/2018 JUSTIN HAMRA																																						
DRAWN: 14/02/2018 TROY O'BRIEN	SIGNATURE: ORIGINAL SIGNED																																						
REVIEWED: 14/02/2018 JONATHON NICHOLLS																																							
A3	TOTAL SHEETS: 1.1																																						
SHT SIZE	PROJECT No:																																						
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TYP-03-00001_25c																																							

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NOTES:  
1. EMERGENCY STOP REQUIREMENT SHALL BE BASED ON A RISK ASSESSMENT.

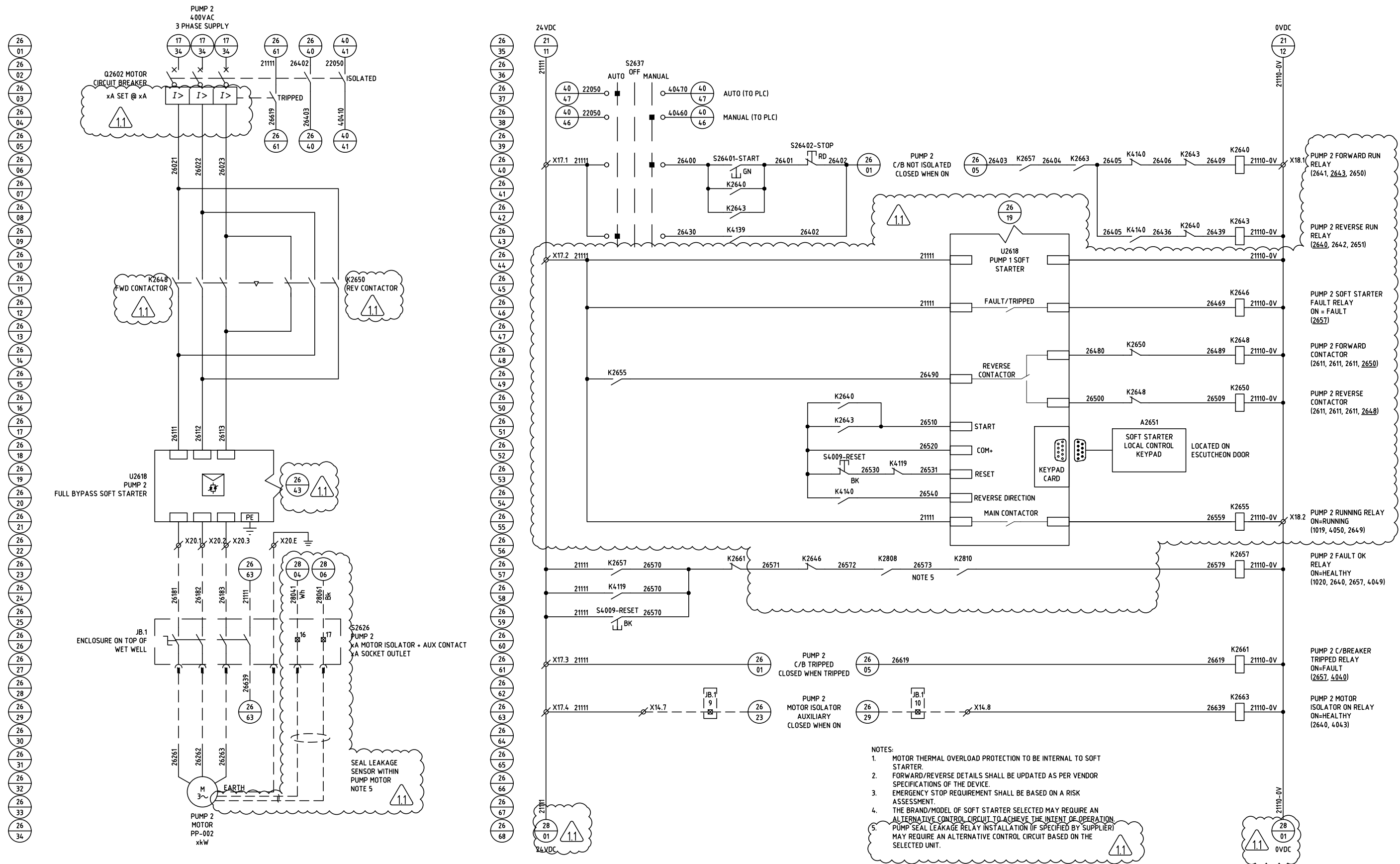
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1.1	28/01/22	WS	UPDATED WITH SA WATER REVIEW REQUIREMENTS	SS
0.1	03/11/20	PAN	UPDATED TITLE BLOCK & MINOR UPDATES	SS
CURRENT REV CONTRACTOR:			CURRENT REV PROJECT:	

DESIGN PANEL		
DESIGNED:	AUTHORISED:	DATE
SACHIN PANDEY	JUSTIN HAMRA	14/02/2018
DRAWN:	SIGNATURE:	DATE
TROY O'BRIEN	[Signature]	14/02/2018
REVIEWED:	SIGNATURE:	DATE
JONATHON NICHOLLS	[Signature]	14/02/2018
CONTRACTOR:		

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SWITCHBOARD 0 - 100A  
MAIN SWITCHBOARD  
PUMP 2 POWER & CONTROL  
ELECTRICAL  
SCHEMATIC DIAGRAM (DOL STARTER)

A3 SHT SIZE	TOTAL SHEETS:	1.1 REVISION
	PROJECT No:	
MAXIMO ID:		TYP-03-00001_26a
SUPERSEDES: 5003-00001-26a		
DRAWING NUMBER		



REV	DATE	DRN	DETAILS	APR
1.1	28/01/22	WS	UPDATED WITH SA WATER REVIEW REQUIREMENTS	SS
0.1	03/11/20	PAN	UPDATED TITLE BLOCK & MINOR UPDATES	SS

CURRENT REV CONTRACTOR: \_\_\_\_\_ CURRENT REV PROJECT: \_\_\_\_\_

DESIGNED:	AUTHORISED:
14/02/2018 SACHIN PANDEY	14/02/2018 JUSTIN HAMRA
DRAWN: 14/02/2018 TROY O'BRIEN	SIGNATURE: ORIGINAL SIGNED
REVIEWED: 14/02/2018 JONATHON NICHOLLS	

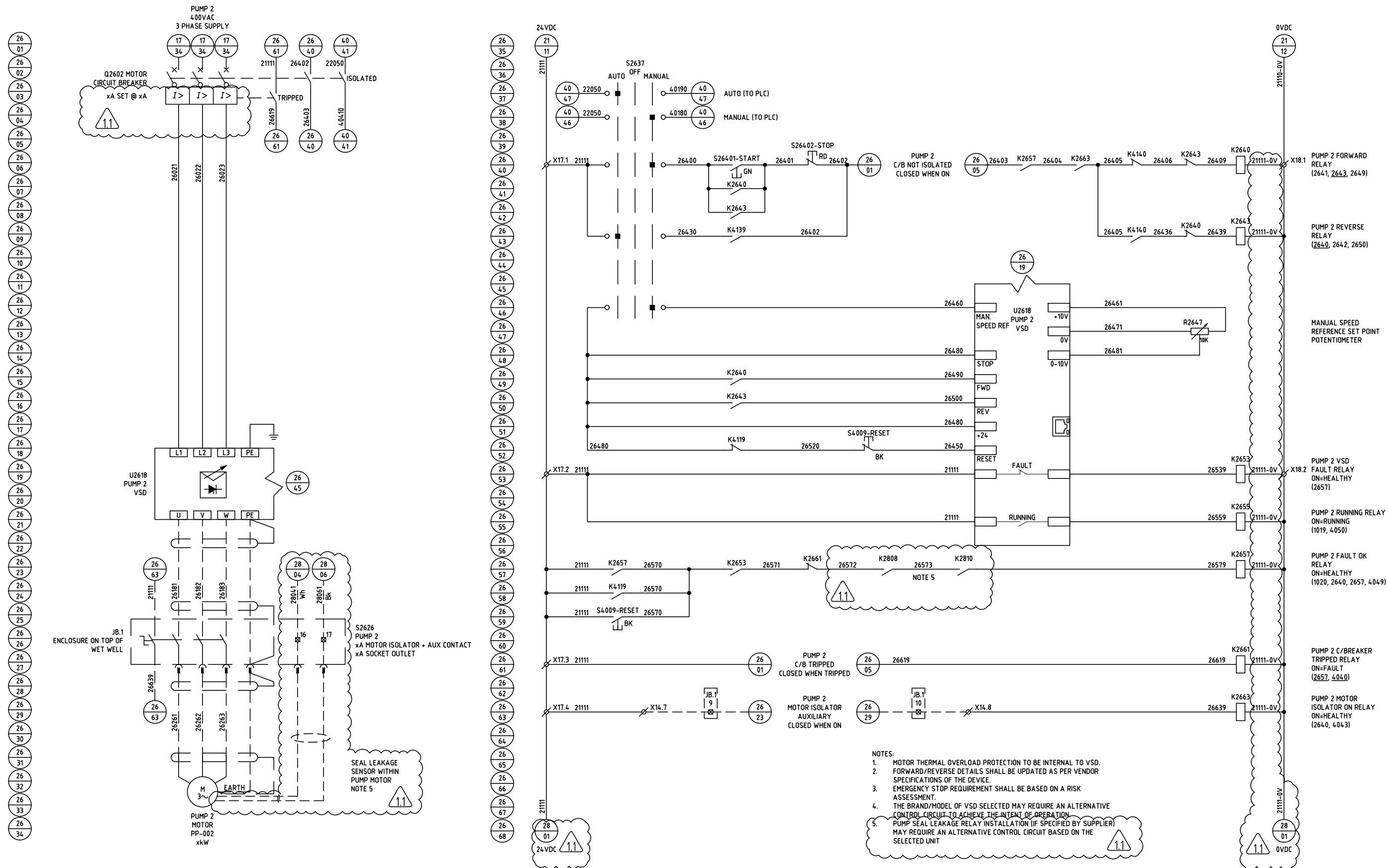
CONTRACTOR: \_\_\_\_\_

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SWITCHBOARD 0 - 100A  
 MAIN SWITCHBOARD  
 PUMP 2 POWER & CONTROL  
 ELECTRICAL  
 SCHEMATIC DIAGRAM (SOFT STARTER)

A3 SHT SIZE	TOTAL SHEETS:	1.1 REVISION
	PROJECT No:	
MAXIMO ID:		
SUPERSEDES: 5003-00001-26b		
DRAWING NUMBER		
TYP-03-00001_26b		



- NOTES:
- MOTOR THERMAL OVERLOAD PROTECTION TO BE INTERNAL TO VSD.
  - FORWARD/REVERSE DETAILS SHALL BE UPDATED AS PER VENDOR SPECIFICATIONS OF THE DEVICE.
  - EMERGENCY STOP REQUIREMENT SHALL BE BASED ON A RISK ASSESSMENT.
  - THE BRAND/MODEL OF VSD SELECTED MAY REQUIRE AN ALTERNATIVE CONTROL CIRCUIT TO ACHIEVE THE INTENT OF OPERATION.
  - PUMP SEAL LEAKAGE RELAY INSTALLATION (IF SPECIFIED BY SUPPLIER) MAY REQUIRE AN ALTERNATIVE CONTROL CIRCUIT BASED ON THE SELECTED UNIT.

REVISION PANEL			
REV	DATE	DRN	DETAILS
1.1	28/01/22	WS	UPDATED WITH SA WATER REVIEW REQUIREMENTS
0.1	03/11/20	PAN	UPDATED TITLE BLOCK & MINOR UPDATES

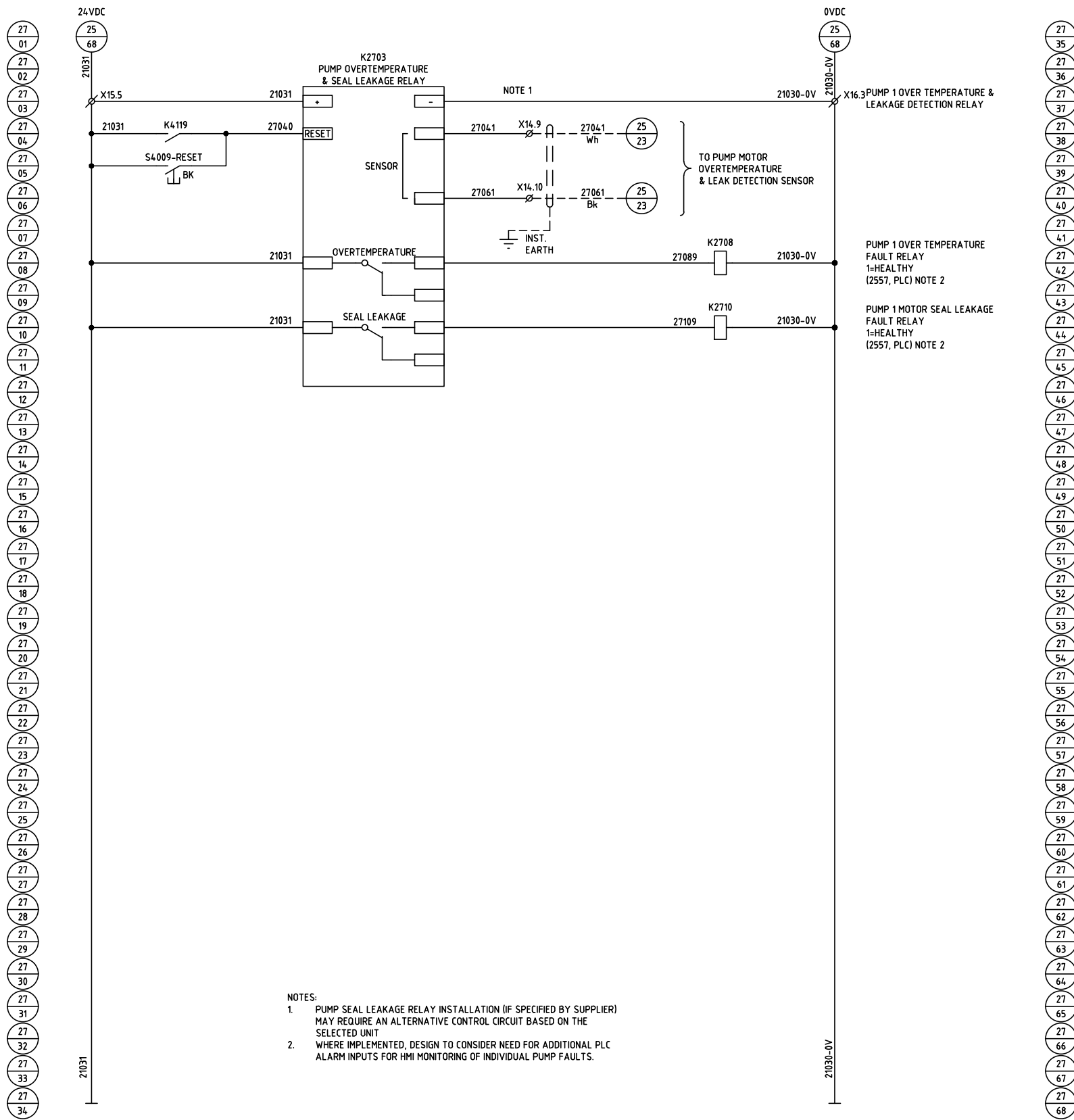
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	AUTHORISED: JUSTIN HAMRA	SACHIN PANDEY	JUSTIN HAMRA
	SIGNATURE: <i>[Signature]</i>	TROY O'BRIEN	SIGNATURE: <i>[Signature]</i>
		REVIEWED: 14/02/2018	ORIGINAL SIGNED
		JONATHON NICHOLLS	

DESIGN PANEL			
APR	CURRENT REV 28/01/22	DESIGNED: 14/02/2018	AUTHORISED: 14/02/2018
	AUTHORISED: JUSTIN HAMRA	SACHIN PANDEY	JUSTIN HAMRA
	SIGNATURE: <i>[Signature]</i>	TROY O'BRIEN	SIGNATURE: <i>[Signature]</i>
		REVIEWED: 14/02/2018	ORIGINAL SIGNED
		JONATHON NICHOLLS	

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SWITCHBOARD 0 - 100A  
 MAIN SWITCHBOARD  
 PUMP 2 POWER & CONTROL  
 ELECTRICAL  
 SCHEMATIC DIAGRAM (VSD STARTER)


A3	TOTAL SHEETS:	1.1
SHT SIZE	PROJECT No:	REVISION
MAXIMO ID:		
SUPERSEDES: 5003-00001-26c		
DRAWING NUMBER		
TYP-03-00001_26c		



- NOTES:
1. PUMP SEAL LEAKAGE RELAY INSTALLATION (IF SPECIFIED BY SUPPLIER) MAY REQUIRE AN ALTERNATIVE CONTROL CIRCUIT BASED ON THE SELECTED UNIT
  2. WHERE IMPLEMENTED, DESIGN TO CONSIDER NEED FOR ADDITIONAL PLC ALARM INPUTS FOR HMI MONITORING OF INDIVIDUAL PUMP FAULTS.

REVISION PANEL				
REV	DATE	DRN	DETAILS	APR
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CURRENT REV CONTRACTOR:			CURRENT REV PROJECT:	

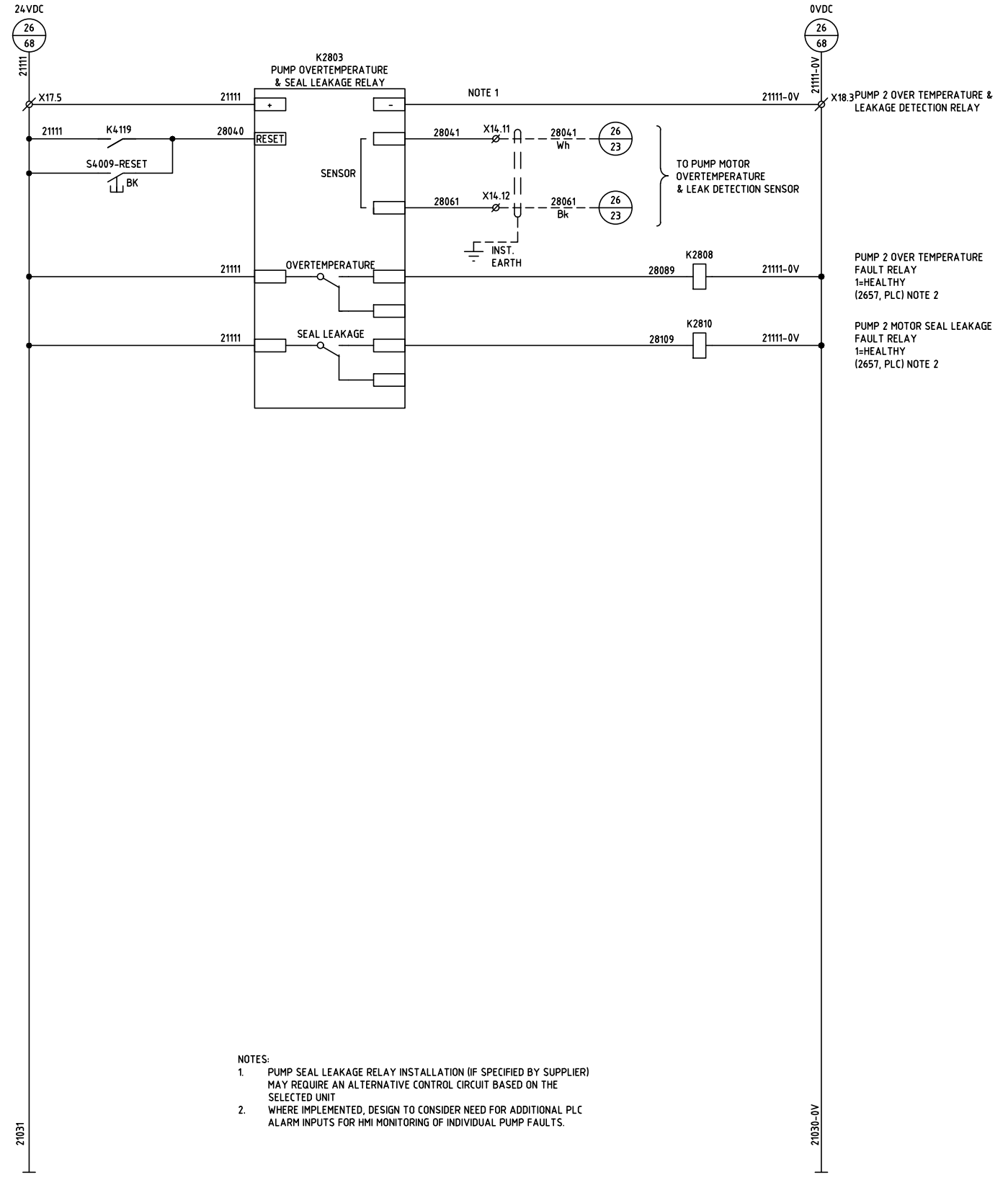
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SACHIN PANDEY		JUSTIN HAMRA
DRAWN:	28/01/2022	SIGNATURE:
W.SAAD		
REVIEWED:	28/01/2022	
JONATHON NICHOLLS		
CONTRACTOR:		


  
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SWITCHBOARD 0 - 100A  
 MAIN SWITCHBOARD  
 PUMP 1 SEAL LEAKAGE DETECTION RELAY  
 ELECTRICAL  
 SCHEMATIC DIAGRAM

A3	TOTAL SHEETS:	0.1
SHT SIZE	PROJECT No:	REVISION
MAXIMO ID:		
SUPERSEDES:		
DRAWING NUMBER		
TYP-03-00001_27		

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- NOTES:
- PUMP SEAL LEAKAGE RELAY INSTALLATION (IF SPECIFIED BY SUPPLIER) MAY REQUIRE AN ALTERNATIVE CONTROL CIRCUIT BASED ON THE SELECTED UNIT
  - WHERE IMPLEMENTED, DESIGN TO CONSIDER NEED FOR ADDITIONAL PLC ALARM INPUTS FOR HMI MONITORING OF INDIVIDUAL PUMP FAULTS.

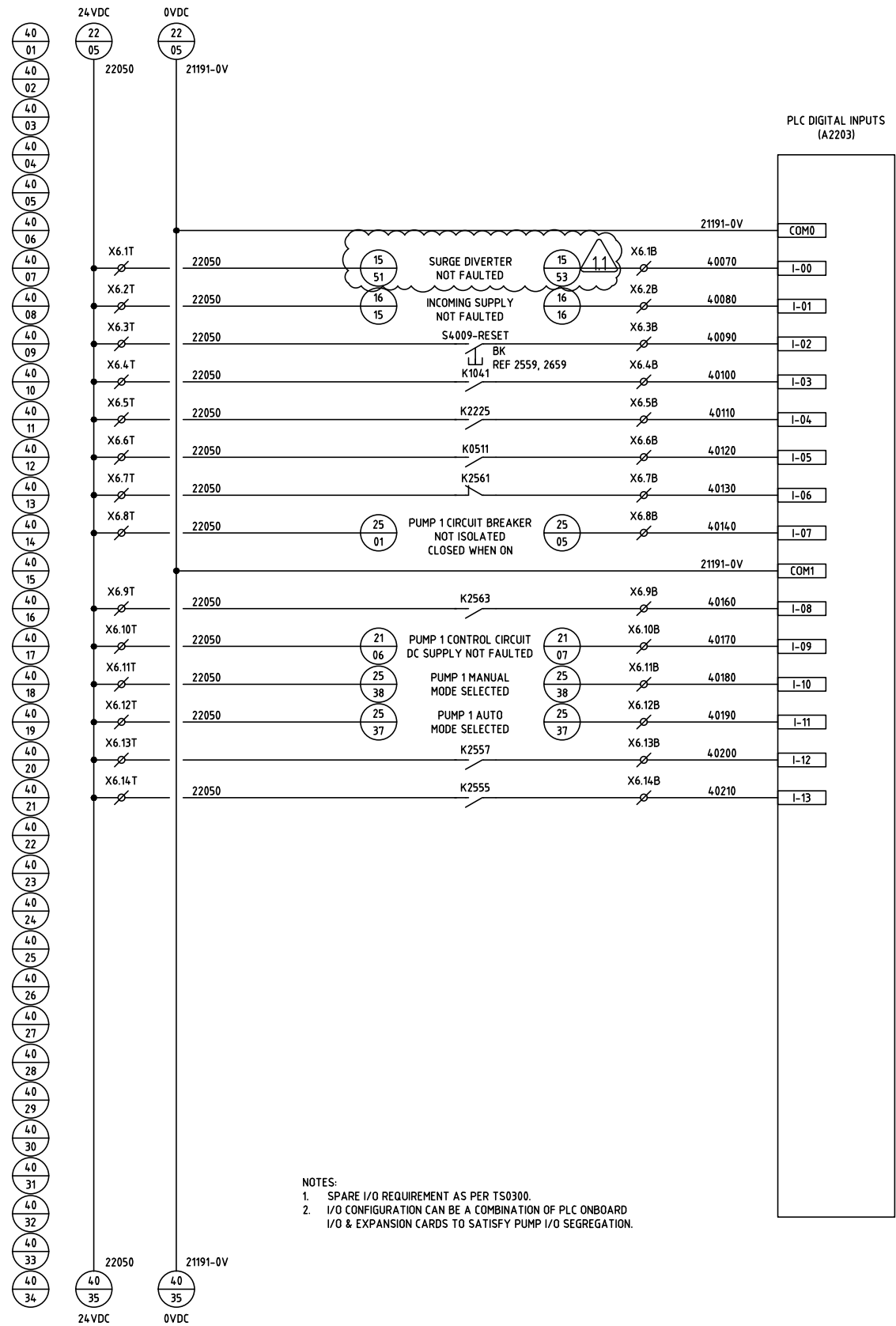
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REV	DATE	DRN	DETAILS	APR
0.1	28/01/22	WS	PUMP SEAL LEAK DETECTION CIRCUIT (WHERE APPLICABLE)	SS
CURRENT REV CONTRACTOR:			CURRENT REV PROJECT:	

DESIGN PANEL		
DESIGNED:	28/01/2022	AUTHORISED: 28/01/2022
SACHIN PANDEY		JUSTIN HAMRA
DRAWN:	28/01/2022	SIGNATURE:
W. SAAD		
REVIEWED:	28/01/2022	
JONATHON NICHOLLS		
CONTRACTOR:		

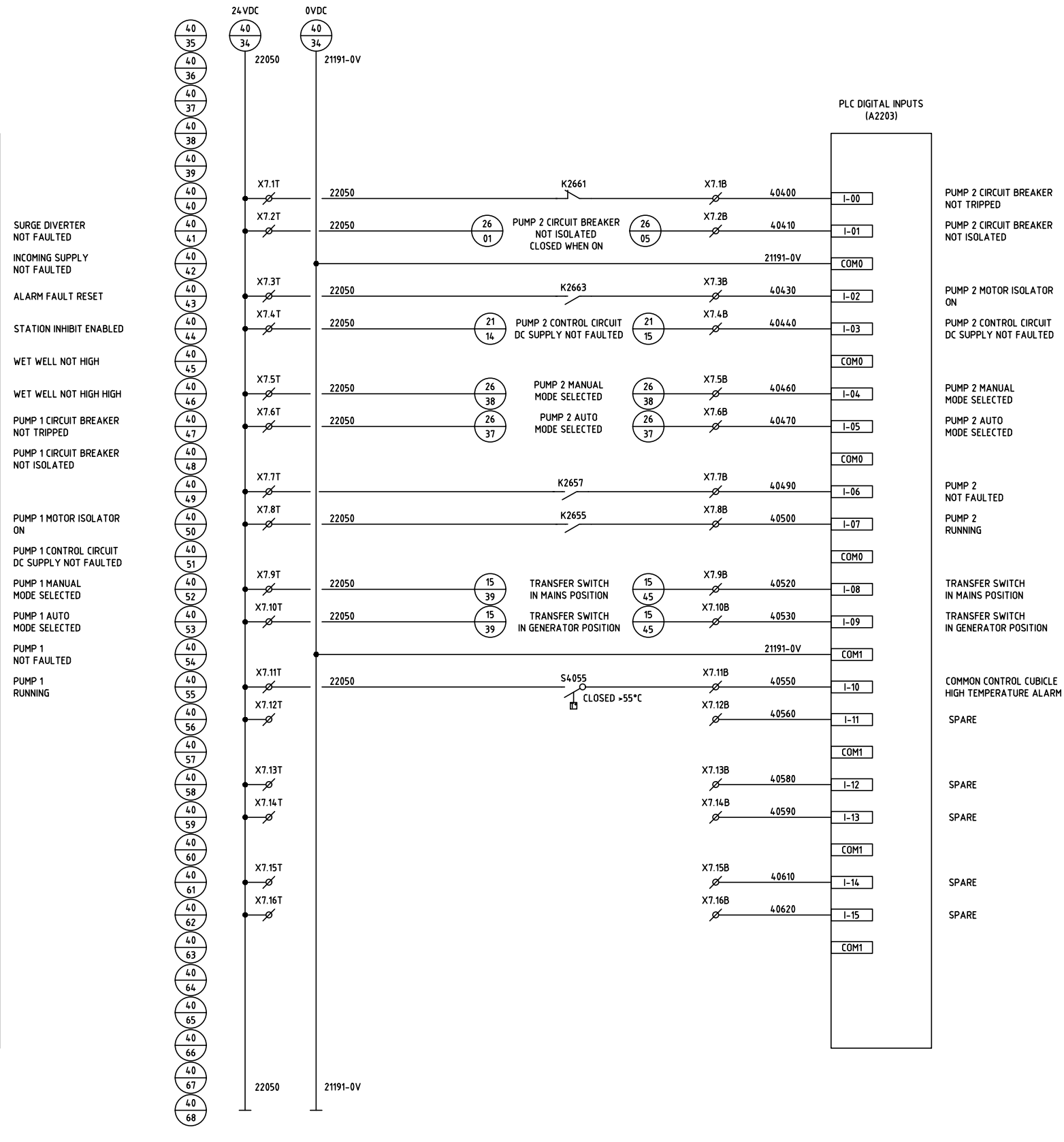
  
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SWITCHBOARD 0 - 100A  
 MAIN SWITCHBOARD  
 PUMP 2 SEAL LEAKAGE DETECTION RELAY  
 ELECTRICAL  
 SCHEMATIC DIAGRAM

A3	TOTAL SHEETS:	0.1
SHT SIZE	PROJECT No:	REVISION
MAXIMO ID:		
SUPERSEDES:		
DRAWING NUMBER		
TYP-03-00001_28		




NOTES:  
 1. SPARE I/O REQUIREMENT AS PER TS0300.  
 2. I/O CONFIGURATION CAN BE A COMBINATION OF PLC ONBOARD I/O & EXPANSION CARDS TO SATISFY PUMP I/O SEGREGATION.



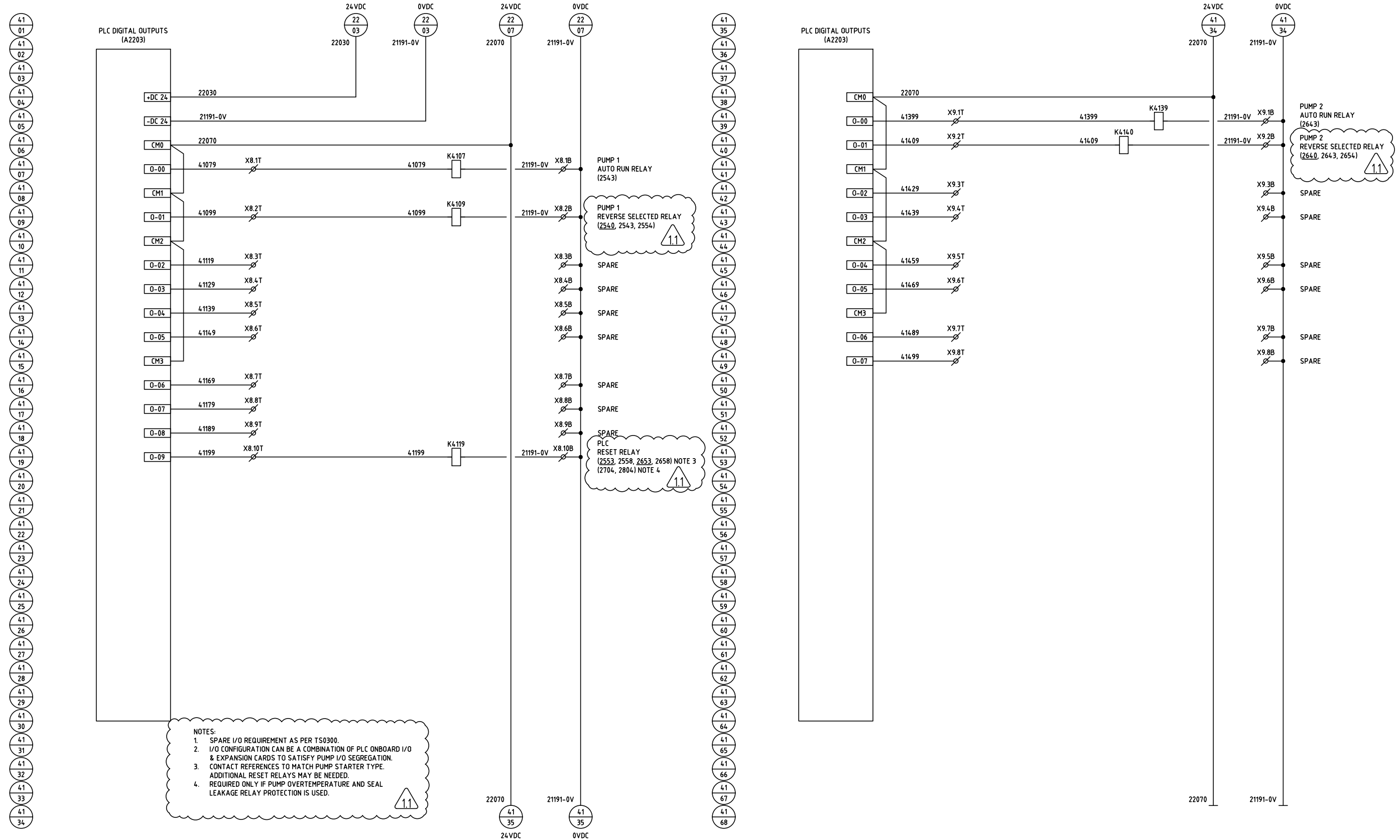
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REV	DATE	DRN	DETAILS
1.1	28/01/22	WS	UPDATED WITH SA WATER REVIEW REQUIREMENTS
0.1	03/11/20	PAN	UPDATED TITLE BLOCK

DESIGN PANEL	
DESIGNED:	AUTHORISED:
14/02/2018	14/02/2018
SACHIN PANDEY	JUSTIN HAMRA
DRAWN:	SIGNATURE:
14/02/2018	
TROY O'BRIEN	
REVIEWED:	ORIGINAL SIGNED
14/02/2018	
JONATHON NICHOLLS	

  
 Government of South Australia  
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SWITCHBOARD 0 - 100A  
 MAIN SWITCHBOARD  
 PLC DIGITAL INPUTS  
 ELECTRICAL  
 SCHEMATIC DIAGRAM


A3	TOTAL SHEETS:	1.1
SHT SIZE	PROJECT No:	REVISION
MAXIMO ID:		
SUPERSEDES: 5003-00001-40		
DRAWING NUMBER		
TYP-03-00001_40		



REVISION PANEL				
REV	DATE	DRN	DETAILS	APR
1.1	28/01/22	WS	UPDATED WITH SA WATER REVIEW REQUIREMENTS	SS
0.1	03/11/20	PAN	UPDATED TITLE BLOCK & MINOR UPDATES	SS

CURRENT REV CONTRACTOR: \_\_\_\_\_ CURRENT REV PROJECT: \_\_\_\_\_

DESIGN PANEL		
DESIGNED:	AUTHORISED:	
14/02/2018	14/02/2018	
SACHIN PANDEY	JUSTIN HAMRA	
DRAWN: 14/02/2018	SIGNATURE:	
TROY O'BRIEN	ORIGINAL SIGNED	
REVIEWED: 14/02/2018		
JONATHON NICHOLLS		

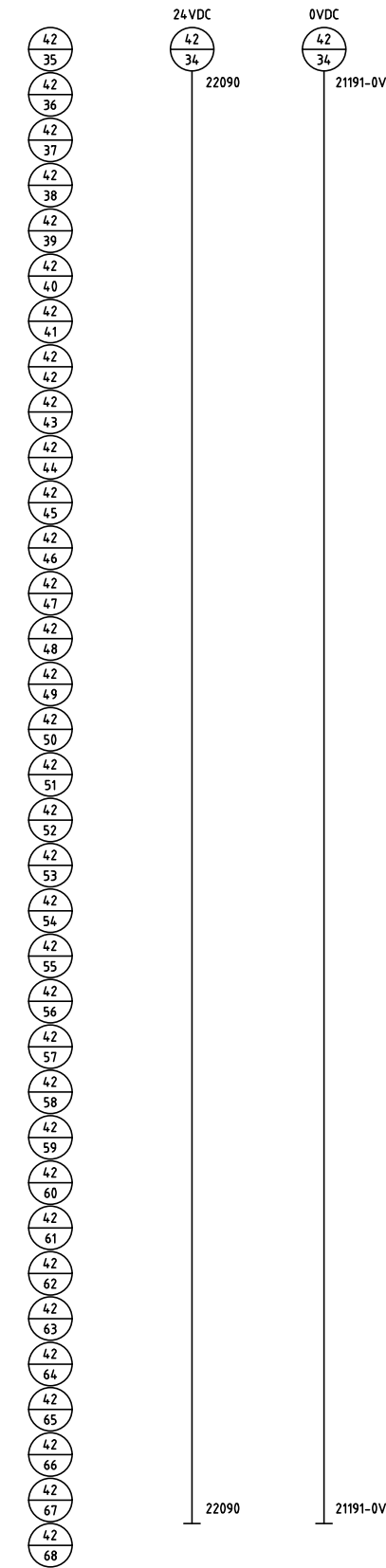
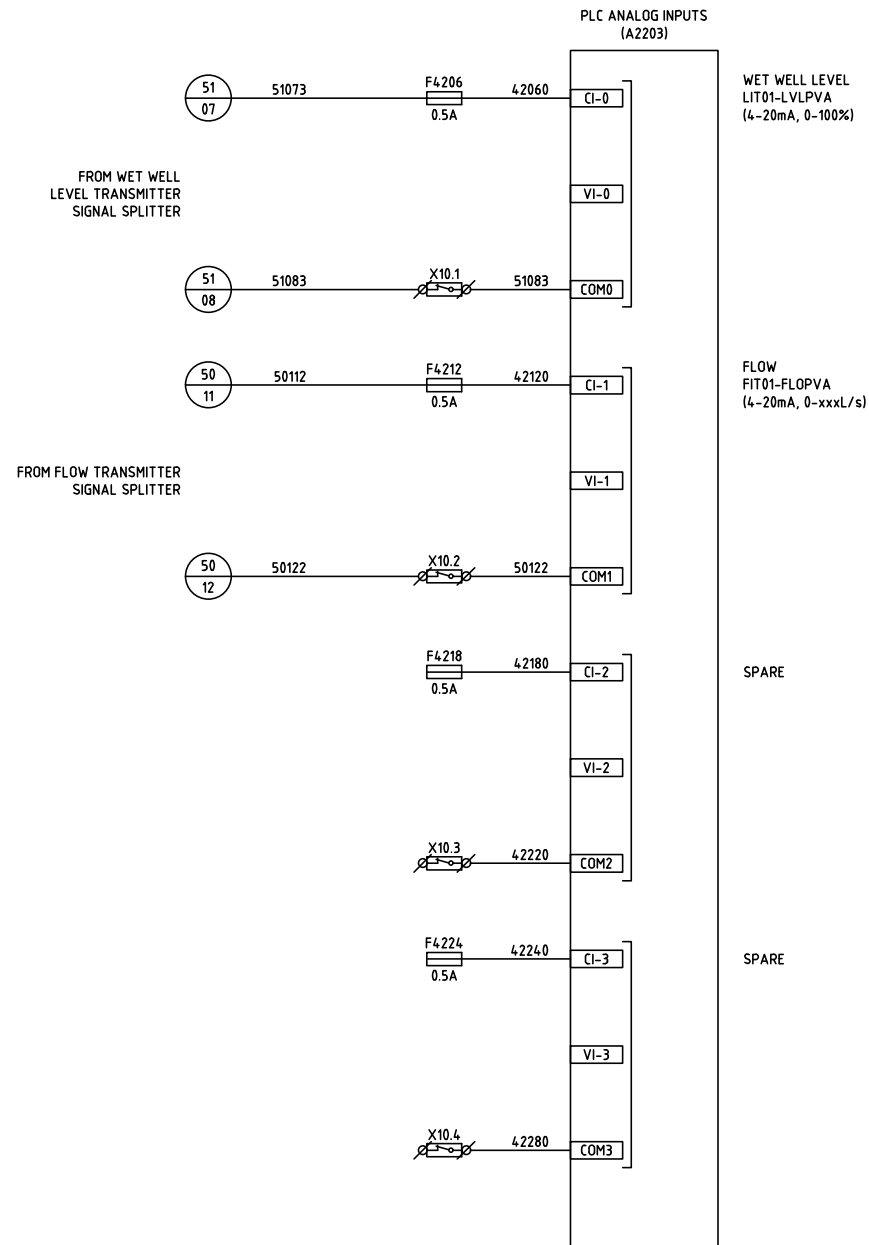
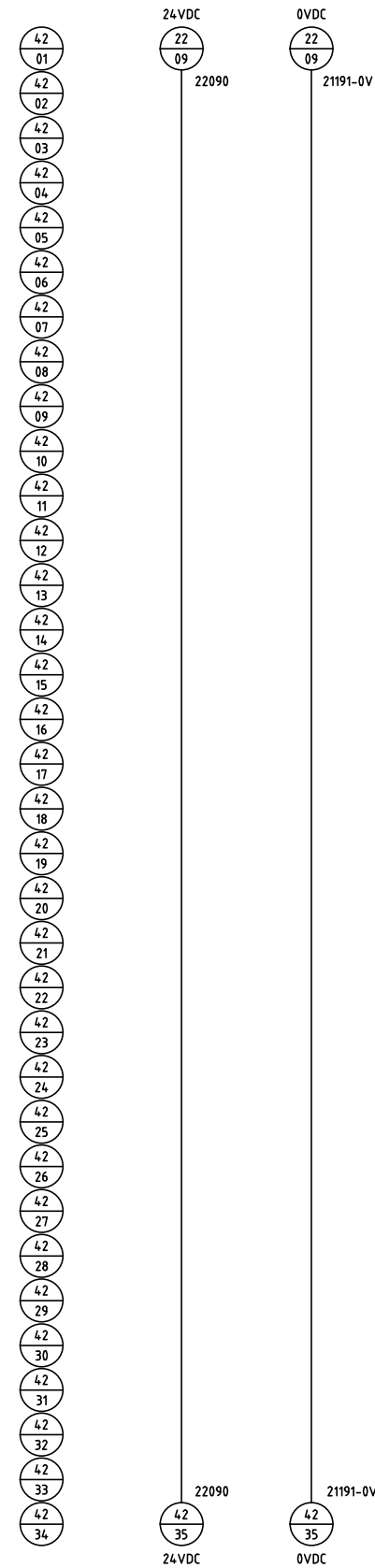

  
 Government of South Australia

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SWITCHBOARD 0 - 100A
   
 MAIN SWITCHBOARD
   
 PLC DIGITAL OUTPUTS
   
 ELECTRICAL
   
 SCHEMATIC DIAGRAM

A3	TOTAL SHEETS:	1.1
	PROJECT No:	
MAXIMO ID:		
SUPERSEDES: 5003-00001-41		
DRAWING NUMBER		
TYP-03-00001_41		





REVISION PANEL				
REV	DATE	DRN	DETAILS	APR
1.1	28/01/22	WS	UPDATED WITH SA WATER REVIEW REQUIREMENTS	SS
0.1	03/11/20	PAN	UPDATED TITLE BLOCK & MINOR UPDATES	SS

CURRENT REV CONTRACTOR: \_\_\_\_\_ CURRENT REV PROJECT: \_\_\_\_\_

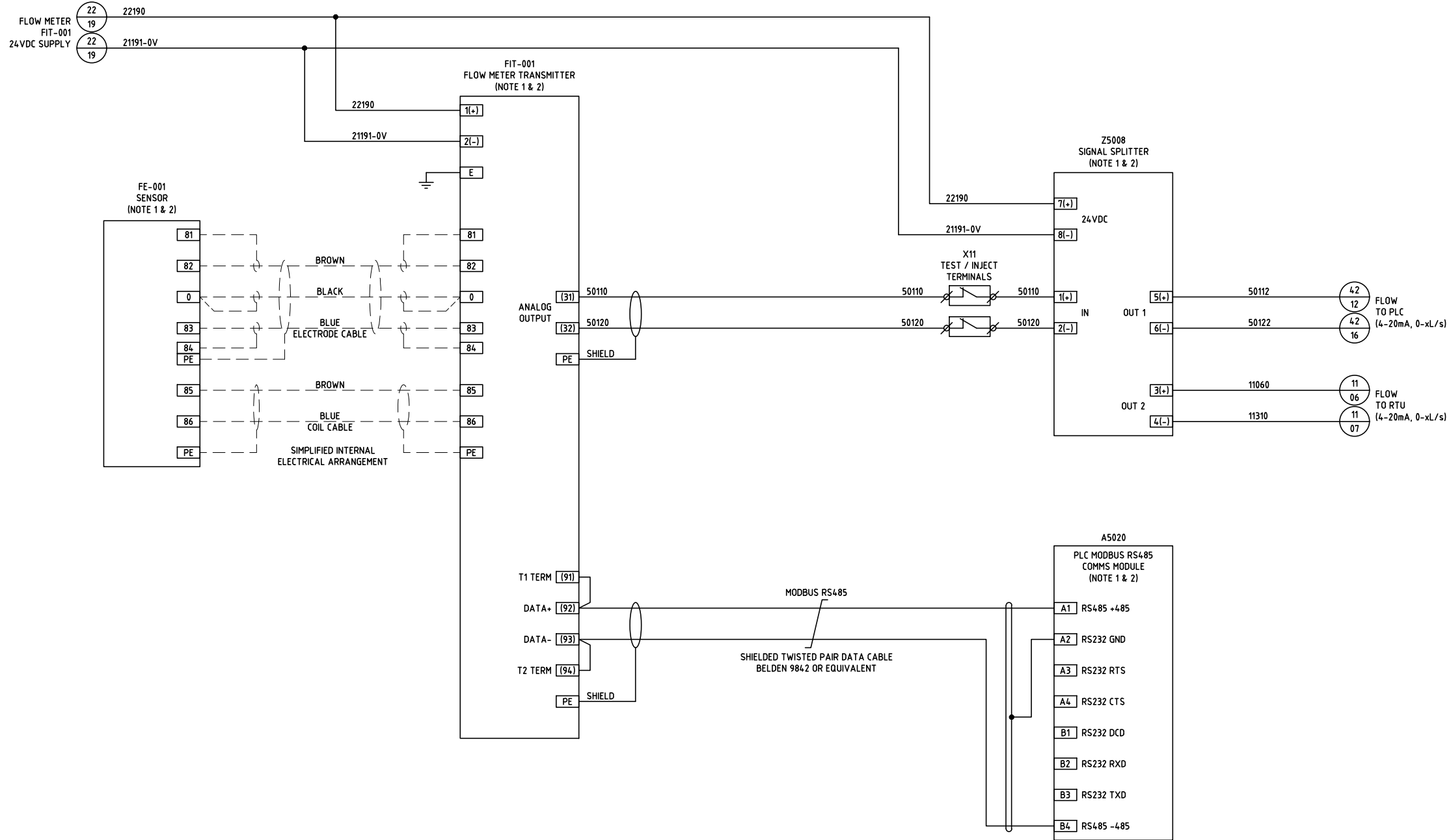
DESIGN PANEL		
DESIGNED:	14/02/2018	AUTHORISED: 14/02/2018
SACHIN PANDEY		JUSTIN HAMRA
DRAWN:	14/02/2018	SIGNATURE:
TROY O'BRIEN		ORIGINAL SIGNED
REVIEWED:	14/02/2018	
JONATHON NICHOLLS		

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SWITCHBOARD 0 - 100A  
 MAIN SWITCHBOARD  
 PLC ANALOG INPUTS  
 ELECTRICAL  
 SCHEMATIC DIAGRAM

A3	TOTAL SHEETS:	1.1
SHT SIZE	PROJECT No:	REVISION
MAXIMO ID:		
SUPERSEDES: 5003-00001-42		
DRAWING NUMBER		
TYP-03-00001_42		

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**NOTE:**  
 1. REQUIREMENT OF FLOW METER & ASSOCIATED CONTROL EQUIPMENT IS PROJECT SPECIFIC.  
 2. EQUIPMENT TERMINATION MAY DIFFER.

REVISION PANEL				
REV	DATE	DRN	DETAILS	APR
1.1	28/01/22	WS	UPDATED WITH SA WATER REVIEW REQUIREMENTS	SS
0.1	03/11/20	PAN	UPDATED TITLE BLOCK & MINOR UPDATES	SS

CURRENT REV CONTRACTOR: \_\_\_\_\_ CURRENT REV PROJECT: \_\_\_\_\_

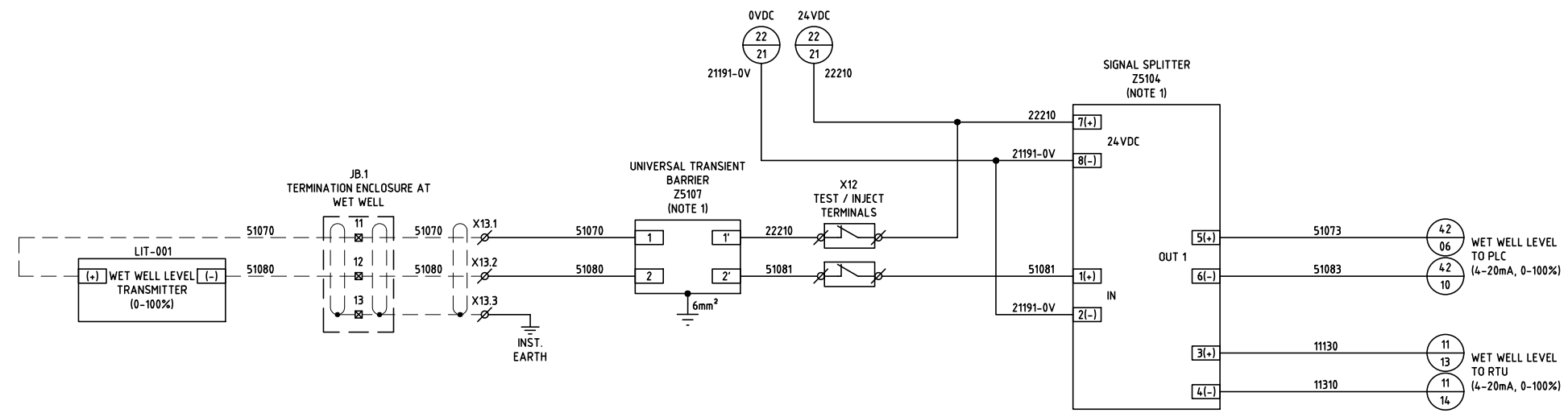
DESIGN PANEL		
DESIGNED:	14/02/2018	AUTHORISED: 14/02/2018
SACHIN PANDEY		JUSTIN HAMRA
DRAWN:	14/02/2018	SIGNATURE:
TROY O'BRIEN		ORIGINAL SIGNED
REVIEWED:	14/02/2018	
JONATHON NICHOLLS		

  
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SWITCHBOARD 0 - 100A  
 MAIN SWITCHBOARD  
 FLOW METER TRANSMITTER CONNECTION  
 ELECTRICAL  
 SCHEMATIC DIAGRAM

A3 SHT SIZE	TOTAL SHEETS:	1.1 REVISION
	PROJECT No:	
MAXIMO ID:		
SUPERSEDES: 5003-00001-50		
DRAWING NUMBER		
TYP-03-00001_50		

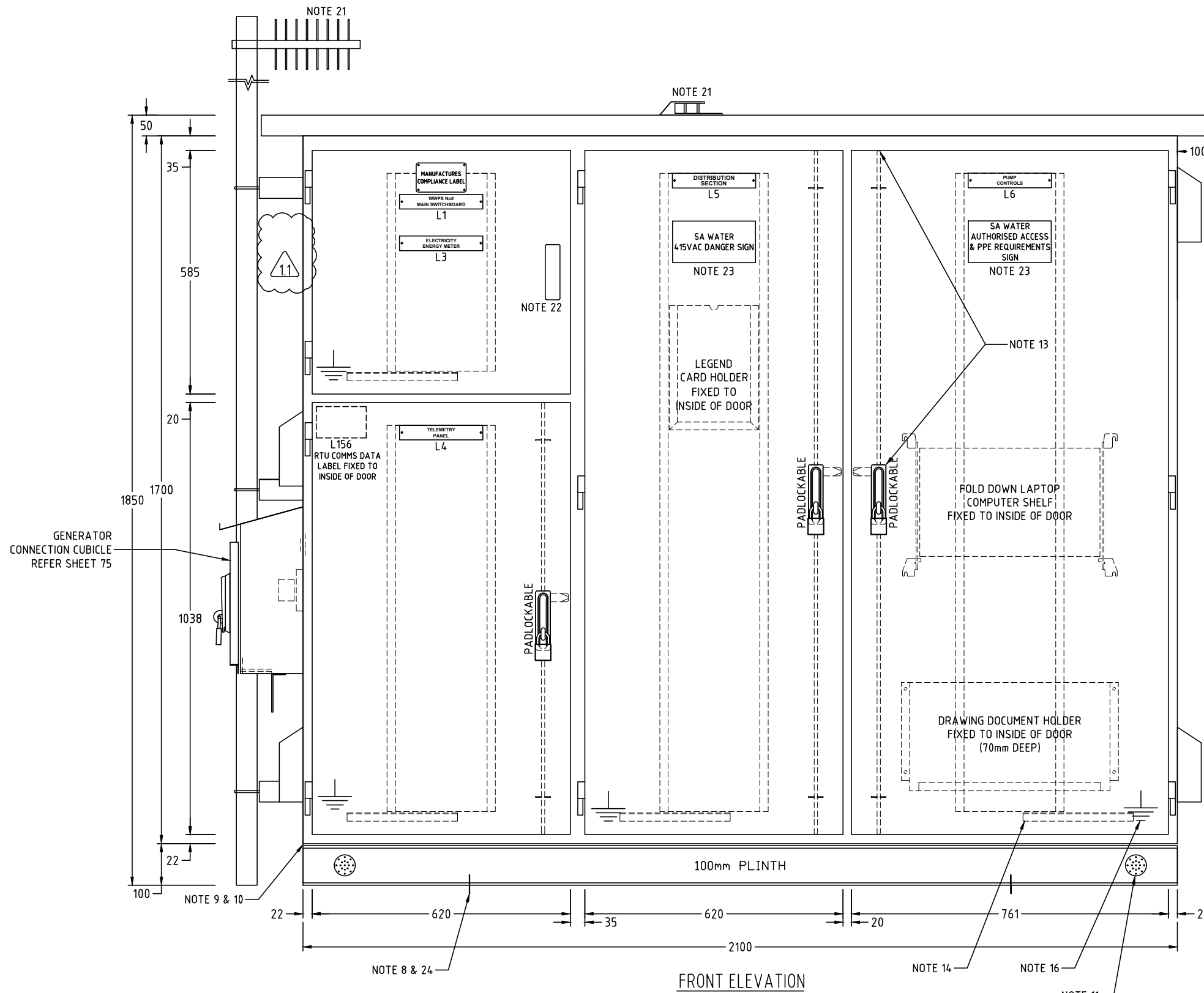
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**NOTE:**  
1. EQUIPMENT TERMINATION MAY DIFFER.

REVISION PANEL				DESIGN PANEL						SWITCHBOARD 0 - 100A MAIN SWITCHBOARD LEVEL TRANSMITTER CONNECTION ELECTRICAL SCHEMATIC DIAGRAM		A3 TOTAL SHEETS: 1.1	
REV	DATE	DRN	DETAILS	APR	CURRENT REV 28/01/22	DESIGNED: 14/02/2018	AUTHORISED: 14/02/2018					SHT SIZE	PROJECT No:
					CURRENT REV 28/01/22	SACHIN PANDEY	JUSTIN HAMRA						
					AUTHORISED:								
					SIGNATURE:								
1.1	28/01/22	WS	UPDATED WITH SA WATER REVIEW REQUIREMENTS	SS		TROY O'BRIEN	ORIGINAL SIGNED						
0.1	03/11/20	PAN	UPDATED TITLE BLOCK & MINOR UPDATES	SS		JONATHON NICHOLLS							
CURRENT REV CONTRACTOR:				CURRENT REV PROJECT:				CONTRACTOR:				MAXIMO ID: SUPERSEDES: 5003-00001-51	
												DRAWING NUMBER TYP-03-00001_51	

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**CONSTRUCTION NOTES:**


- SWITCHBOARD TO BE CONSTRUCTED TO AS/NZS 61439 PARTS 1 & 3, & COMPLIANT WITH SA WATER STANDARD TS0300.
- DEGREE OF PROTECTION - IP56
- FORM OF SEGREGATION - FORM 1
- CURRENT RATING - 100A
- FAULT RATING - 10kA FOR 1 SECOND.
- CUBICLE TO BE CONSTRUCTED FROM A THICKNESS OF 1.6mm G2 GALVABOND & GROUND SMOOTH BEFORE PAINTING IN ACCORDANCE WITH TS0300.
- PLINTH MANUFACTURED FROM 100mmx50mm HOT DIPPED GALV IRON CHANNEL. PLINTH NOT TO BE PAINTED.
- 15mm PLINTH MOUNTING HOLES TO BE LOCATED IN CENTRE OF PLINTH TOES & CONSISTENTLY LOCATED USING DRILLING TEMPLATE. HOLES TO BE DRILLED PRIOR TO GALVANISING.
- PLINTH MOUNTING BOLTS TO BE HOT DIPPED GALVANISED & FIXED WITH NYLON ISOLATING WASHERS.
- PROVIDE ELECTRICAL ISOLATION BETWEEN ALL SURFACES OF DISSIMILAR METALS THAT WOULD OTHERWISE BE IN CONTACT WITH EACH OTHER, INCLUDING BETWEEN HDG PLINTH & SWITCHBOARD BASE.
- FIT VENTED PLUGS TO FILL THE 50mm PLINTH LIFTING POINTS (MAXIMUM 2mm HOLES FOR VENTING).
- CUBICLE TO BE PAINTED IN ACCORDANCE WITH TS0300 CLAUSE 8.3 OUTDOOR CUBICLE. PAINTED RIVERGUM GREEN G62, USING GRAFFITI RESISTANT PAINT/COATINGS. INTERNAL REMOVABLE PANELS, BACKPLATES, BRACKETS & ESCUTCHEONS SHALL BE GLOSS WHITE IN COLOUR.
- DOORS TO BE HINGED USING VANDAL PROOF 316 STAINLESS STEEL HINGES, 3 POINT LOCKING & SECURED WITH 316 STAINLESS STEEL FLUSH MOUNT PADLOCKABLE HANDLES. LOCKING RODS TO BE FIXED WITH ROLLER ENDS TO PREVENT PAINT DAMAGE.
- DOORS TO BE FITTED WITH SELF LATCHING STAYS (HOLD AT MINIMUM 90°)
- DOORS TO BE SEALED WITH WEATHERPROOF RUBBER.
- DOORS, ESCUTCHEONS & GLAND PLATES TO BE BONDED TO CUBICLE VIA WELDED EARTH STUDS.
- HINGED ESCUTCHEON DOORS TO BE PROVIDED ONLY OVER THE POWER DISTRIBUTION AND PUMP CONTROLS SECTION.
- M10 EARTH STUD IS REQUIRED IN THE INCOMER/METER ISOLATION SECTION FOR SWITCHBOARD EARTHING.
- ALL 230VAC/400VAC TERMINALS TO BE SHROUDED C/W WARNING LABELS "DANGER 230/400VAC"
- STICK ON CABLE TIE MOUNTS TO BE SCREWED DOWN
- REQUIREMENT FOR 4G MODEM OR RADIO TYPE RTU ANTENNA WILL BE PROJECT SPECIFIC.
- PROVIDE SAPN CM LOCK INSERT & HOOK INSIDE TELEMETRY SECTION TO HOLD CM KEY FOR ACCESS TO RETAILERS METER & METER ISOLATOR.
- SIGNS FREE ISSUED SUPPLIED FROM SA WATER.
- SWITCHBOARD MOUNTING HOLES DRILLING TEMPLATE TO BE PROVIDED TO SITE INSTALLER FOR INSTALLING ANCHOR BOLTS.
- ADDITIONAL COOLING AND VENTILATION REQUIREMENTS SHALL BE DETERMINED ON A CASE BY CASE BASIS IN LINE WITH SITE AMBIENT CONDITIONS AND EQUIPMENT RATINGS AS SPECIFIED IN TS 0300.

G2 GALVABOND STEEL CONSTRUCTION	
CABINET	1.6mm G2 Z275 GALVABOND
DOORS	1.6mm G2 Z275 GALVABOND
ESCUTCHEONS	1.6mm ZINC ANNEAL MILD STEEL
EQUIPMENT PANELS	2.0mm ZINC ANNEAL MILD STEEL
PLINTH	100x50mm GR300 HOT ROLLED PARALLEL FLANGE IRON CHANNEL

REVISION PANEL				
REV	DATE	DRN	DETAILS	APR
1.1	28/01/22	WS	UPDATED WITH SA WATER REVIEW REQUIREMENTS	SS
0.1	03/11/20	PAN	UPDATED TITLE BLOCK	SS

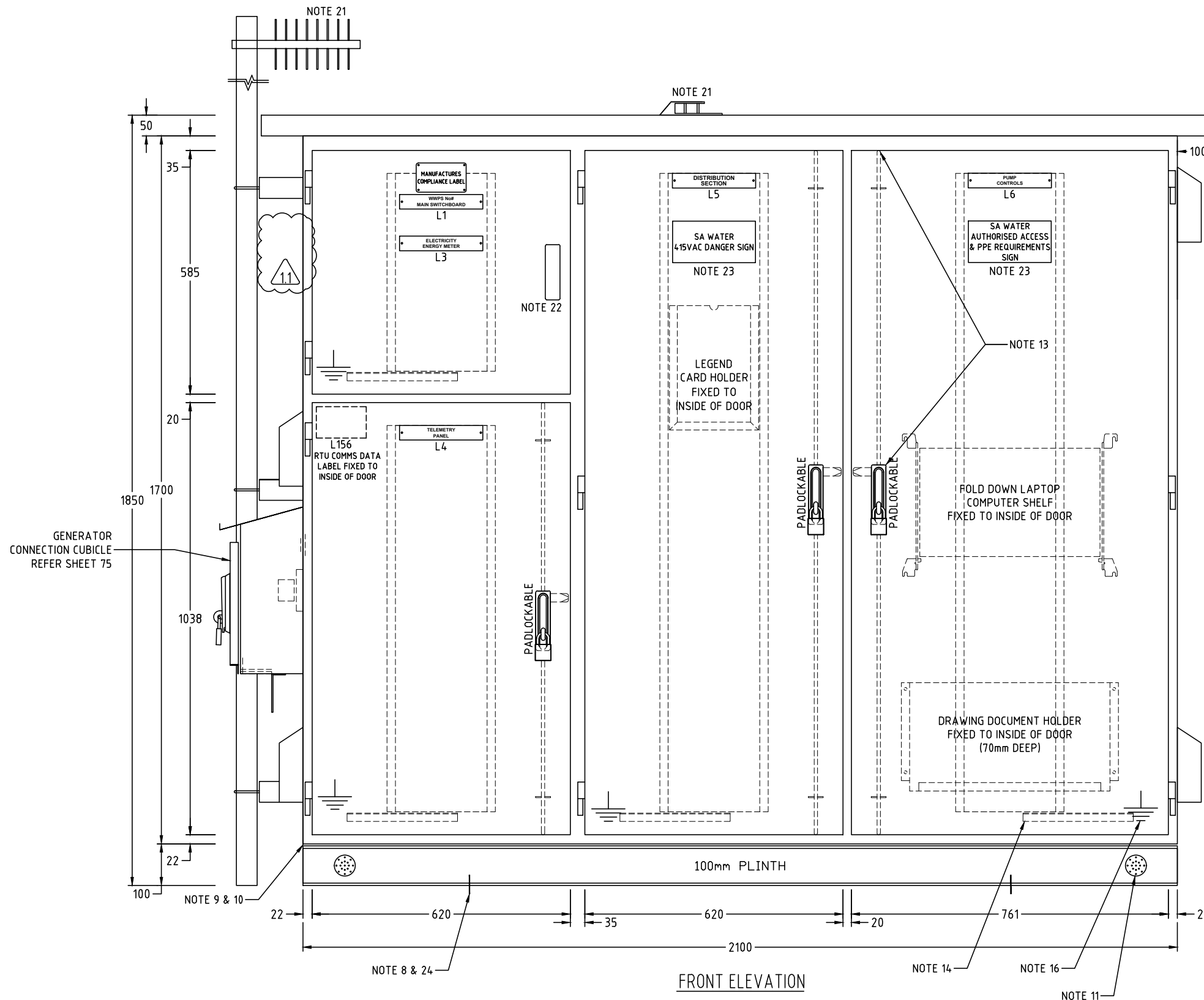
CURRENT REV CONTRACTOR: \_\_\_\_\_ CURRENT REV PROJECT: \_\_\_\_\_

DESIGN PANEL		
DESIGNED:	14/02/2018	AUTHORISED: 14/02/2018
SACHIN PANDEY		JUSTIN HAMRA
DRAWN:	14/02/2018	SIGNATURE:
TROY O'BRIEN		ORIGINAL SIGNED
REVIEWED:	14/02/2018	
JONATHON NICHOLLS		


  
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SWITCHBOARD 0 - 100A  
 MAIN SWITCHBOARD  
 SWITCHBOARD LAYOUT (GALVANISED)  
 ELECTRICAL  
 FRONT VIEW

A3 SHT SIZE	TOTAL SHEETS:	1.1
	PROJECT No:	
MAXIMO ID:		
SUPERSEDES: 5003-00001-70a		
DRAWING NUMBER		
TYP-03-00001_70a		



**CONSTRUCTION NOTES:**

- SWITCHBOARD TO BE CONSTRUCTED TO AS/NZS 61439 PARTS 1 & 3, & COMPLIANT WITH SA WATER STANDARD TS0300.
- DEGREE OF PROTECTION - IP56
- FORM OF SEGREGATION - FORM 1
- CURRENT RATING - 100A
- FAULT RATING - 10kA FOR 1 SECOND.
- CUBICLE TO BE CONSTRUCTED FROM A THICKNESS OF 1.6mm 316 STAINLESS STEEL & GROUND SMOOTH BEFORE POWDER COATING.
- PLINTH MANUFACTURED FROM 100mmx50mmx5mm 316 STAINLESS STEEL CHANNEL. PLINTH NOT TO BE PAINTED.
- 15mm PLINTH MOUNTING HOLES TO BE LOCATED IN CENTRE OF PLINTH TOES & CONSISTENTLY LOCATED USING DRILLING TEMPLATE. HOLES TO BE DRILLED PRIOR TO ACID ETCH.
- PLINTH MOUNTING BOLTS TO BE 316 STAINLESS STEEL.
- PROVIDE ELECTRICAL ISOLATION BETWEEN ALL SURFACES OF DISSIMILAR METALS THAT WOULD OTHERWISE BE IN CONTACT WITH EACH OTHER.
- FIT VENTED PLUGS TO FILL THE 50mm PLINTH LIFTING POINTS (MAXIMUM 20mm HOLES FOR VENTING)
- CUBICLE TO BE POWDER COATED IF SPECIFIED BY THE PROJECT SPECIFICATION. CUBICLE TO BE POWDER COATED REVIERGUM GREEN G62, USING GRAFFITI RESISTANT COATINGS. ROUGH SURFACES TO BE FILED, GROUND SMOOTH, SURFACES ROUGHENED, CLEANED, DEGREASED & OVEN BAKED POWDER COATED. THE COATING SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S DATA SHEET & SHALL INCLUDE ANY PRIMERS OR UNDERCOATS AS RECOMMENDED BY THE MANUFACTURER. INTERNAL REMOVABLE PANELS, BACKPLATES, BRACKETS & ESCUTCHEONS SHALL BE GLOSS WHITE IN COLOUR. POWDER COATING TO HAVE A DRY FILM THICKNESS NOT LESS THAN 60 MICRONS.
- DOORS TO BE HINGED USING VANDAL PROOF 316 STAINLESS STEEL HINGES, 3 POINT LOCKING & SECURED WITH 316 STAINLESS STEEL FLUSH MOUNT PADLOCKABLE HANDLES. LOCKING RODS TO BE FIXED WITH ROLLER ENDS TO PREVENT PAINT DAMAGE.
- DOORS TO BE FITTED WITH SELF LATCHING STAYS (HOLD AT MINIMUM 90°)
- DOORS TO BE SEALED WITH WEATHERPROOF RUBBER.
- DOORS, ESCUTCHEONS & GLAND PLATES TO BE BONDED TO CUBICLE VIA WELDED EARTH STUDS.
- HINGED ESCUTCHEON DOORS TO BE PROVIDED ONLY OVER THE POWER DISTRIBUTION AND PUMP CONTROLS SECTION.
- M10 EARTH STUD IS REQUIRED IN THE INCOMER/METER ISOLATION SECTION FOR SWITCHBOARD EARTHING.
- ALL 230VAC/400VAC TERMINALS TO BE SHROUDED C/W WARNING LABELS "DANGER 230/400VAC"
- STICK ON CABLE TIE MOUNTS TO BE SCREWED DOWN
- REQUIREMENT FOR 4G MODEM OR RADIO TYPE RTU ANTENNA WILL BE PROJECT SPECIFIC
- PROVIDE SAPN CM LOCK INSERT & HOOK INSIDE TELEMETRY SECTION TO HOLD CM KEY FOR ACCESS TO RETAILERS METER & METER ISOLATOR.
- SIGNS FREE ISSUED SUPPLIED FROM SA WATER.
- SWITCHBOARD MOUNTING HOLES DRILLING TEMPLATE TO BE PROVIDED TO SITE INSTALLER FOR INSTALLING ANCHOR BOLTS.
- ADDITIONAL COOLING AND VENTILATION REQUIREMENTS SHALL BE DETERMINED ON A CASE BY CASE BASIS IN LINE WITH SITE AMBIENT CONDITIONS AND EQUIPMENT RATINGS AS SPECIFIED IN TS 0300.


316 STAINLESS STEEL CONSTRUCTION	
CABINET	1.6mm 316 STAINLESS STEEL
DOORS	1.6mm 316 STAINLESS STEEL
ESCUTCHEONS	1.6mm 316 STAINLESS STEEL
EQUIPMENT PANELS	2.0mm ZINC ANNEAL MILD STEEL
PLINTH	100x50x5mm 316 STAINLESS STEEL PARALLEL FLANGE CHANNEL

REVISION PANEL				
REV	DATE	DRN	DETAILS	APR
1.1	28/01/22	WS	UPDATED WITH SA WATER REVIEW REQUIREMENTS	SS
0.1	03/11/20	PAN	UPDATED TITLE BLOCK	SS

CURRENT REV CONTRACTOR: \_\_\_\_\_ CURRENT REV PROJECT: \_\_\_\_\_

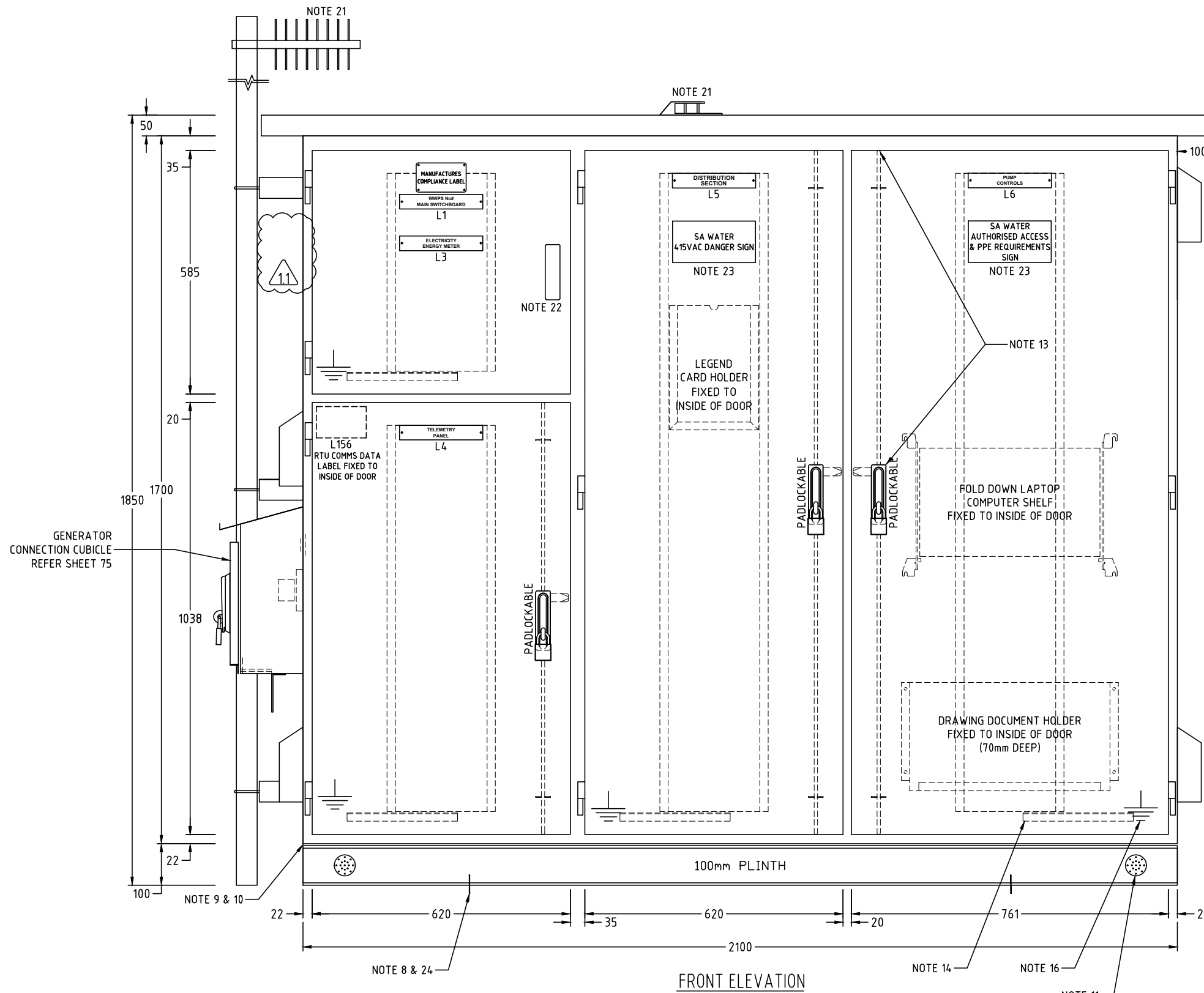
DESIGN PANEL		
DESIGNED:	AUTHORISED:	DATE
SACHIN PANDEY	JUSTIN HAMRA	14/02/2018
DRAWN:	TROY O'BRIEN	14/02/2018
REVIEWED:	JONATHON NICHOLLS	14/02/2018

CONTRACTOR: \_\_\_\_\_


  
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SWITCHBOARD 0 - 100A  
 MAIN SWITCHBOARD  
 SWITCHBOARD LAYOUT (316SS)  
 ELECTRICAL  
 FRONT VIEW

A3 SHT SIZE	TOTAL SHEETS:	1.1
	PROJECT No:	
MAXIMO ID:		
SUPERSEDES: 5003-00001-70b		
DRAWING NUMBER		
TYP-03-00001_70b		




**CONSTRUCTION NOTES:**

1. SWITCHBOARD TO BE CONSTRUCTED TO AS/NZS 61439 PARTS 1 & 3, & COMPLIANT WITH SA WATER STANDARD TS0300.
2. DEGREE OF PROTECTION - IP56
3. FORM OF SEGREGATION - FORM 1
4. CURRENT RATING - 100A
5. FAULT RATING - 10kA FOR 1 SECOND.
6. CUBICLE TO BE CONSTRUCTED FROM A THICKNESS OF 3mm MARINE GRADE ALUMINIUM (5052) & GROUND SMOOTH BEFORE POWDER COATING.
7. PLINTH MANUFACTURED FROM 100mmx50mmx5mm MARINE GRADE ALUMINIUM (5052) CHANNEL. PLINTH TO BE POWDER COATED BLACK.
8. 15mm PLINTH MOUNTING HOLES TO BE LOCATED IN CENTRE OF PLINTH TOES & CONSISTENTLY LOCATED USING DRILLING TEMPLATE. HOLES TO BE DRILLED PRIOR TO POWDER COATING.
9. PLINTH MOUNTING BOLTS TO BE 316 STAINLESS STEEL & FIXED WITH NYLON ISOLATING WASHERS.
10. PROVIDE ELECTRICAL ISOLATION BETWEEN ALL SURFACES OF DISSIMILAR METALS THAT WOULD OTHERWISE BE IN CONTACT WITH EACH OTHER.
11. FIT VENTED PLUGS TO FILL THE 50mm PLINTH LIFTING POINTS (MAXIMUM 2mm HOLES FOR VENTING).
12. CUBICLE TO BE POWDER COATED RIVERGUM GREEN G62, USING GRAFFITI RESISTANT COATINGS. ROUGH SURFACES TO BE FILED, GROUND SMOOTH, CLEANED, DEGREASED, ETCH PRIMED & OVEN BAKED POWDER COATED. THE COATING SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S DATA SHEET & SHALL INCLUDE ANY PRIMERS OR UNDERCOATS AS RECOMMENDED BY THE MANUFACTURER. INTERNAL REMOVABLE PANELS, BACKPLATES, BRACKETS & ESCUTCHEONS SHALL BE GLOSS WHITE IN COLOUR. PRIME COATING TO HAVE A DRY FILM THICKNESS NOT LESS THAN 50 MICRONS. POWDER COATING TO HAVE A DRY FILM THICKNESS NOT LESS THAN 60 MICRONS.
13. DOORS TO BE HINGED USING VANDAL PROOF 316 STAINLESS STEEL HINGES, 3 POINT LOCKING & SECURED WITH 316 STAINLESS STEEL FLUSH MOUNT PADLOCKABLE HANDLES. LOCKING RODS TO BE FIXED WITH ROLLER ENDS TO PREVENT PAINT DAMAGE.
14. DOORS TO BE FITTED WITH SELF LATCHING STAYS (HOLD AT MINIMUM 90°)
15. DOORS TO BE SEALED WITH WEATHERPROOF RUBBER.
16. DOORS, ESCUTCHEONS & GLAND PLATES TO BE BONDED TO CUBICLE VIA WELDED EARTH STUDS.
17. HINGED ESCUTCHEON DOORS TO BE PROVIDED ONLY OVER THE POWER DISTRIBUTION AND PUMP CONTROLS SECTION.
18. M10 EARTH STUD IS REQUIRED IN THE INCOMER/METER ISOLATION SECTION FOR SWITCHBOARD EARTHING.
19. ALL 230VAC/400VAC TERMINALS TO BE SHROUDED C/W WARNING LABELS "DANGER 230/400VAC"
20. ~~STICK-ON CABLE TIE MOUNTS TO BE SCREWED DOWN~~
21. REQUIREMENT FOR 4G MODEM OR RADIO TYPE RTU ANTENNA WILL BE PROJECT SPECIFIC.
22. PROVIDE SAPN CM LOCK INSERT & HOOK INSIDE TELEMETRY SECTION TO HOLD CM KEY FOR ACCESS TO RETAILERS METER & METER ISOLATOR.
23. SIGNS FREE ISSUED SUPPLIED FROM SA WATER.
24. SWITCHBOARD MOUNTING HOLES DRILLING TEMPLATE TO BE PROVIDED TO SITE INSTALLER FOR INSTALLING ANCHOR BOLTS.
25. ADDITIONAL COOLING AND VENTILATION REQUIREMENTS SHALL BE DETERMINED ON A CASE BY CASE BASIS IN LINE WITH SITE AMBIENT CONDITIONS AND EQUIPMENT RATINGS AS SPECIFIED IN TS 0300.

MARINE GRADE ALUMINIUM CONSTRUCTION	
CABINET	3mm MARINE GRADE ALUMINIUM (5052)
DOORS	3mm MARINE GRADE ALUMINIUM (5052)
ESCUTCHEONS	3mm MARINE GRADE ALUMINIUM (5052)
EQUIPMENT PANELS	2.0mm ZINC ANNEAL MILD STEEL
PLINTH	100x50x5mm MARINE GRADE ALUMINIUM (5052) PARALLEL FLANGE CHANNEL

REVISION PANEL				
REV	DATE	DRN	DETAILS	APR
1.1	28/01/22	WS	UPDATED WITH SA WATER REVIEW REQUIREMENTS	SS
0.1	03/11/20	PAN	UPDATED TITLE BLOCK	SS

DESIGN PANEL		
DESIGNED:	AUTHORISED:	DATE
SACHIN PANDEY	JUSTIN HAMRA	14/02/2018
TROY O'BRIEN	ORIGINAL SIGNED	14/02/2018
JONATHON NICHOLLS		

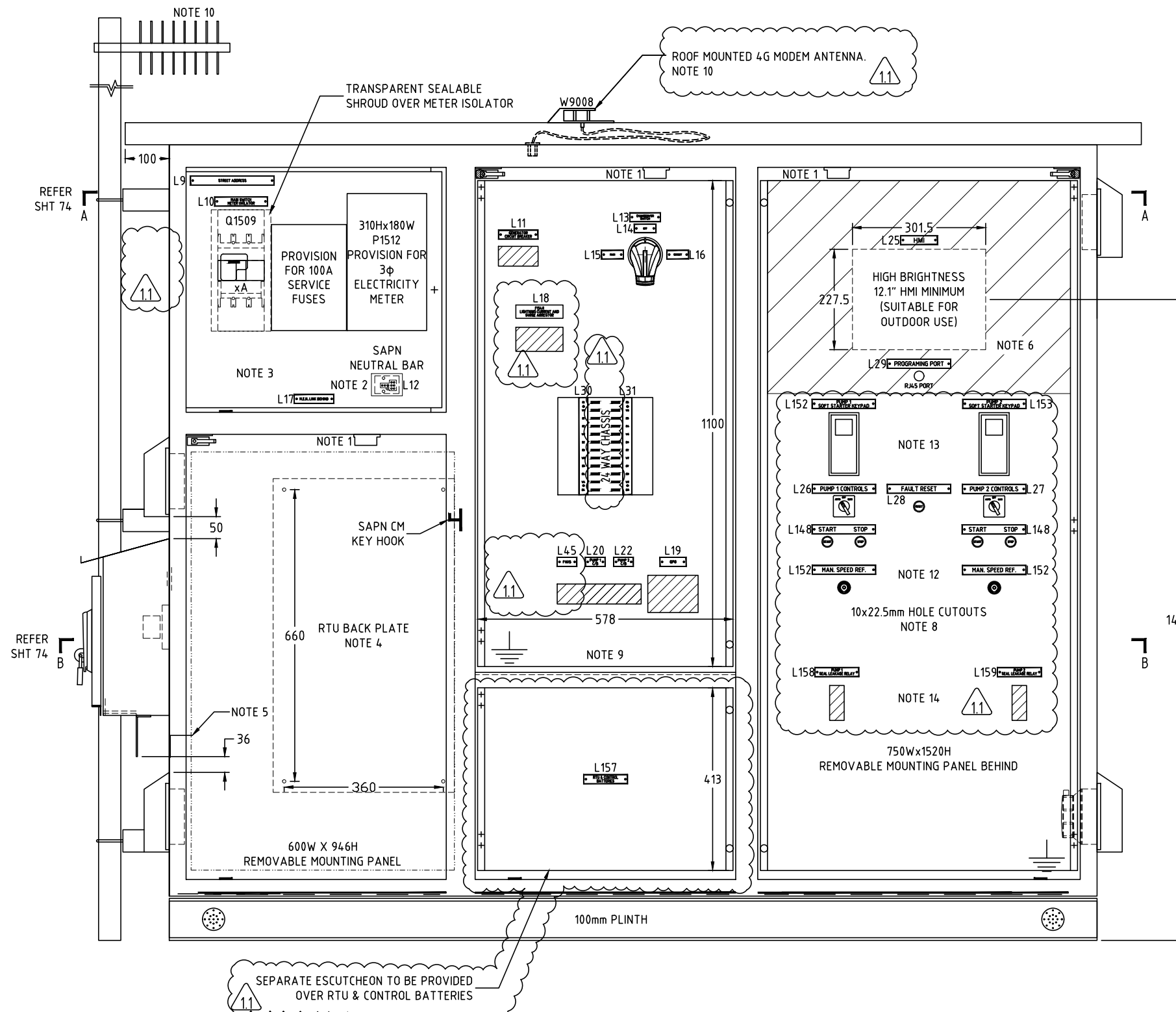

  
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**SWITCHBOARD 0 - 100A**  
**MAIN SWITCHBOARD**  
**SWITCHBOARD LAYOUT (ALUMINIUM)**  
**ELECTRICAL**  
**FRONT VIEW**

A3 SHT SIZE	TOTAL SHEETS:	1.1 REVISION
	PROJECT No:	
MAXIMO ID:		
SUPERSEDES: 5003-00001-70c		
DRAWING NUMBER		
TYP-03-00001_70c		

CURRENT REV CONTRACTOR: \_\_\_\_\_ CURRENT REV PROJECT: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_




**CONSTRUCTION NOTES:**

1. PROVIDE MOUNTING BRACKET ONLY FOR FUTURE SECURITY ALARM DOOR SWITCHES.
2. SAPN METERING NEUTRAL BAR MOUNTED ON BACKSIDE OF METER PANEL.
3. HINGED METERING PANEL. MOUNTING HOLES AS PER SAPN SERVICE RULES DRILLING TEMPLATE.
4. 4x6mm STUDS (35mm LONG) TO BE FITTED TO ALLOW MOUNTING OF EXISTING RTU BACKPLATE (410W x 710H).
5. PROVIDE ANTENNA BULKHEAD SURGE ARRESTOR MOUNTING BRACKET.
6. ESCUTCHEON HMI SURROUND TO BE MATT BLACK TO REDUCE SUN GLARE.
7. DIMENSIONS PROVIDED FOR GUIDE ONLY.
8. PUSHBUTTONS & SELECTOR SWITCH SHALL BE IP56 RATED.
9. ESCUTCHEON TO HAVE CUTOUPS FOR GENERATOR CIRCUIT BREAKER, SURGE ARRESTOR, MCB'S, PUMP MOTOR CIRCUIT BREAKERS & SOCKET OUTLET.
10. RTU ANTENNA TYPE IS PROJECT SPECIFIC.
11. FLOWMETER REQUIREMENT IS PROJECT SPECIFIC. FLOWMETER SIGNALS SHALL BE DISPLAYED ON HMI.
12. MANUAL SPEED REFERENCE POTS PROJECT SPECIFIC FOR VSD'S.
13. SOFT STARTER KEYPADS PROJECT SPECIFIC FOR SOFT STARTERS.
14. VIEWING CUTOUPS OF PUMP SEAL LEAKAGE DETECTION RELAYS STATUS TO BE PROVIDED IF SPECIFIED BY SUPPLIER. CONSIDERATION TO ALTERNATIVE METHODS TO INFORM OPERATOR OF PUMP SEAL LEAKAGE FAULT WILL BE ACCEPTED (E.G. VIA PLC/HMI ALARMS).

FRONT ELEVATION LESS DOORS

REVISION PANEL			
REV	DATE	DRN	DETAILS
1.1	28/01/22	WS	UPDATED WITH SA WATER REVIEW REQUIREMENTS
0.1	03/11/20	PAN	UPDATED TITLE BLOCK

DESIGN PANEL		
DESIGNED:	AUTHORISED:	DATE
SACHIN PANDEY	JUSTIN HAMRA	14/02/2018
DRAWN:	SIGNATURE:	
TROY O'BRIEN		
REVIEWED:	SIGNATURE:	
JONATHON NICHOLLS		


  
 Government of South Australia

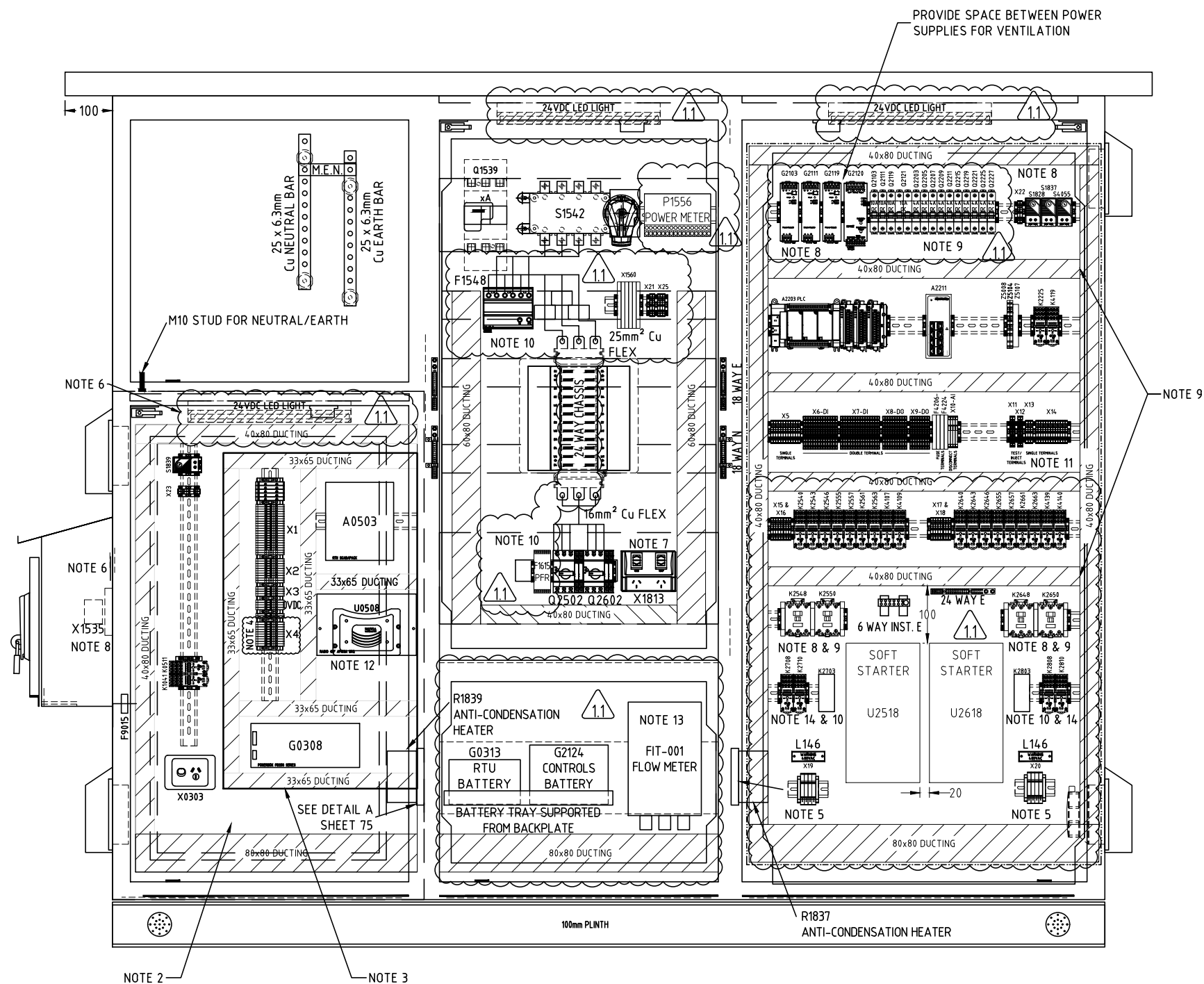
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SWITCHBOARD 0 - 100A  
 MAIN SWITCHBOARD  
 SWITCHBOARD LAYOUT  
 ELECTRICAL  
 FRONT VIEW LESS DOORS

A3 SHT SIZE	TOTAL SHEETS:	1.1 REVISION
	PROJECT No:	
MAXIMO ID:		
SUPERSEDES: 5003-00001-71		
DRAWING NUMBER		
TYP-03-00001_71		







**CONSTRUCTION NOTES:**

1. ALL EQUIPMENT TO BE MOUNTED ABOVE 300mm FROM GROUND.
2. REMOVABLE PLATE BEHIND MOUNTING PANEL.
3. EXISTING RTU BACKPLATE MAY BE RELOCATED FROM SITE, (FREE ISSUE), MOUNTED ON STUDS.
4. ADDITIONAL DISCONNECT TERMINALS TO BE INSTALLED & WIRED.
5. SHROUD 400VAC TERMINALS.
6. SDI GENERATOR CABLES TO BE RUN IN PVC CONDUIT / DUCT FIXED TO SWITCHBOARD WHILE IN THE TELEMETRY SECTION.
7. SOCKET OUTLET IN DISTRIBUTION SECTION SHALL BE WEATHER PROOF.
8. PROVIDE WARNING LABEL STATING 400/230VAC PRESENT.
9. SEGREGATE LV & ELV WIRING WITHIN COMMON DUCTS.
10. EQUIPMENT MOUNTED ON SEPARATE TOP HAT BRACKETS TO SUIT ESCUTCHEON.
11. ELV FIELD CABLING TO BE KEPT SHEATHED UP TO TERMINATION FACILITIES. SEGREGATE FROM LV WIRING.
12. TELEMETRY RTU TYPE (4G MODEM OR RADIO) WILL BE PROJECT SPECIFIC.
13. FLOWMETER REQUIREMENT IS PROJECT SPECIFIC.
14. PUMP SEAL LEAKAGE DETECTION RELAYS TO BE PROVIDED IF SPECIFIED BY SUPPLIER. VIEWING CUTOUTS IN ESCUTCHEON TO ALLOW RELAY STATUS TO BE PROVIDED. CONSIDERATION TO ALTERNATIVE METHODS TO INFORM OPERATOR OF PUMP SEAL LEAKAGE FAULT WILL BE ACCEPTED (E.G. VIA PLC/HMI ALARMS).

FRONT ELEVATION LESS DOORS AND ESCUTCHEON (INTERNAL VIEW)

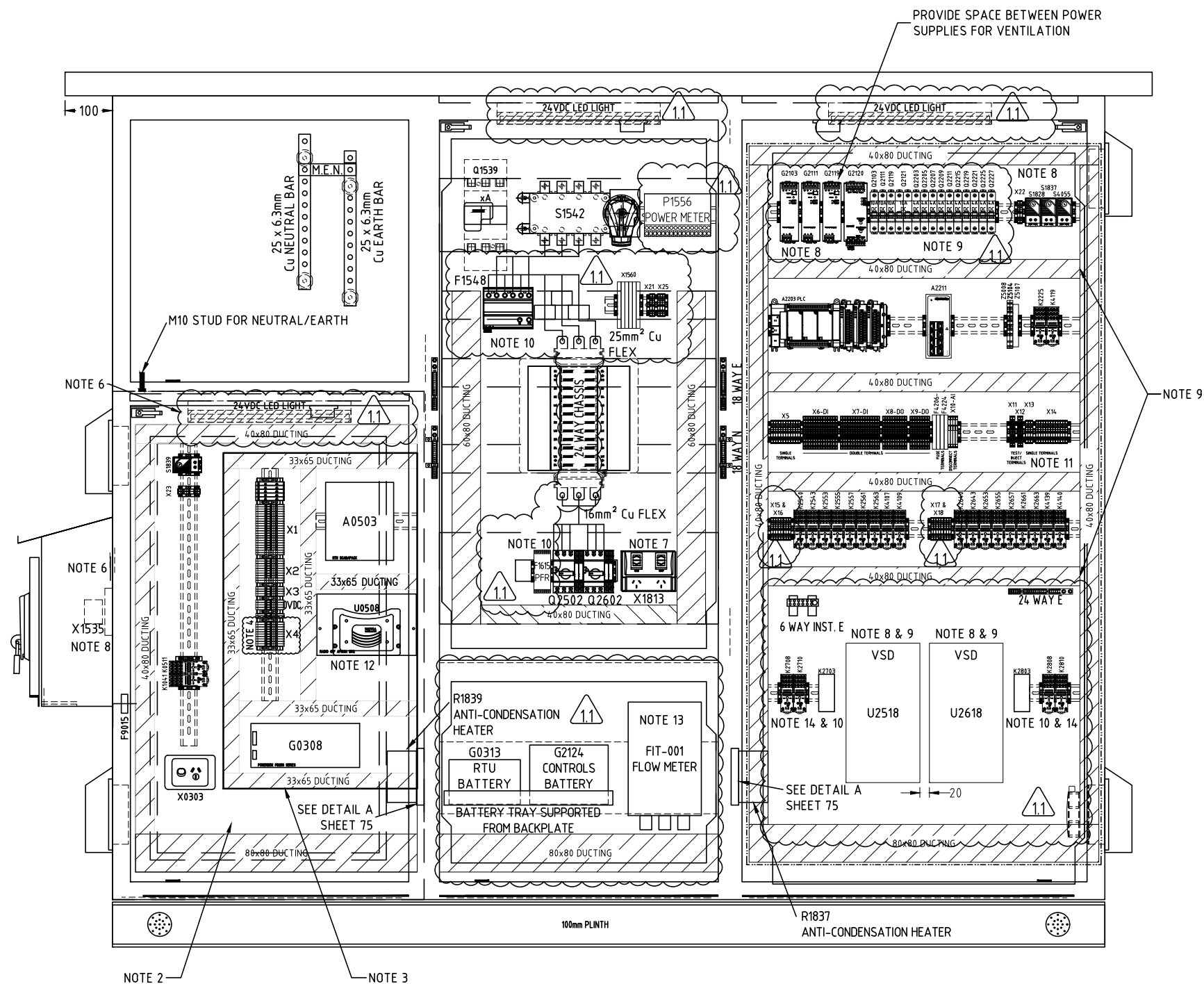
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REV	DATE	DRN	DETAILS	APR
1.1	28/01/22	WS	UPDATED WITH SA WATER REVIEW REQUIREMENTS	SS
0.1	03/11/20	PAN	UPDATED TITLE BLOCK & MINOR UPDATES	SS
CURRENT REV CONTRACTOR:			CURRENT REV PROJECT:	

DESIGN PANEL		
DESIGNED:	AUTHORISED:	DATE
SACHIN PANDEY	JUSTIN HAMRA	14/02/2018
DRAWN:	SIGNATURE:	
TROY O'BRIEN		
REVIEWED:	ORIGINAL SIGNED	
JONATHON NICHOLLS		
CONTRACTOR:		

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SWITCHBOARD 0 - 100A  
 MAIN SWITCHBOARD  
 SWITCHBOARD LAYOUT  
 ELECTRICAL  
 FRONT VIEW LESS ESCUTCHEONS - (SS)

A3 SHT SIZE	TOTAL SHEETS:	1.1 REVISION
	PROJECT No:	
MAXIMO ID:		
SUPERSEDES: 5003-00001-72b		
DRAWING NUMBER		
TYP-03-00001_72b		



- CONSTRUCTION NOTES:**
1. ALL EQUIPMENT TO BE MOUNTED ABOVE 300mm FROM GROUND.
  2. REMOVABLE PLATE BEHIND MOUNTING PANEL.
  3. EXISTING RTU BACKPLATE MAY BE RELOCATED FROM SITE, (FREE ISSUE), MOUNTED ON STUDS.
  4. ADDITIONAL DISCONNECT TERMINALS TO BE INSTALLED & WIRED.
  5. SHROUD 400VAC TERMINALS.
  6. SDI GENERATOR CABLES TO BE RUN IN PVC CONDUIT/DUCT FIXED TO SWITCHBOARD WHILE IN THE TELEMETRY SECTION.
  7. SOCKET OUTLET IN DISTRIBUTION SECTION SHALL BE WEATHER PROOF.
  8. PROVIDE WARNING LABEL STATING 400/230VAC PRESENT.
  9. SEGREGATE LV & ELV WIRING WITHIN COMMON DUCTS.
  10. EQUIPMENT MOUNTED ON SEPARATE TOP HAT BRACKETS TO SUIT ESCUTCHEON.
  11. ELV FIELD CABLING TO BE KEPT SHEATHED UP TO TERMINATION FACILITIES. SEGREGATE FROM LV WIRING.
  12. TELEMETRY RTU TYPE (4G MODEM OR RADIO) WILL BE PROJECT SPECIFIC.
  13. FLOWMETER REQUIREMENT WILL BE PROJECT SPECIFIC.
  14. PUMP SEAL LEAKAGE DETECTION RELAYS TO BE PROVIDED IF SPECIFIED BY SUPPLIER. VIEWING CUTOUTS IN ESCUTCHEON TO ALLOW RELAY STATUS TO BE PROVIDED. CONSIDERATION TO ALTERNATIVE METHODS TO INFORM OPERATOR OF PUMP SEAL LEAKAGE FAULT WILL BE ACCEPTED (E.G. VIA PLC/HMI ALARMS).

FRONT ELEVATION LESS DOORS AND ESCUTCHEON (INTERNAL VIEW)

REVISION PANEL				
REV	DATE	DRN	DETAILS	APR
1.1	28/01/22	WS	UPDATED WITH SA WATER REVIEW REQUIREMENTS	SS
0.1	03/11/20	PAN	UPDATED TITLE BLOCK & MINOR UPDATES	SS

CURRENT REV CONTRACTOR: \_\_\_\_\_ CURRENT REV PROJECT: \_\_\_\_\_

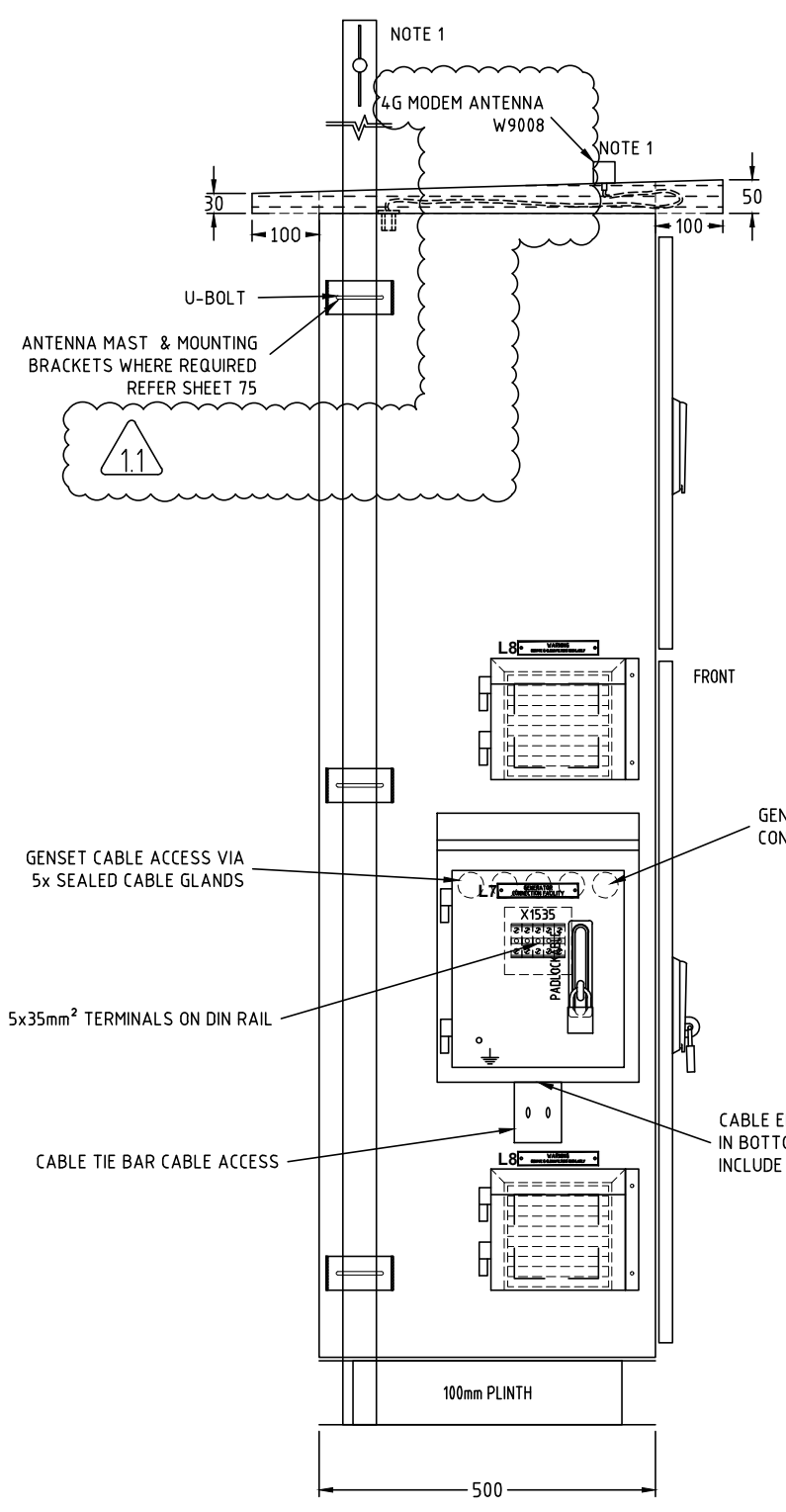
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DESIGNED:	AUTHORISED:	DATE
SACHIN PANDEY	JUSTIN HAMRA	14/02/2018
TROY O'BRIEN		14/02/2018
JONATHON NICHOLLS		14/02/2018

CONTRACTOR: \_\_\_\_\_

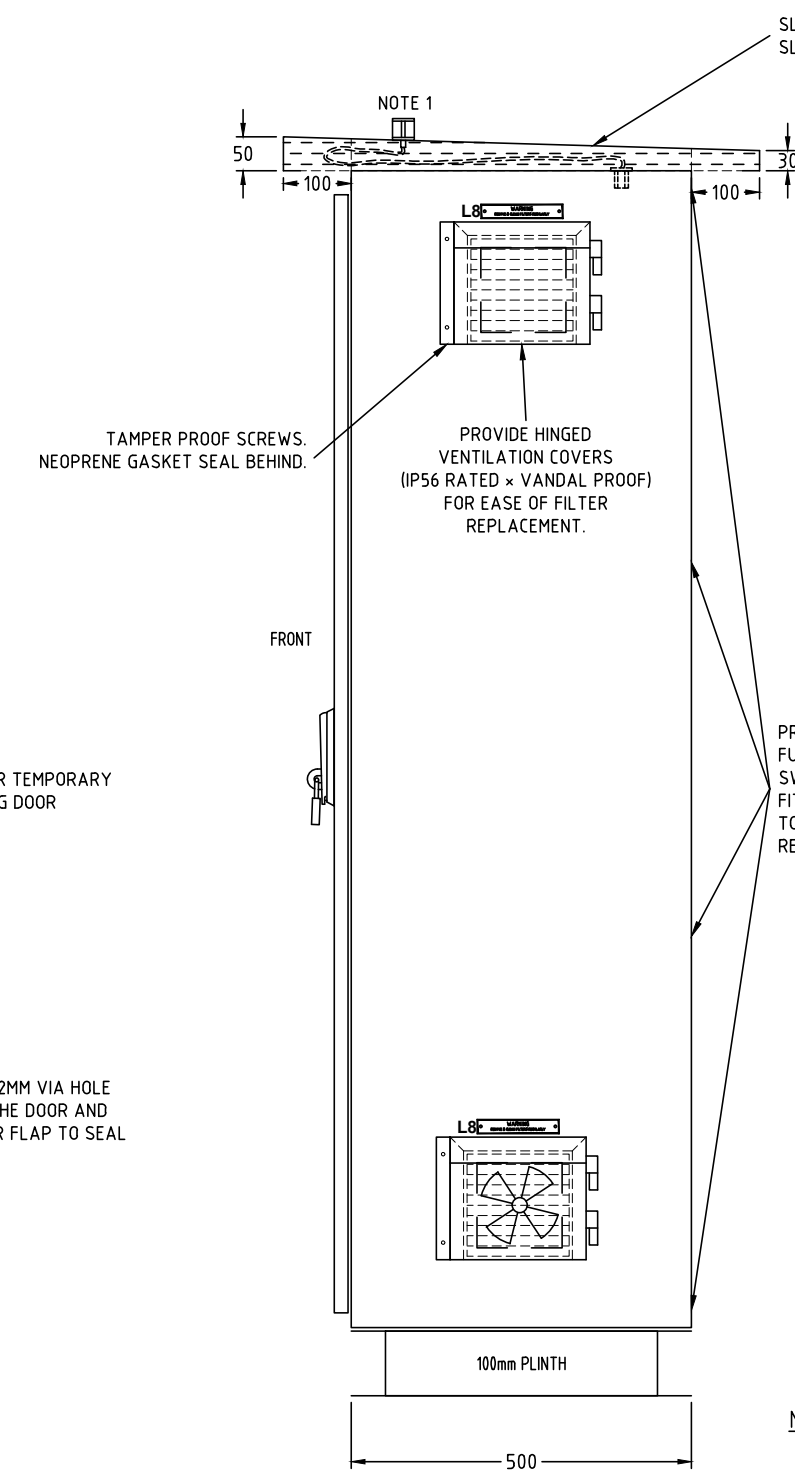
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SWITCHBOARD 0 - 100A  
 MAIN SWITCHBOARD  
 SWITCHBOARD LAYOUT  
 ELECTRICAL  
 FRONT VIEW LESS ESCUTCHEONS

A3 SHT SIZE	TOTAL SHEETS:	1.1
	PROJECT No:	REVISION
MAXIMO ID:		
SUPERSEDES: 5003-00001-72c		
DRAWING NUMBER		
TYP-03-00001_72c		



LEFT SIDE VIEW  
AND GENSET CONNECTION BOX



RIGHT SIDE VIEW

- NOTES:
1. RTU ANTENNA TYPE IS PROJECT SPECIFIC.
  2. ADDITIONAL COOLING AND VENTILATION REQUIREMENTS SHALL BE DETERMINED ON A CASE BY CASE BASIS IN LINE WITH SITE AMBIENT CONDITIONS AND EQUIPMENT RATINGS AS SPECIFIED IN TS 0300.

REVISION PANEL				
REV	DATE	DRN	DETAILS	APR
1.1	28/01/22	WS	UPDATED WITH SA WATER REVIEW REQUIREMENTS	SS
0.1	03/11/20	PAN	UPDATED TITLE BLOCK	SS

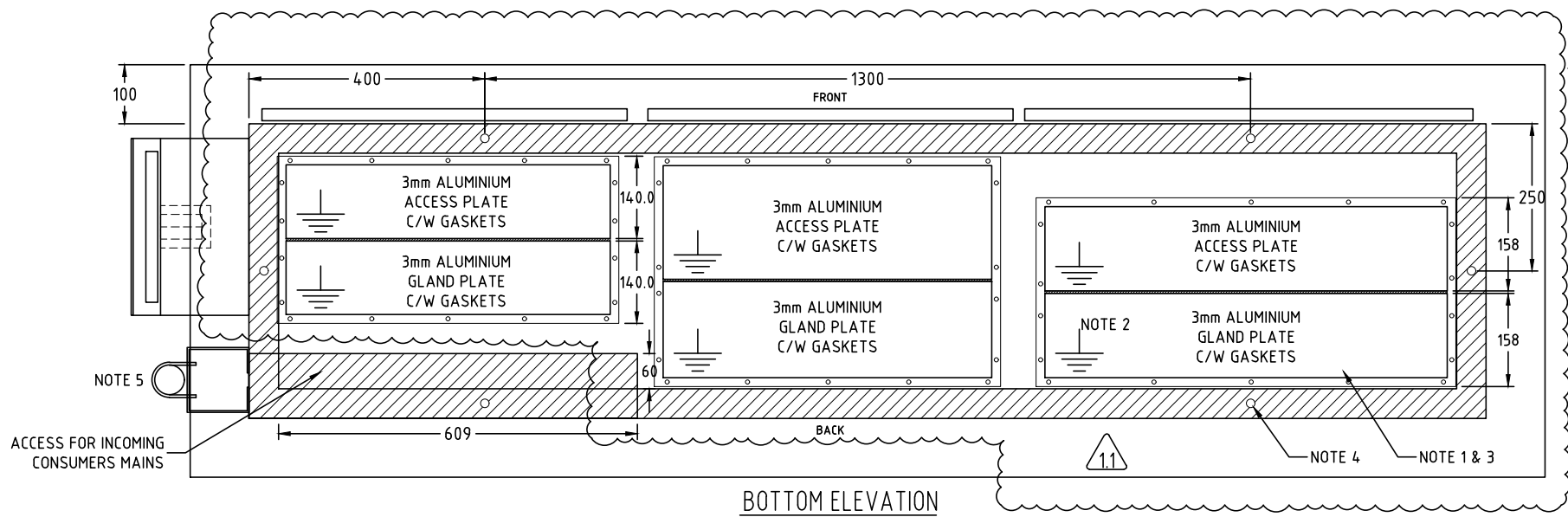
CURRENT REV CONTRACTOR: \_\_\_\_\_ CURRENT REV PROJECT: \_\_\_\_\_

DESIGN PANEL		
DESIGNED:	14/02/2018	AUTHORISED: 14/02/2018
SACHIN PANDEY		JUSTIN HAMRA
DRAWN:	14/02/2018	SIGNATURE:
TROY O'BRIEN		ORIGINAL SIGNED
REVIEWED:	14/02/2018	
JONATHON NICHOLLS		

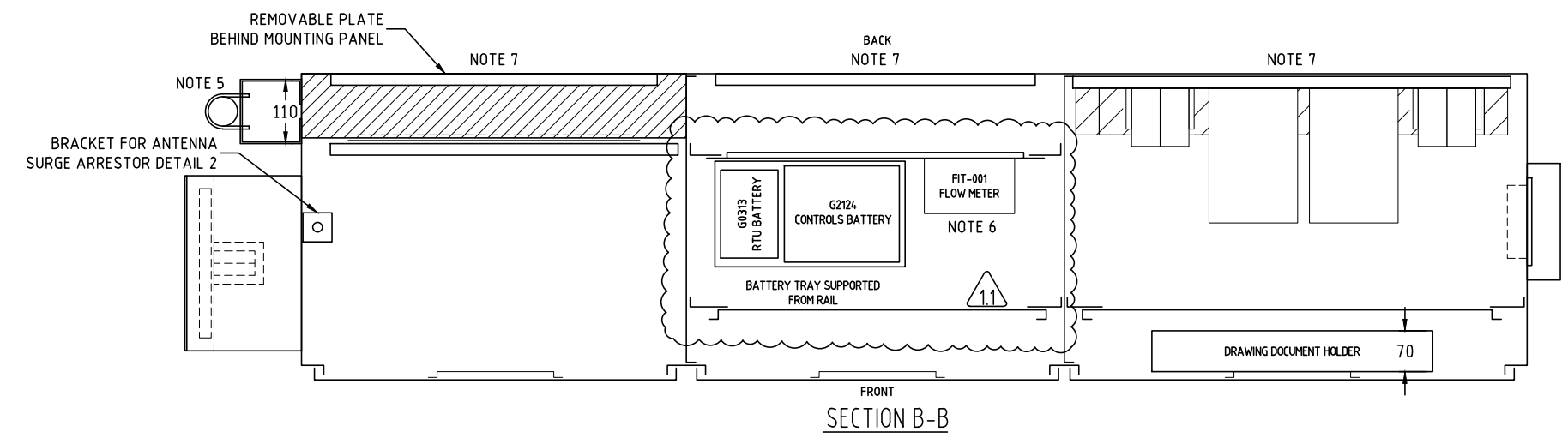
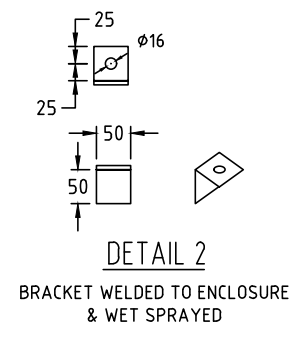
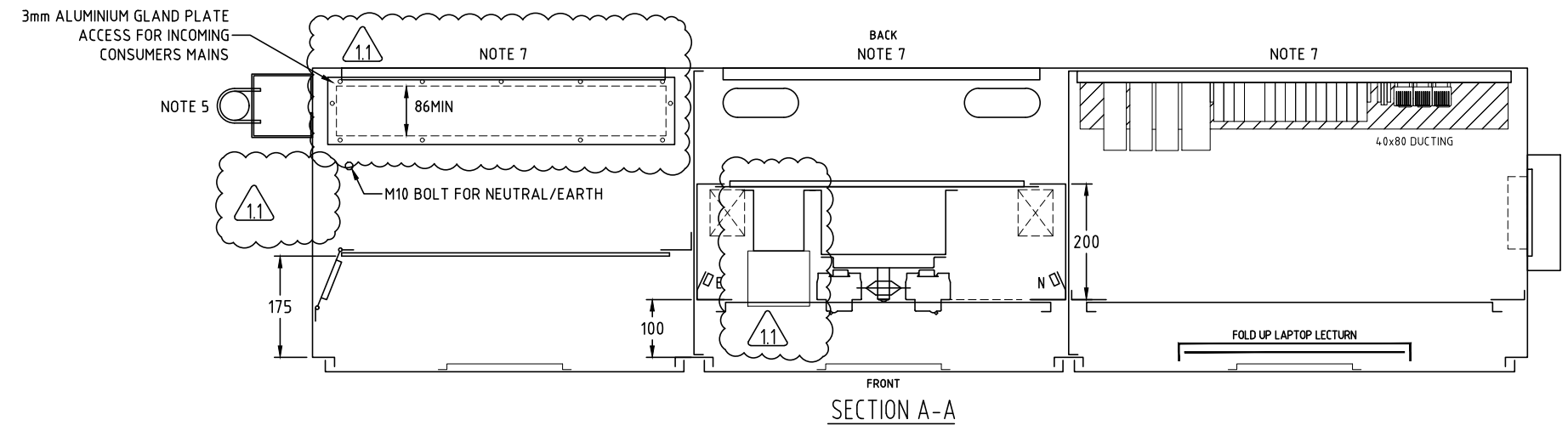
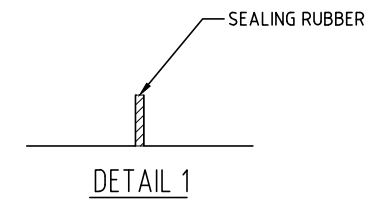
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SWITCHBOARD 0 - 100A  
MAIN SWITCHBOARD  
SWITCHBOARD LAYOUT  
ELECTRICAL  
LHS & RHS VIEW

A3	TOTAL SHEETS:	1.1
SHT SIZE	PROJECT No:	REVISION
MAXIMO ID:		
SUPERSEDES: 5003-00001-73		
DRAWING NUMBER		
TYP-03-00001_73		



- NOTES:**
1. GLAND PLATES TO BE FITTED WITH GAS SEALING RUBBER GASKETS & SPLIT GLAND PLATE TO BE AS PER DETAIL 1.
  2. 6mm BRASS EARTH STUD ON EACH GLAND PLATE.
  3. GLAND PLATES FASTENED WITH 6mm HEX HEAD BOLTS INTO NUT INSERTS.
  4. 15mm PLINTH MOUNTING HOLES TO BE LOCATED IN CENTRE OF PLINTH TOES & CONSISTENTLY LOCATED USING DRILLING TEMPLATE. HOLES TO BE DRILLED PRIOR TO GALVANISING/ACID ETCH/POWDER COATING.
  5. REQUIREMENT FOR RTU ANTENNA MAST & BRACKET IS PROJECT SPECIFIC.
  6. FLOWMETER REQUIREMENT IS PROJECT SPECIFIC.
  7. PROVIDE FACILITIES FOR MOUNTING FUTURE SUNSHADES TO REAR OF SWITCHBOARD. ANTI TAMPER SCREWS FITTED TO INTERNAL WELDED FIXINGS TO MAINTAIN IP RATING. REFER SHEET 78



REVISION PANEL			
REV	DATE	DRN	DETAILS
1.1	28/01/22	WS	UPDATED WITH SA WATER REVIEW REQUIREMENTS
0.1	03/11/20	PAN	UPDATED TITLE BLOCK

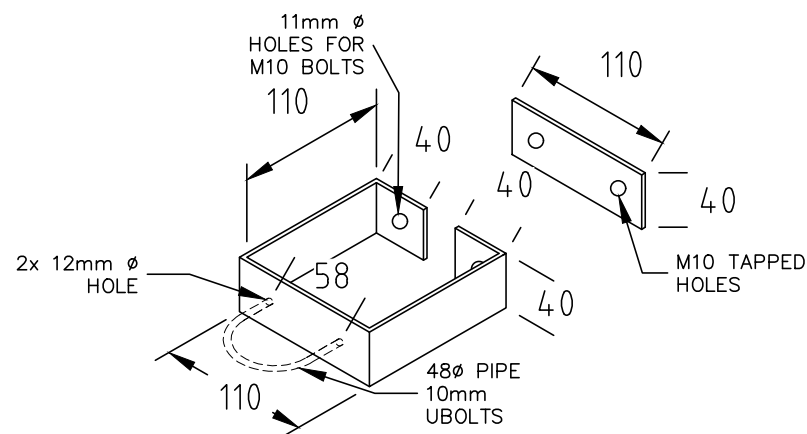
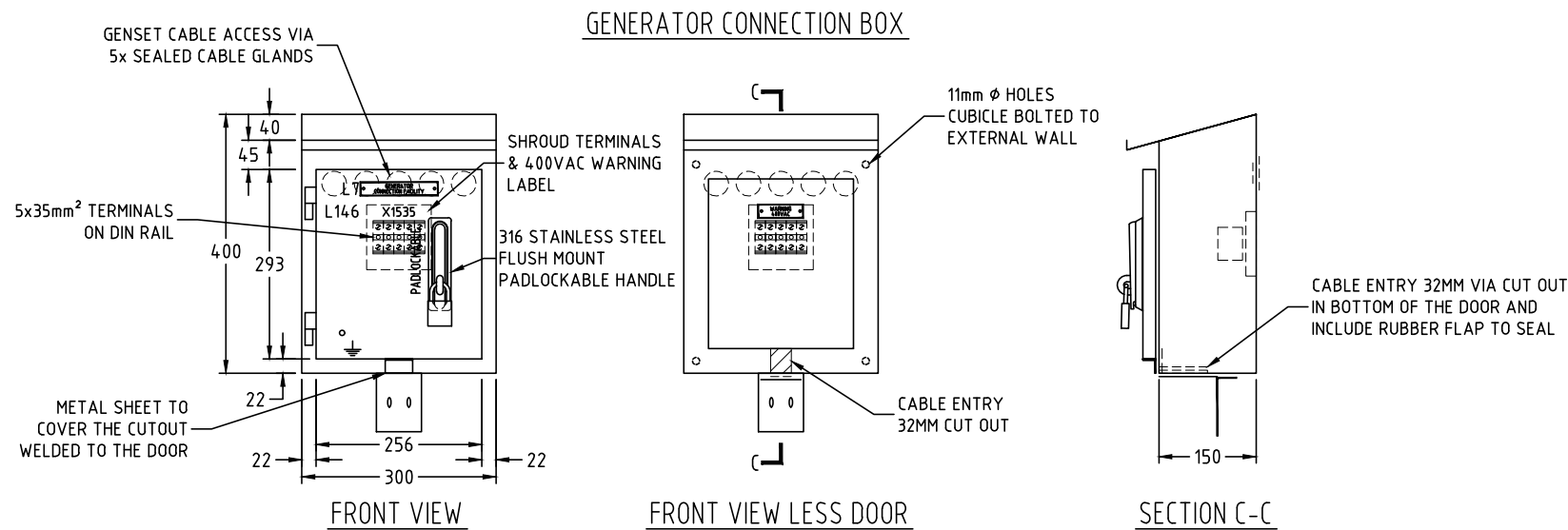
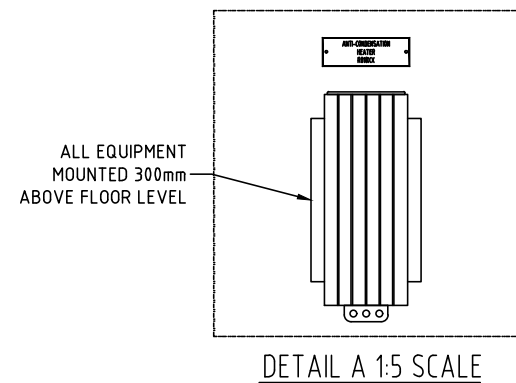
APR		CURRENT REV 28/01/22	
AUTHORISED:		JUSTIN HAMRA	
SIGNATURE:		<i>[Signature]</i>	

DESIGN PANEL	
DESIGNED: 14/02/2018	AUTHORISED: 14/02/2018
SACHIN PANDEY	JUSTIN HAMRA
DRAWN: 14/02/2018	SIGNATURE:
TROY O'BRIEN	ORIGINAL SIGNED
REVIEWED: 14/02/2018	
JONATHON NICHOLLS	

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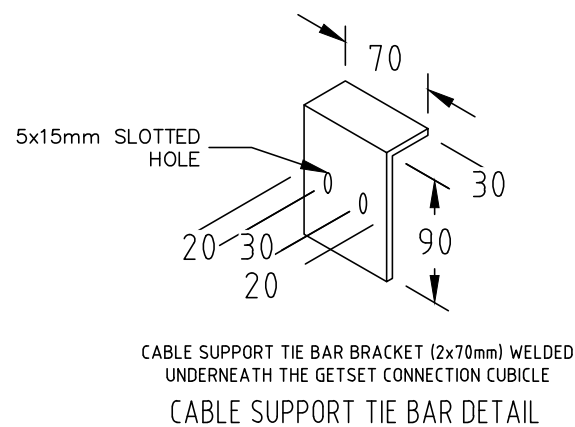
SWITCHBOARD 0 - 100A  
 MAIN SWITCHBOARD  
 SWITCHBOARD LAYOUT  
 ELECTRICAL  
 BOTTOM VIEW

A3	TOTAL SHEETS:	1.1
SHT SIZE	PROJECT No:	REVISION
MAXIMO ID:		
SUPERSEDES: 5003-00001-74		
DRAWING NUMBER		
TYP-03-00001_74		



ANTENNA PIPE SUPPORT BRACKET (5mmx40mm FLAT BAR) BOLTED TO EXTERNAL WALL WHERE REQUIRED

ANTENNA PIPE SUPPORT BRACKET DETAIL



REVISION PANEL				
REV	DATE	DRN	DETAILS	APR
1.1	28/01/22	WS	UPDATED WITH SA WATER REVIEW REQUIREMENTS	SS
0.1	03/11/20	PAN	UPDATED TITLE BLOCK & MINOR UPDATES	SS
CURRENT REV CONTRACTOR:			CURRENT REV PROJECT:	

DESIGN PANEL		
DESIGNED:	14/02/2018	AUTHORISED: 14/02/2018
SACHIN PANDEY		JUSTIN HAMRA
DRAWN:	14/02/2018	SIGNATURE:
TROY O'BRIEN		ORIGINAL SIGNED
REVIEWED:	14/02/2018	
JONATHON NICHOLLS		
CONTRACTOR:		

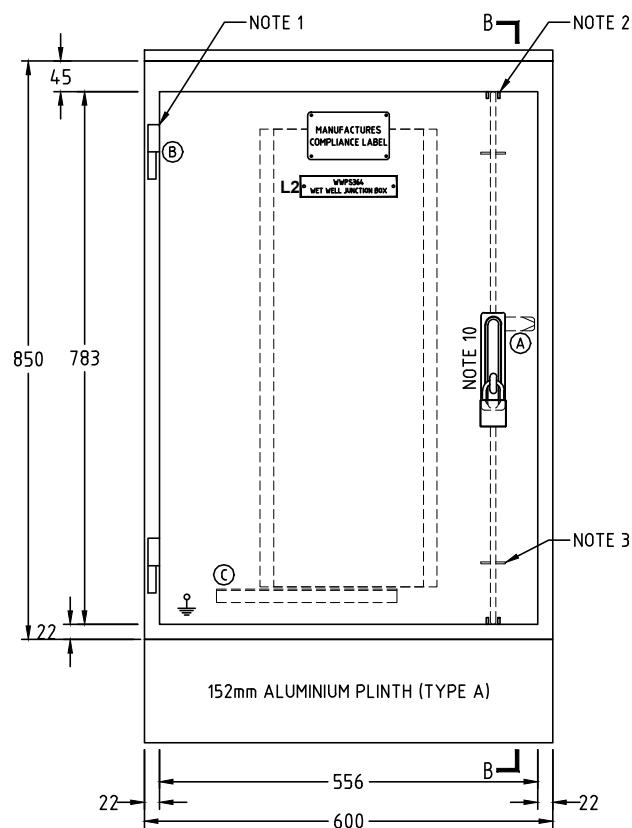
SA Water

Government of South Australia

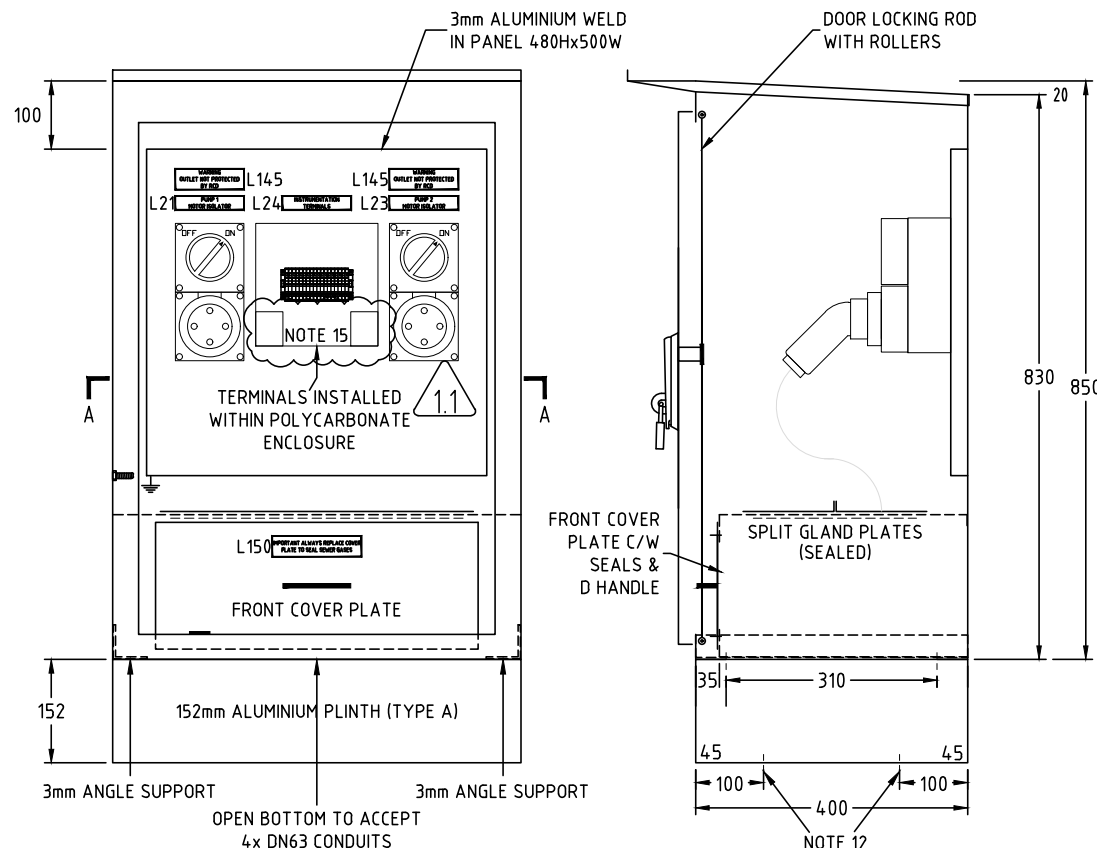
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SWITCHBOARD 0 - 100A  
 MAIN SWITCHBOARD  
 SWITCHBOARD LAYOUT  
 ELECTRICAL  
 GENERATOR BOX & CONSTRUCTION NOTES

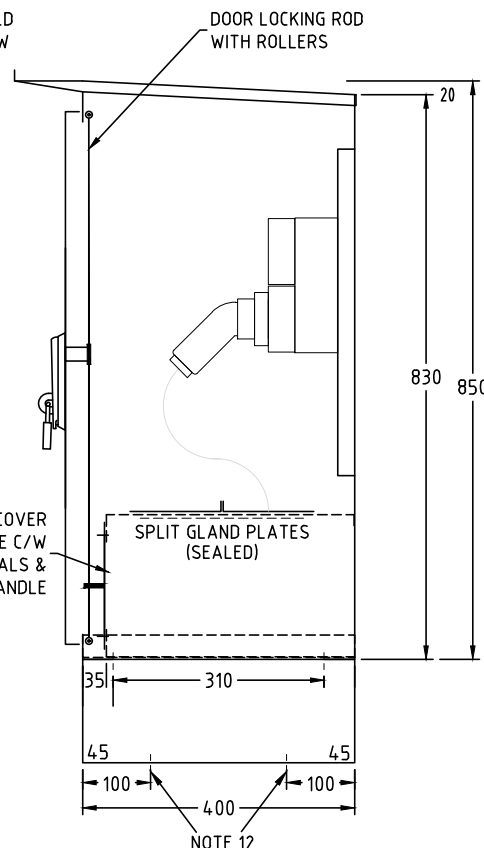
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SHT SIZE	PROJECT No:	REVISION
MAXIMO ID:		
SUPERSEDES: 5003-00001-75		
DRAWING NUMBER		
TYP-03-00001_75		



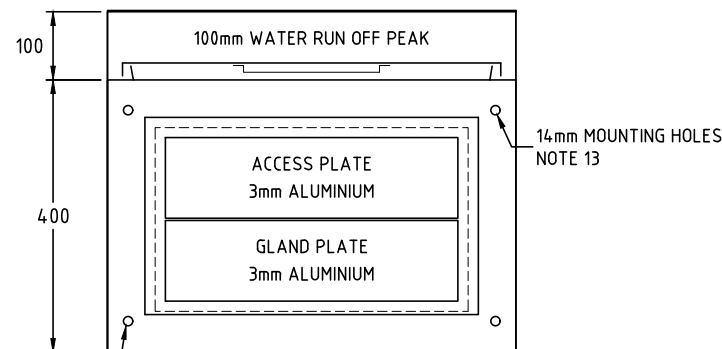
FRONT ELEVATION



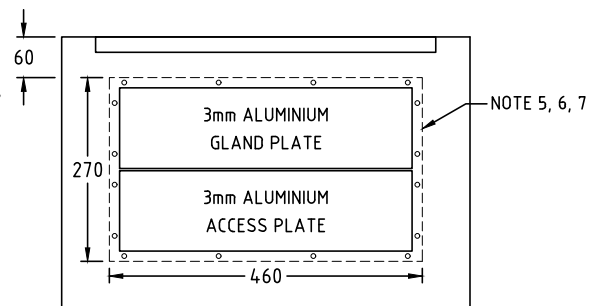
FRONT ELEVATION LESS DOOR



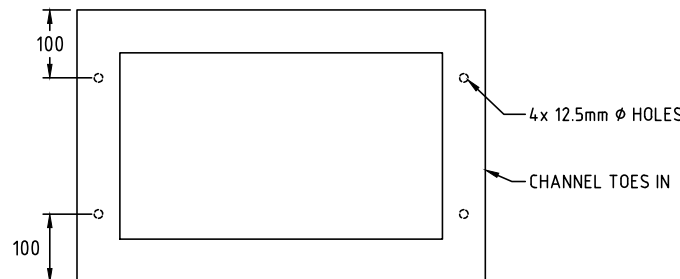
SECTION B-B



BOTTOM ELEVATION W/O PLINTH

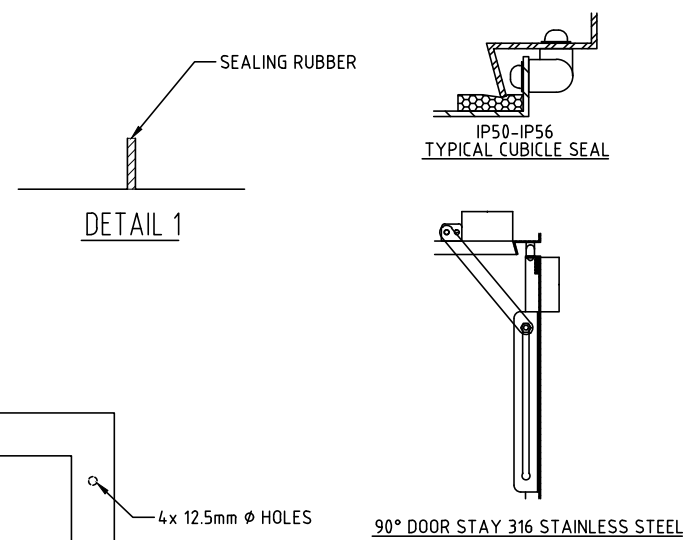


SECTION A-A



PLINTH

CONSTRUCTION NOTES	
CONSTRUCTION	MACHINE FORMED AND WELDED
CABLE ENTRY	MAINS IN: BOTTOM SUBMAINS OUT: BOTTOM
MATERIAL	CABINET: 3.0mm MARINE GRADE ALUMINIUM, (5052) DOORS: 3.0mm MARINE GRADE ALUMINIUM, (5052) ESCUTCHEONS: 3.0mm MARINE GRADE ALUMINIUM, (5052) EQUIPMENT PANELS: 3.0mm MARINE GRADE ALUMINIUM, (5052) BASE: 3.0mm MARINE GRADE ALUMINIUM, (5052) PLINTH: 152mm x 63mm x 6.3mm MARINE GRADE ALUMINIUM (G5052) CHANNEL
DEGREE OF PROTECTION	INGRESS: IP56 SEGREGATION: FORM 1 (AS/NZS 61439.2) DOOR SEAL: TESA 4773 21x6mm PVC/NITRILE CLOSED-CELL FOAM (SUITABLE -28°C TO 79°C)
FINISH	CABINET, DOORS, BASE PANELS & PLINTH: ROUGH SURFACES FILED, CLEAN, DEGREASE, GRIND SMOOTH, OVEN BAKED POWDER COATED
COLOUR	CABINET: "RIVERGUM G62" RIPPLE WITH "AG GHETTO CLEAR 910 81797" ANTI-GRAFFITI DOORS: "RIVERGUM G62" RIPPLE WITH "AG GHETTO CLEAR 910 81797" ANTI-GRAFFITI ESCUTCHEONS: "NEW BRIGHT WHITE" RIPPLE EQUIPMENT PANELS: "NEW BRIGHT WHITE" RIPPLE PLINTH: "RIVERGUM G62" RIPPLE
LABELS	MATERIAL: ROWMARK LASERMAX 2 PLY ACRYLIC FIXING: EXTERNAL: STAINLESS STEEL SCREWS INTERNAL: DOUBLE SIDED TAPE COLOURING: WHITE WITH BLACK ENGRAVING (W.B.W.) FOR STANDARD LABELS RED WITH WHITE ENGRAVING (R.W.R.) FOR WARNING AND DANGER LABELS



DETAIL 1

90° DOOR STAY 316 STAINLESS STEEL

CONSTRUCTION NOTES:

- PROVIDE PLASTIC SHIM (POLYETHYLENE OR SIMILAR) ON THE ATTACHMENT POINTS FOR THE STAINLESS STEEL HINGES TO ISOLATE THE ALUMINIUM FRAME OR DOOR.
- PROVIDE PLASTIC ROLLERS AT THE TIP OF THE 3 WAY LOCKING ROD.
- PROVIDE NYLON BUSHING BETWEEN 3 WAY LOCKING ROD AND METAL TAGS.
- PROVIDE ELECTRICAL ISOLATION BETWEEN DISSIMILAR METALS.
- GLAND PLATES TO BE FITTED WITH GAS SEALING RUBBER GASKETS & SPLIT GLAND PLATE TO BE AS PER DETAIL 1.
- GLAND PLATES FASTENED WITH 6mm 316SS HEX HEAD BOLTS INTO 316SS NUT INSERTS.
- 6mm BRASS STUD ON GLAND PLATE.
- REFER TO SHEET 95 FOR WET WELL JUNCTION BOX BILL OF MATERIALS - ELECTRICAL EQUIPMENT. JUNCTION BOX BILL OF MATERIALS SHALL BE POPULATED AS PART OF SHEET 95.
- REFER TO SHEET 96 FOR WET WELL JUNCTION BOX LABELS. JUNCTION BOX LABEL DETAILS SHALL BE POPULATED AS PART OF SHEET 96.
- 316 STAINLESS STEEL FLUSH MOUNT PADLOCKABLE HANDLE.
- PLINTH MANUFACTURED FROM 152x63x6.3mm MARINE GRADE (G5052) ALUMINIUM CHANNEL, POWDER COATED RIVERGUM GREEN G62 WITH CHANNEL TOES IN.
- MOUNTING HOLES IN PLINTH TO BE 12.5mmØ ALLOWING FOR ACCESS FROM WITH IN CABINET. PROVIDE DRILLING TEMPLATE FOR MOUNTING TO CONCRETE PLINTH.
- BOX TO PLINTH MOUNTING BOLTS TO BE G316 STAINLESS STEEL.
- LOCATION OF JUNCTION BOX TO BE FINALISED ON SITE IN DISCUSSION WITH OPERATIONS TEAM.
- SEAL LEAKAGE DETECTION AND ASSOCIATED CABLE SOCKETS TO BE PROVIDED IF SPECIFIED BY SUPPLIER. JUNCTION BOX DIMENSIONS, TERMINAL QUANTITY AND CABLE SOCKET ARRANGEMENT MAY DIFFER DEPENDING ON EQUIPMENT SELECTED.

HARDWARE LIST				
REF.	ITEM DESCRIPTION	MANUFACTURER	QTY.	ITEM No.
(A)	316 SS PADLOCKABLE SWING HANDLE	M & G GARDINER	1	2250-65316
	LOCKING ROD WITH ROLLERS - 1000mmL	SELECTLOK	2	ROD1000R
	3 POINT CAM	SELECTLOK	1	1000-1588
(B)	POLISHED 316 STAINLESS STEEL BLOCK HINGE	SELECTLOK	2	HIB650SS-316NS
(C)	AUTO DOOR STAY - STANDARD - 316 STAINLESS STEEL	LAI	1	DOOR STAY-AUTO STD

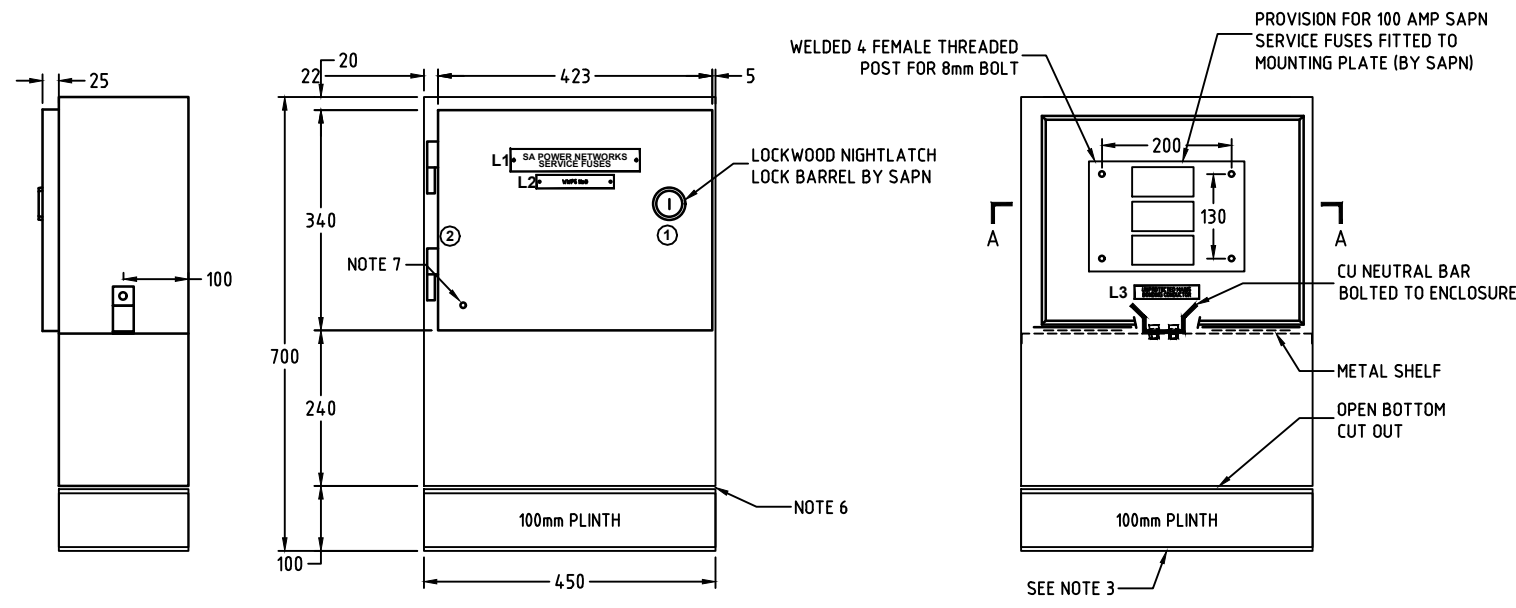
REVISION PANEL				
REV	DATE	DRN	DETAILS	APR
1.1	28/01/22	WS	UPDATED WITH SA WATER REVIEW REQUIREMENTS	SS
0.1	03/11/20	PAN	UPDATED TITLE BLOCK & MINOR UPDATES	SS

DESIGN PANEL		
DESIGNED:	AUTHORISED:	DATE
SACHIN PANDEY	JUSTIN HAMRA	14/02/2018
TROY O'BRIEN	ORIGINAL SIGNED	14/02/2018
JONATHON NICHOLLS		

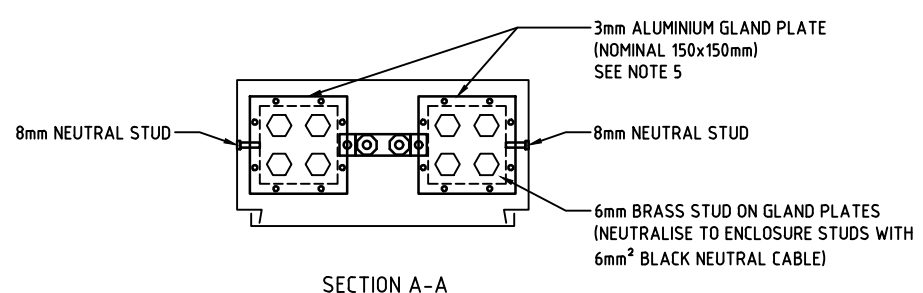
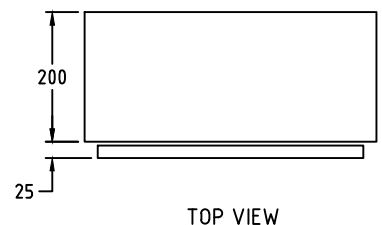
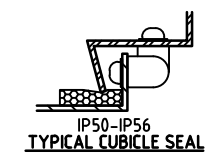
This drawing is the property of the SOUTH AUSTRALIAN WATER CORPORATION and shall not be copied or modified in part or in whole without authorization.

SWITCHBOARD 0 - 100A  
 MAIN SWITCHBOARD  
 WET WELL JUNCTION BOX  
 ELECTRICAL  
 GENERAL ARRANGEMENT

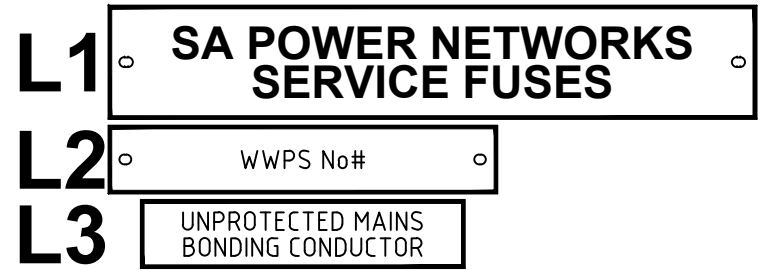
A3	TOTAL SHEETS:	1.1
	PROJECT No:	
MAXIMO ID:		
SUPERSEDES: 5003-00001-76		
DRAWING NUMBER		
TYP-03-00001_76		



CONSTRUCTION NOTES		
CONSTRUCTION	MACHINE FORMED AND WELDED	
CABLE ENTRY	MAINS IN: BOTTOM	SUBMAINS OUT: BOTTOM
MATERIAL	CABINET: 3mm MARINE GRADE ALUMINIUM (5052)	DOORS: 3mm MARINE GRADE ALUMINIUM (5052)
	ESCUTCHEONS: N/A	EQUIPMENT PANELS: N/A
DEGREE OF PROTECTION	PLINTH: 100mmx50mmx5mm MARINE GRADE ALUMINIUM (5052) PARALLEL FLANGE CHANNEL.	INGRESS: IP56
	SEGREGATION: FORM 1 (AS/NZS 61439.2)	DOOR SEAL: TESA 4773 21x6mm PVC/NITRILE CLOSED-CELL FOAM (SUITABLE -28°C TO 79°C)
FINISH	GLAND SEAL: TESA 4773 21x6mm PVC/NITRILE CLOSED-CELL FOAM (SUITABLE -28°C TO 79°C)	CABINET, DOORS, PANELS & PLINTH: ROUGH SURFACES FILED, CLEANED, DEGREASED, GRIND SMOOTH, PRIME COATED, OVEN BAKED POWDER COATED.
COLOUR	DOORS: "RIVERGUM G62" RIPPLE WITH "AG GHETTO CLEAR 910 81797" ANTI-GRAFFITI	EQUIPMENT PANELS: "RIVERGUM G62" RIPPLE WITH "AG GHETTO CLEAR 910 81797" ANTI-GRAFFITI
	ESUTCHEONS: N/A	EQUIPMENT PANELS: N/A
LABELS	PLINTH: "RIVERGUM G62" RIPPLE	MATERIAL: ROWMARK LASERMAX 2 PLY ACRYLIC
	FIXING: EXTERNAL: STAINLESS STEEL SCREWS	INTERNAL: DOUBLE SIDED TAPE
	COLOURING: WHITE WITH BLACK ENGRAVING (W.B.W.) FOR STANDARD LABELS	RED WITH WHITE ENGRAVING (R.W.R.) FOR WARNING AND DANGER LABELS



**ALL LABELS ARE W.B.W. UNLESS OTHERWISE NOTED**



**CONSTRUCTION NOTES:**

- SWITCHBOARD CONSTRUCTED IN ACCORDANCE WITH AS/NZS 61439.2, SA WATER TS0300 & SAPN SERVICE AND INSTALLATION RULES
- CUBICLE TO BE CONSTRUCTED FROM 3mm MARINE GRADE ALUMINIUM & GROUND SMOOTH BEFORE POWDER COATED IN ACCORDANCE WITH TS0300, RIVERGUM GREEN G62, USING GRAFFITI RESISTANT COATINGS.
- PLINTH MANUFACTURED FROM 100mmx50mmx5mm MARINE GRADE ALUMINIUM CHANNEL C/W 15mm MOUNTING HOLES. PLINTH TO BE POWDER COATED RIVERGUM GREEN G62.
- DOORS TO BE SEALED WITH WEATHERPROOF RUBBER
- GLAND PLATES FASTENED BY MINIMUM 6mm HEX HEAD HARDENED BOLTS INTO NUTSERTS
- PLINTH MOUNTING BOLTS TO BE 316 STAINLESS STEEL & FITTED WITH NYLON ISOLATING WASHERS
- PROVIDE 8mm WELDED STUD TO INSIDE OF DOOR. DOOR TO BE BONDED TO ENCLOSURE WITH 6mm² BLACK NEUTRAL CABLE.

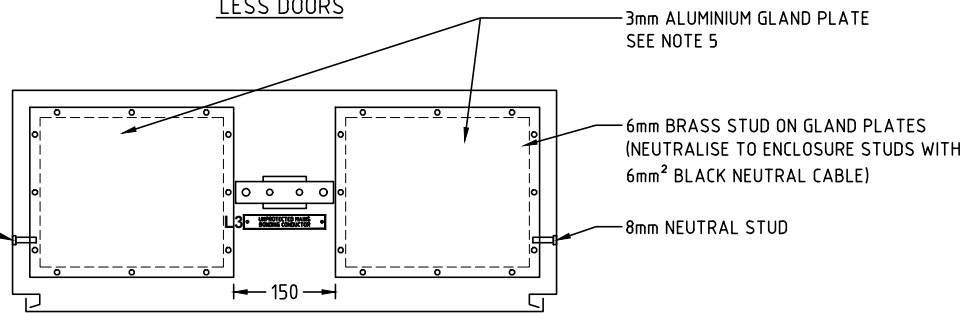
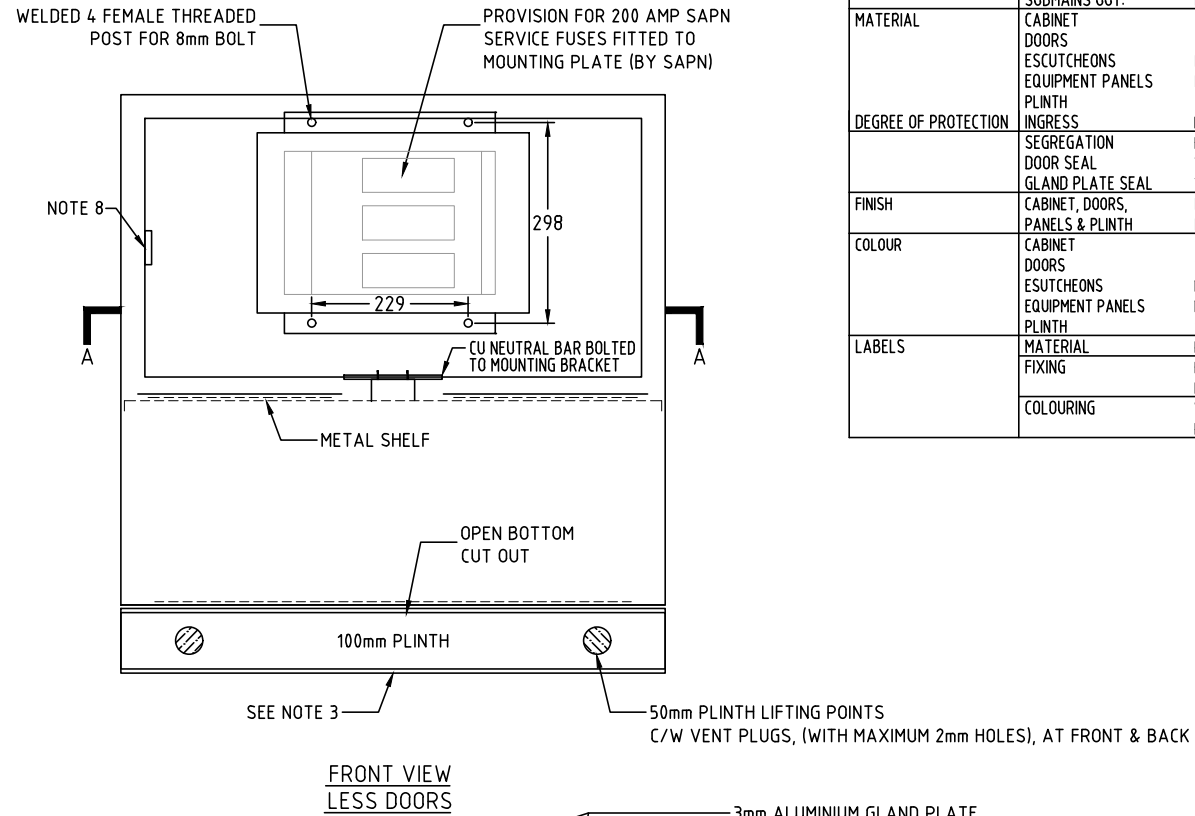
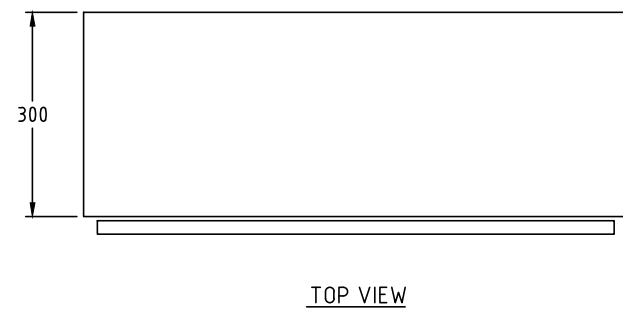
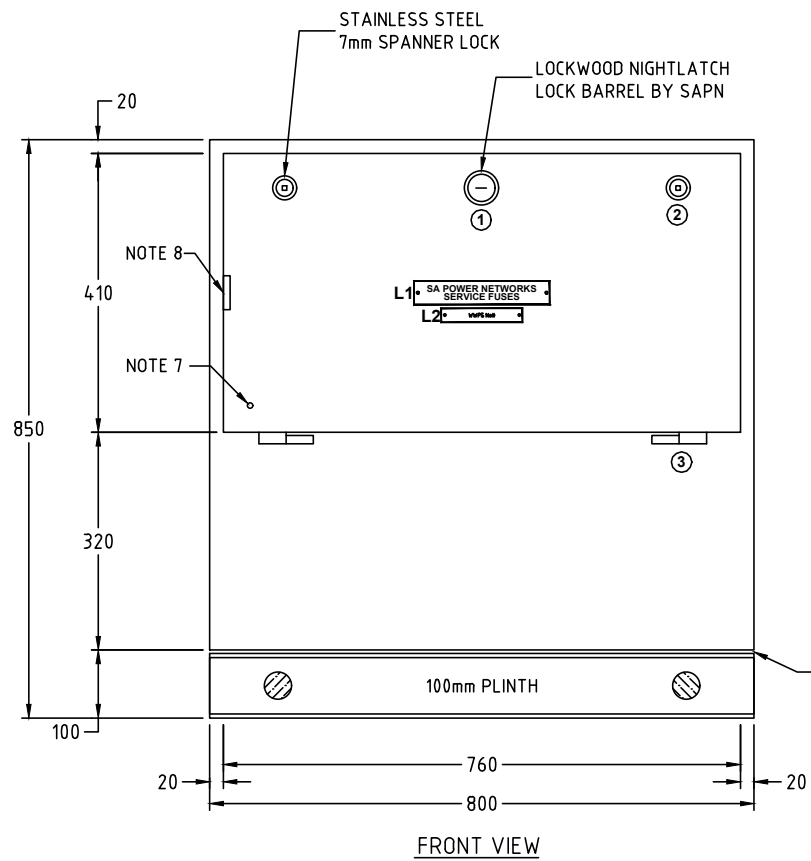
EQUIPMENT LIST				
REF.	ITEM DESCRIPTION	MANUFACTURER	QTY.	ITEM No.
①	STREAMLATCH DEADBOLT	LOCKWOOD	1	213SCA0
②	POLISHED 316 STAINLESS STEEL BLOCK HINGE	SELECTLOK	2	HIB650SS-316NS

REVISION PANEL				
REV	DATE	DRN	DETAILS	APR
1.1	28/01/22	WS	UPDATED WITH SA WATER REVIEW REQUIREMENTS	SS
0.1	03/11/20	PAN	UPDATED TITLE BLOCK & MINOR UPDATES	SS

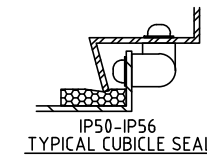
DESIGN PANEL	
DESIGNED:	AUTHORISED:
14/02/2018 SACHIN PANDEY	14/02/2018 JUSTIN HAMRA
DRAWN: 14/02/2018 TROY O'BRIEN	SIGNATURE:
REVIEWED: 14/02/2018 JONATHON NICHOLLS	ORIGINAL SIGNED

SWITCHBOARD 0 - 100A  
MAIN SWITCHBOARD  
SAPN 100A SERVICE FUSE ENCLOSURE  
ELECTRICAL  
GENERAL ARRANGEMENT

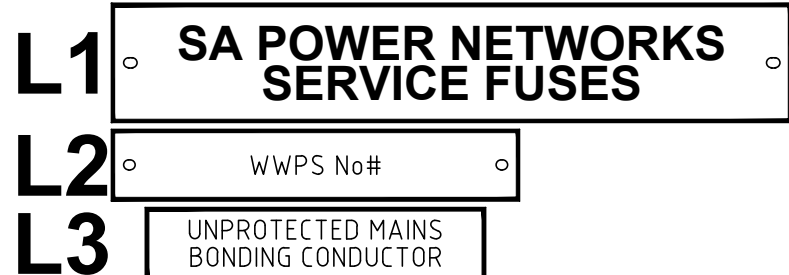
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SHT SIZE	PROJECT No:	REVISION
MAXIMO ID:		
SUPERSEDES: 5003-00001-77a		
DRAWING NUMBER		
TYP-03-00001_77a		



CONSTRUCTION NOTES		
CONSTRUCTION	MACHINE FORMED AND WELDED	
CABLE ENTRY	MAINS IN:	BOTTOM
	SUBMAINS OUT:	BOTTOM
MATERIAL	CABINET	3mm MARINE GRADE ALUMINIUM (5052)
	DOORS	3mm MARINE GRADE ALUMINIUM (5052)
	ESCUTCHEONS	N/A
	EQUIPMENT PANELS	N/A
DEGREE OF PROTECTION	PLINTH	100mmx50mmx5mm MARINE GRADE ALUMINIUM (5052) PARALLEL FLANGE CHANNEL.
	INGRESS	IP56
	SEGREGATION	FORM 1 (AS/NZS 61439.2)
	DOOR SEAL	TESA 4773 21x6mm PVC/NITRILE CLOSED-CELL FOAM (SUITABLE -28°C TO 79°C)
	GLAND PLATE SEAL	TESA 4773 21x6mm PVC/NITRILE CLOSED-CELL FOAM (SUITABLE -28°C TO 79°C)
FINISH	CABINET, DOORS, PANELS & PLINTH	ROUGH SURFACES FILED, CLEANED, DEGREASED, GRIND SMOOTH, PRIME COATED, OVEN BAKED POWDER COATED.
COLOUR	CABINET	"RIVERGUM G62" RIPPLE WITH "AG GHETTO CLEAR 910 81797" ANTI-GRAFFITI
	DOORS	"RIVERGUM G62" RIPPLE WITH "AG GHETTO CLEAR 910 81797" ANTI-GRAFFITI
	ESCUTCHEONS	N/A
	EQUIPMENT PANELS	N/A
	PLINTH	"RIVERGUM G62" RIPPLE
LABELS	MATERIAL	ROWMARK LASERMAX 2 PLY ACRYLIC
	FIXING	EXTERNAL: DOUBLE SIDED TAPE WITH PLASTIC PINS INTERNAL: DOUBLE SIDED TAPE
	COLOURING	WHITE WITH BLACK ENGRAVING (W.B.W.) FOR STANDARD LABELS RED WITH WHITE ENGRAVING (R.W.R.) FOR WARNING AND DANGER LABELS



**ALL LABELS ARE W.B.W. UNLESS OTHERWISE NOTED**



**CONSTRUCTION NOTES:**

- SWITCHBOARD CONSTRUCTED IN ACCORDANCE WITH AS/NZS61439.2, SA WATER TS0300 & SAPN SERVICE AND INSTALLATION RULES
- CUBICLE TO BE CONSTRUCTED FROM 3mm MARINE GRADE ALUMINIUM & GROUND SMOOTH BEFORE POWDER COATED IN ACCORDANCE WITH TS0300, RIVERGUM GREEN G62, USING GRAFFITI RESISTANT COATINGS.
- PLINTH MANUFACTURED FROM 100mmx50mmx5mm MARINE GRADE ALUMINIUM CHANNEL C/W 15mm MOUNTING HOLES. PLINTH TO BE POWDER COATED RIVERGUM GREEN G62.
- DOORS TO BE SEALED WITH WEATHERPROOF RUBBER
- GLAND PLATES FASTENED BY MINIMUM 6mm HEX HEAD HARDENED BOLTS INTO NUTSERTS
- PLINTH MOUNTING BOLTS TO BE 316 STAINLESS STEEL & FITTED WITH NYLON ISOLATING WASHERS.
- PROVIDE 8mm WELDED STUD TO INSIDE OF DOOR. DOOR TO BE BONDED TO ENCLOSURE WITH 6mm² BLACK NEUTRAL CABLE.
- PROVIDE 90° OPENING CABLE DOOR STAY AND WELDED BRACKETS.

EQUIPMENT LIST				
REF.	ITEM DESCRIPTION	MANUFACTURER	QTY.	ITEM No.
①	STREAMLATCH DEADBOLT	LOCKWOOD	1	Z13SCA0
②	SPANNER LOCK 7mm SQUARE 316 STAINLESS STEEL	LOCK FOCUS	2	A/SR18/TS/SS/H/T66
③	POLISHED 316 STAINLESS STEEL BLOCK HINGE	SELECTLOK	2	HIB650SS-316NS

REVISION PANEL				
REV	DATE	DRN	DETAILS	APR
1.1	28/01/22	WS	UPDATED WITH SA WATER REVIEW REQUIREMENTS	SS
0.1	03/11/20	PAN	UPDATED TITLE BLOCK & MINOR UPDATES	SS

DESIGN PANEL		
DESIGNED:	AUTHORISED:	
SACHIN PANDEY	JUSTIN HAMRA	
DRAWN: TROY O'BRIEN	SIGNATURE:	
REVIEWED: JONATHON NICHOLLS	ORIGINAL SIGNED	

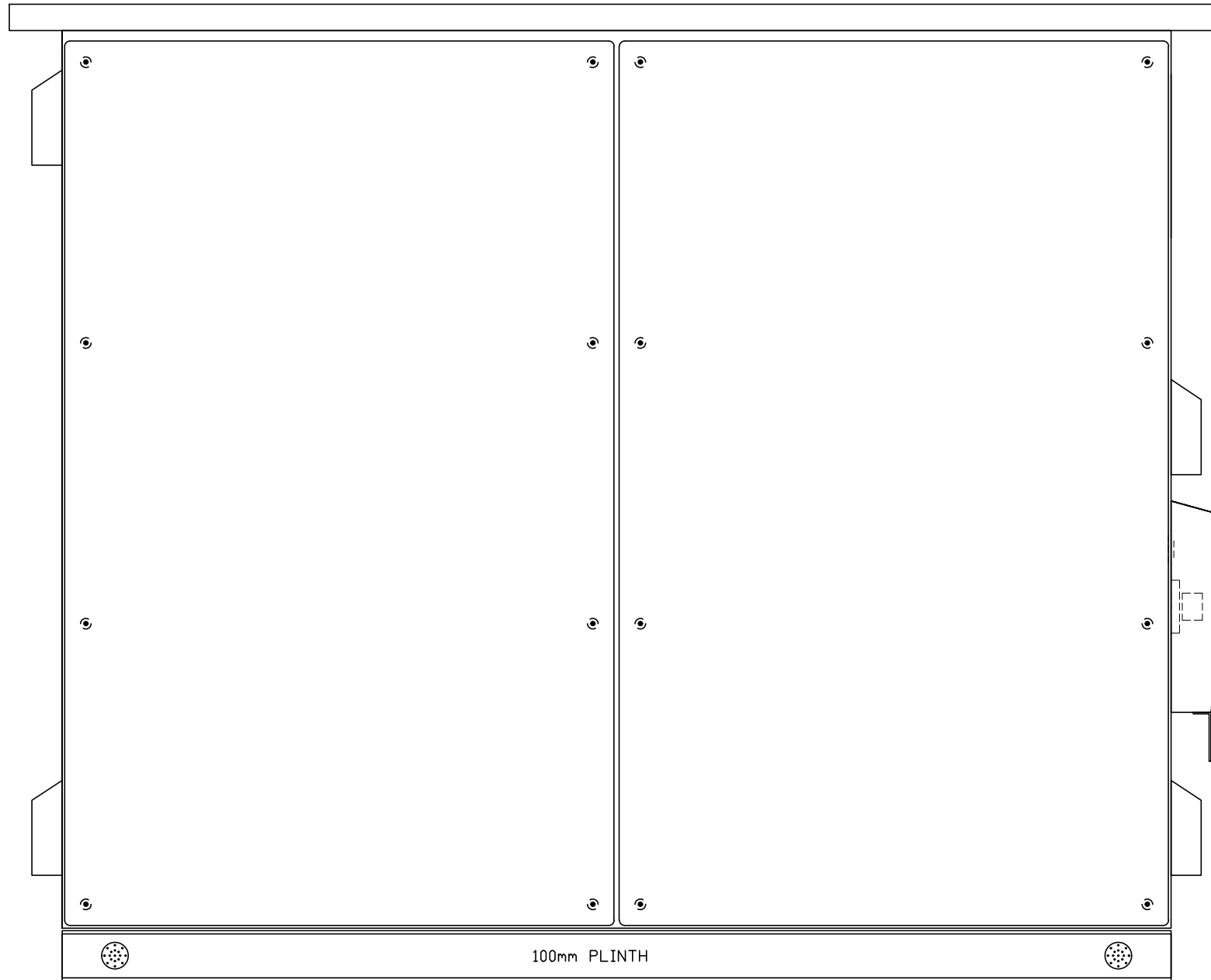
This drawing is the property of the SOUTH AUSTRALIAN WATER CORPORATION and shall not be copied or modified in part or in whole without authorization.

SWITCHBOARD 0 - 100A  
 MAIN SWITCHBOARD  
 SAPN 200A SERVICE FUSE ENCLOSURE  
 ELECTRICAL  
 GENERAL ARRANGEMENT

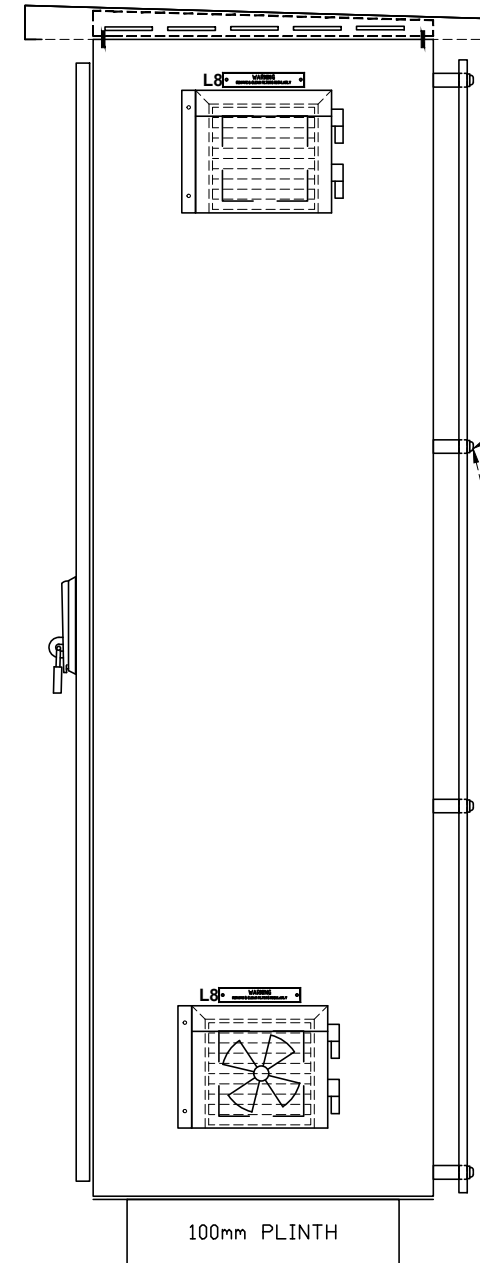
A3	TOTAL SHEETS:	1.1
SHT SIZE	PROJECT No:	REVISION
MAXIMO ID:		
SUPERSEDES: 5003-00001-77b		
DRAWING NUMBER		
TYP-03-00001_77b		



REAR SUN SHIELDS - WHERE REQUIRED (PROJECT SPECIFIC)



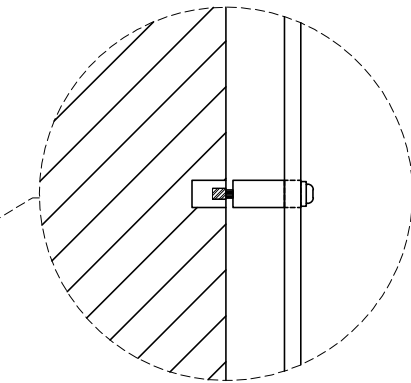
REAR ELEVATION



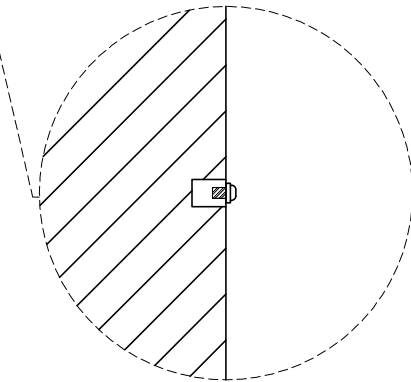
RIGHT SIDE VIEW

SUN SHIELD FIXING DETAILS

WITH SUN SHIELD



WITHOUT SUN SHIELD




SUN SHIELD CONSTRUCTION NOTES:

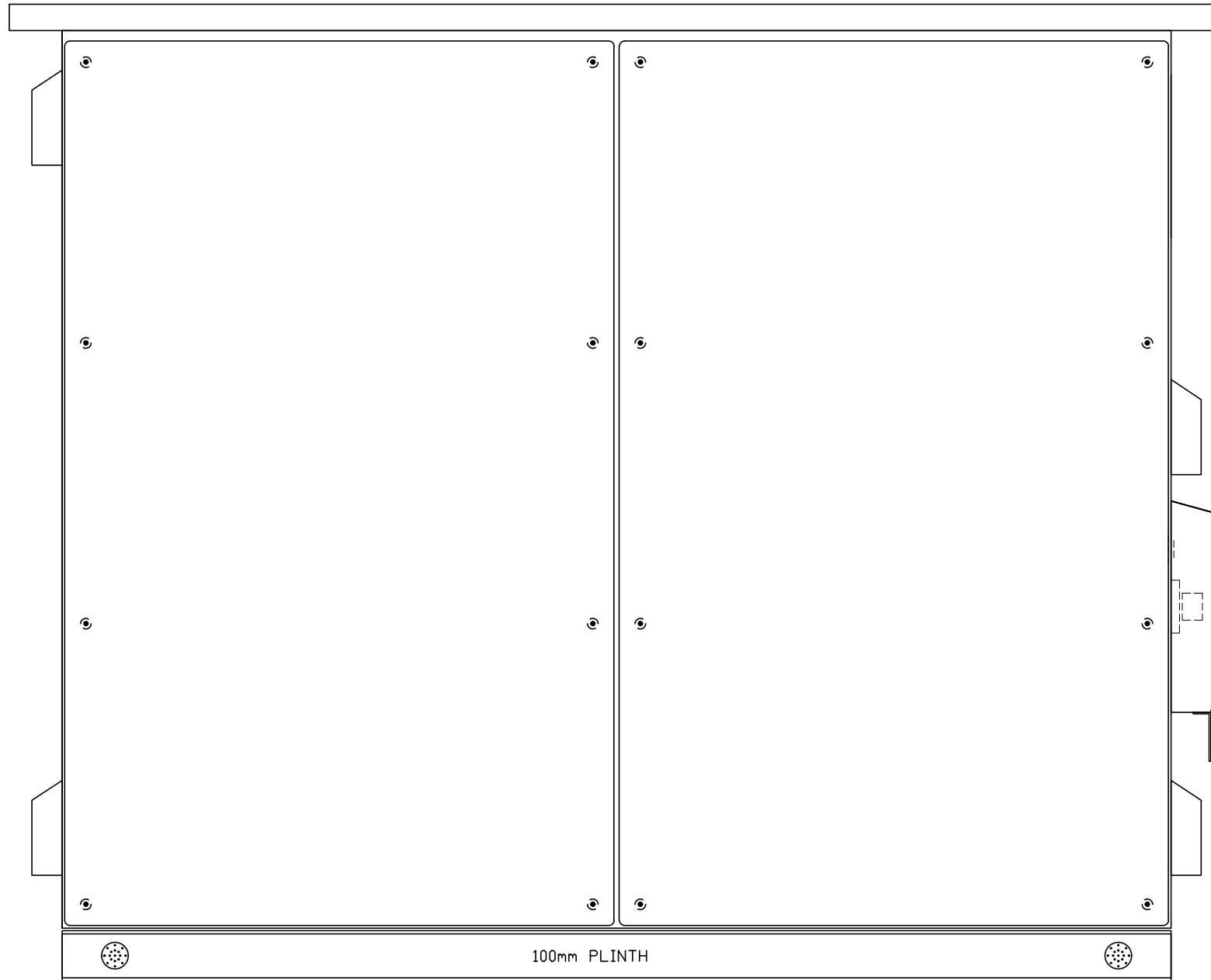
1. MATERIAL - 1.6mm G2 Z275 GALVABOND
2. FINISH - CUBICLE TO BE WET SPRAYED 2 PACK PAINTED IN ACCORDANCE WITH TS0300 CLAUSE 8.3 OUTDOOR CUBICLE. PAINTED RIVERGUM GREEN G62, USING GRAFFITI RESISTANT PAINT/COATINGS.
3. COLOUR - "RIVERGUM GREEN G62" WET SPRAY WITH "AG GHETTO CLEAR 910 81797" ANTI-GRAFFITI

PROVISIONS FOR SUN SHIELDS SHALL BE MADE ON ALL SWITCHBOARDS BY USE OF A WELDED BLIND STANDOFF ON THE INSIDE OF THE BOARD. THIS WILL ALLOW THE SUN SHIELD TO BE FIXED WHEN NEEDED WITHOUT ALTERING THE IP RATING.

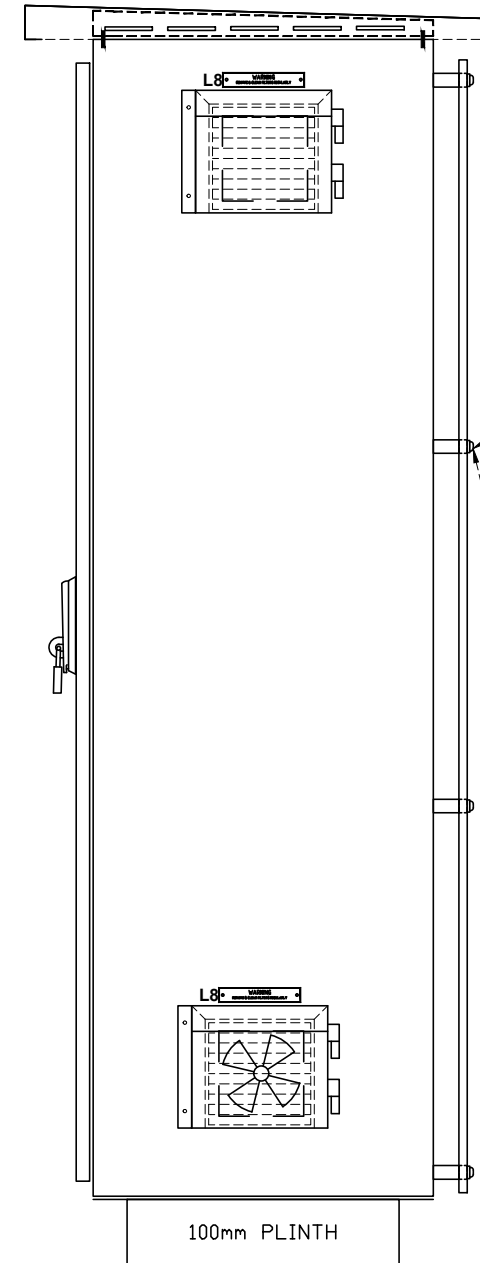


REVISION PANEL				DESIGN PANEL		 This drawing is the property of the SOUTH AUSTRALIAN WATER CORPORATION and shall not be copied or modified in part or in whole without authorization.	SWITCHBOARD 0 - 100A MAIN SWITCHBOARD SWITCHBOARD LAYOUT ELECTRICAL WET SPRAYED GALVABOND - REAR SUN SHIELD		TOTAL SHEETS: 1.1 PROJECT No: REVISION	
REV	DATE	DRN	DETAILS	APR	CURRENT REV 28/01/22		DESIGNED: 14/02/2018	AUTHORISED: 14/02/2018	MAXIMO ID:	SUPERSEDES: 5003-00001-78a
					CURRENT REV 28/01/22	DESIGNED: 14/02/2018	AUTHORISED: 14/02/2018	DRAWING NUMBER	TYP-03-00001_78a	
					AUTHORISED:	SACHIN PANDEY	JUSTIN HAMRA			
					SIGNATURE:	TROY O'BRIEN	SIGNATURE:			
1.1	28/01/22	WS	UPDATED WITH SA WATER REVIEW REQUIREMENTS	SS		REVIEWED: 14/02/2018	ORIGINAL SIGNED			
0.1	03/11/20	PAN	UPDATED TITLE BLOCK	SS		JONATHON NICHOLLS				
CURRENT REV CONTRACTOR:				CURRENT REV PROJECT:		CONTRACTOR:				

REAR SUN SHIELDS - WHERE REQUIRED (PROJECT SPECIFIC)



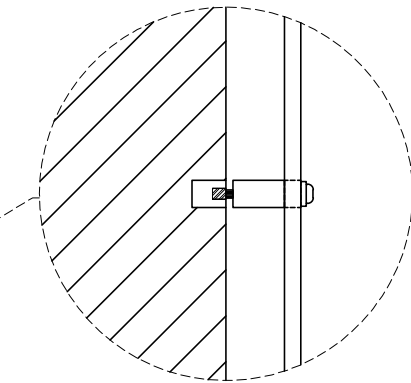
REAR ELEVATION



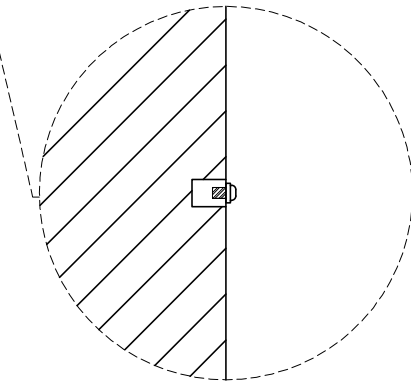
RIGHT SIDE VIEW

SUN SHIELD FIXING DETAILS

WITH SUN SHIELD



WITHOUT SUN SHIELD





SUN SHIELD CONSTRUCTION NOTES:

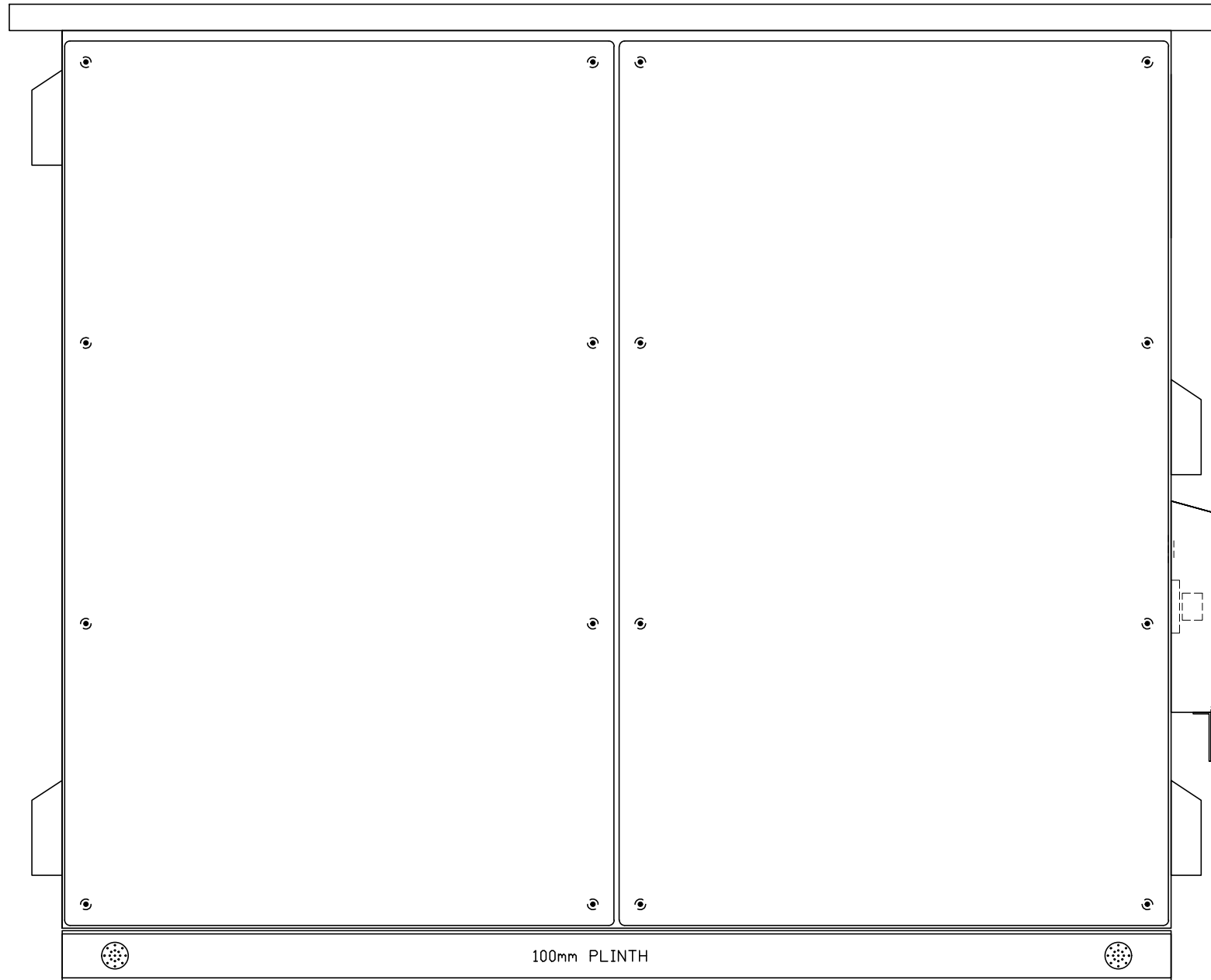
1. MATERIAL - 1.6mm 316 STAINLESS STEEL
2. FINISH - CUBICLE TO BE POWDER COATED RIVERGUM GREEN G62, USING GRAFFITI RESISTANT COATINGS. ROUGH SURFACES TO BE FILED, GROUND SMOOTH, SURFACES ROUGHENED, CLEANED, DEGREASED & OVEN BAKED POWDER COATED. THE COATING SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S DATA SHEET & SHALL INCLUDE ANY PRIMERS OR UNDERCOATS AS RECOMMENDED BY THE MANUFACTURER. INTERNAL REMOVABLE PANELS, BACKPLATES, BRACKETS & ESCUTCHEONS SHALL BE GLOSS WHITE IN COLOUR. POWDER COATING TO HAVE A DRY FILM THICKNESS NOT LESS THAN 60 MICRONS.
3. COLOUR - "RIVERGUM GREEN G62" OVEN BAKED POWDER COATED WITH "AG GHETTO CLEAR 910 81797" ANTI-GRAFFITI.

PROVISIONS FOR SUN SHIELDS SHALL BE MADE ON ALL SWITCHBOARDS BY USE OF A WELDED BLIND STANDOFF ON THE INSIDE OF THE BOARD. THIS WILL ALLOW THE SUN SHIELD TO BE FIXED WHEN NEEDED WITHOUT ALTERING THE IP RATING..

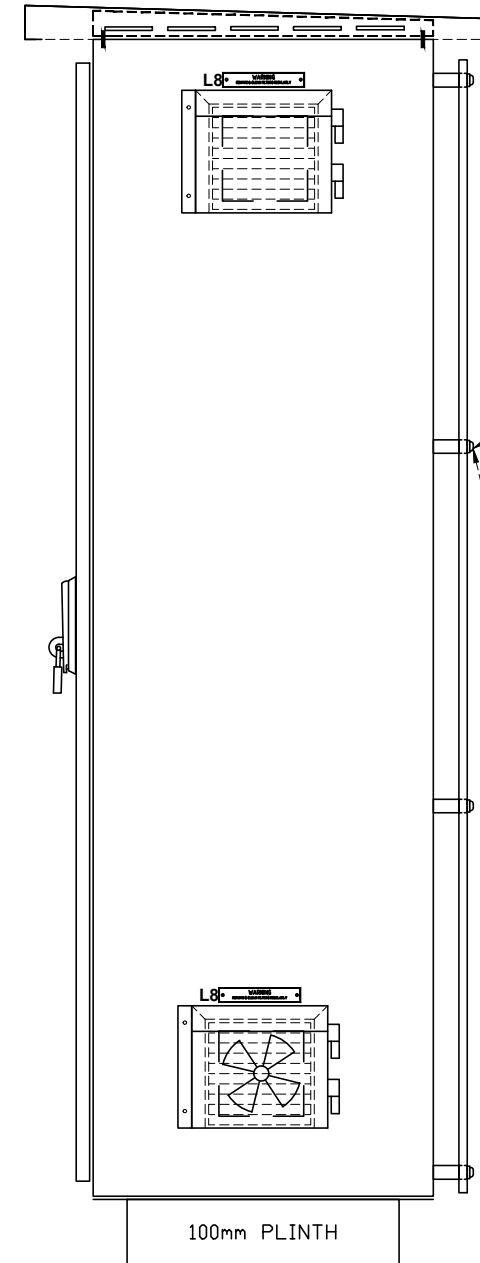


REVISION PANEL				DESIGN PANEL				 This drawing is the property of the SOUTH AUSTRALIAN WATER CORPORATION and shall not be copied or modified in part or in whole without authorization.	SWITCHBOARD 0 - 100A MAIN SWITCHBOARD SWITCHBOARD LAYOUT ELECTRICAL POWDER COATED 316SS - REAR SUN SHIELD		A3 TOTAL SHEETS: SHT SIZE PROJECT No:		1.1 REVISION
REV	DATE	DRN	DETAILS	APR	CURRENT REV 28/01/22	DESIGNED: 14/02/2018	AUTHORISED: 14/02/2018		MAXIMO ID:		5003-00001-78b		
					AUTHORISED: JUSTIN HAMRA	SACHIN PANDEY	JUSTIN HAMRA	DRAWING NUMBER		TYP-03-00001_78b			
					SIGNATURE: 	TROY O'BRIEN	ORIGINAL SIGNED						
1.1	28/01/22	WS	UPDATED WITH SA WATER REVIEW REQUIREMENTS	SS		REVIEWED: 14/02/2018							
0.1	03/11/20	PAN	UPDATED TITLE BLOCK	SS		JONATHON NICHOLLS							
CURRENT REV CONTRACTOR:				CURRENT REV PROJECT:									

REAR SUN SHIELDS - WHERE REQUIRED (PROJECT SPECIFIC)



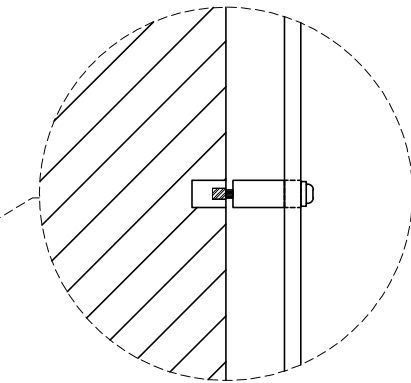
REAR ELEVATION



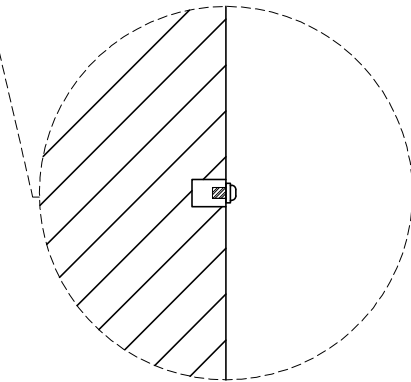
RIGHT SIDE VIEW

SUN SHIELD FIXING DETAILS

WITH SUN SHIELD



WITHOUT SUN SHIELD





SUN SHIELD CONSTRUCTION NOTES:

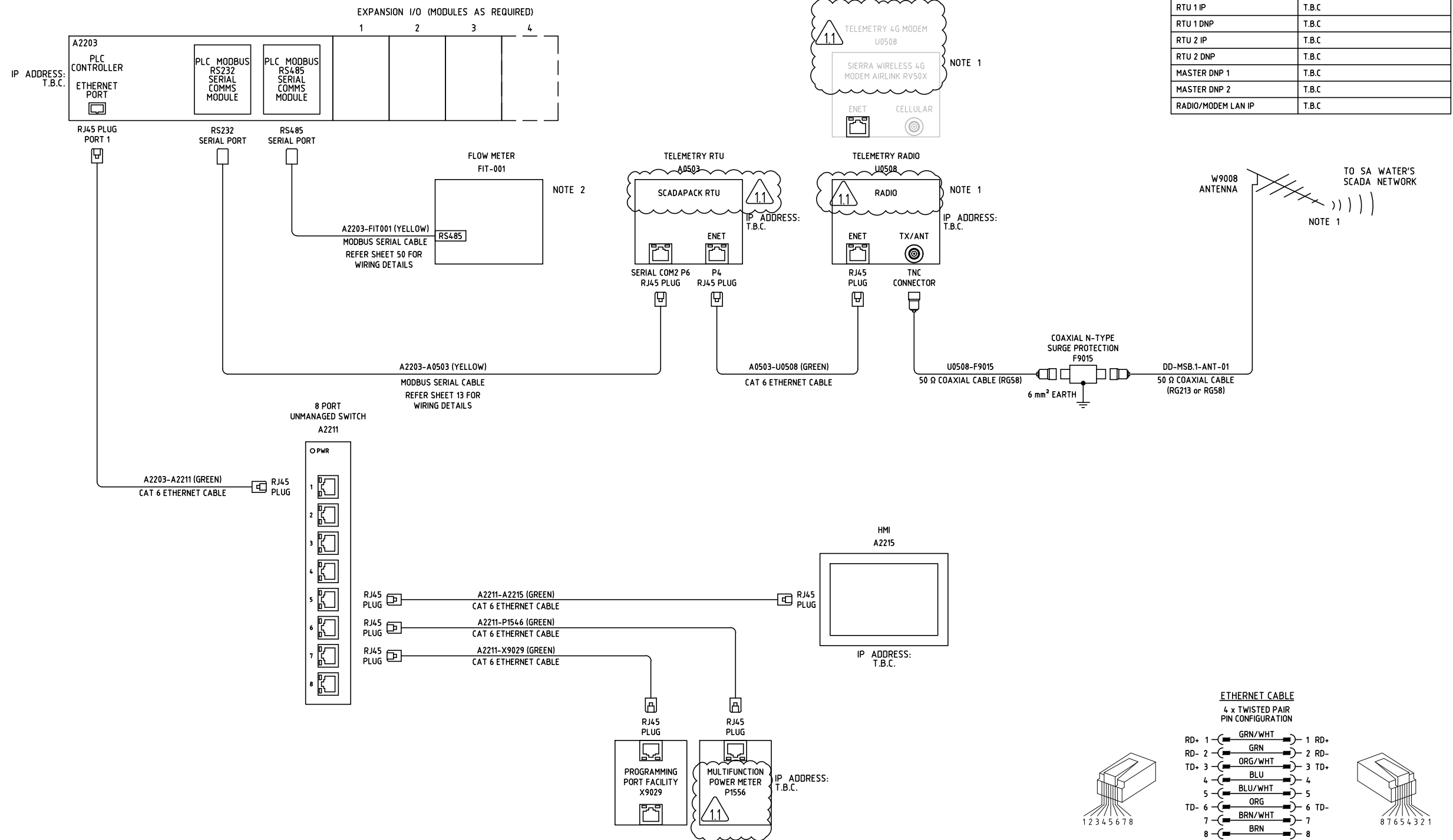
1. MATERIAL - 3mm MARINE GRADE ALUMINIUM (5052)
2. FINISH - ROUGH SURFACES TO BE FILED, GROUND SMOOTH, CLEANED, DEGREASED, ETCH PRIMED & OVEN BAKED POWDER COATED. THE COATING SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S DATA SHEET & SHALL INCLUDE ANY PRIMERS OR UNDERCOATS AS RECOMMENDED BY THE MANUFACTURER. INTERNAL REMOVABLE PANELS, BACKPLATES, BRACKETS & ESCUTCHEONS SHALL BE GLOSS WHITE IN COLOUR. PRIME COATING TO HAVE A DRY FILM THICKNESS NOT LESS THAN 50 MICRONS. POWDER COATING TO HAVE A DRY FILM THICKNESS NOT LESS THAN 60 MICRONS.
3. COLOUR - "RIVERGUM GREEN G62" OVEN BAKED POWDER COATED WITH "AG GHETTO CLEAR 910 81797" ANTI-GRAFFITI .

PROVISIONS FOR SUN SHIELDS SHALL BE MADE ON ALL SWITCHBOARDS BY USE OF A WELDED BLIND STANDOFF ON THE INSIDE OF THE BOARD. THIS WILL ALLOW THE SUN SHIELD TO BE FIXED WHEN NEEDED WITHOUT ALTERING THE IP RATING..



REVISION PANEL				DESIGN PANEL				 SWITCHBOARD 0 - 100A MAIN SWITCHBOARD SWITCHBOARD LAYOUT ELECTRICAL POWDER COATED ALUMINUM - REAR SUN SHIELD		A3 TOTAL SHEETS: 1.1 SHT SIZE PROJECT No: REVISION	
REV	DATE	DRN	DETAILS	APR	CURRENT REV 28/01/22	DESIGNED: 14/02/2018	AUTHORISED: 14/02/2018			This drawing is the property of the SOUTH AUSTRALIAN WATER CORPORATION and shall not be copied or modified in part or in whole without authorization.	
					AUTHORISED: JUSTIN HAMRA	SACHIN PANDEY	JUSTIN HAMRA	DRAWING NUMBER TYP-03-00001_78c			
1.1	28/01/22	WS	UPDATED WITH SA WATER REVIEW REQUIREMENTS	SS	SIGNATURE: 	TROY O'BRIEN	SIGNATURE: ORIGINAL SIGNED				
0.1	03/11/20	PAN	UPDATED TITLE BLOCK	SS		JONATHON NICHOLLS					
CURRENT REV CONTRACTOR:				CURRENT REV PROJECT:				CONTRACTOR:			



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**NOTES:**  
 1. TELEMETRY RTU & ANTENNA TYPE (RADIO OR NEXT G) IS PROJECT SPECIFIC.  
 2. REQUIREMENT FOR FLOWMETER IS PROJECT SPECIFIC.

REVISION PANEL				DESIGN PANEL				 SA Water Government of South Australia	SWITCHBOARD 0 - 100A MAIN SWITCHBOARD NETWORK ARCHITECTURE ELECTRICAL BLOCK DIAGRAM																			
REV	DATE	DRN	DETAILS	APR	CURRENT REV 28/01/22	DESIGNED: 14/02/2018	AUTHORISED: 14/02/2018		<table border="1" style="width: 100%;"> <tr><td>A3</td><td>TOTAL SHEETS:</td><td>1.1</td></tr> <tr><td>SHT SIZE</td><td>PROJECT No:</td><td>REVISION</td></tr> <tr><td colspan="3">MAXIMO ID:</td></tr> <tr><td colspan="3">SUPERSEDES: 5003-00001-90</td></tr> <tr><td colspan="3">DRAWING NUMBER</td></tr> <tr><td colspan="3" style="font-size: 1.2em;">TYP-03-00001_90</td></tr> </table>			A3	TOTAL SHEETS:	1.1	SHT SIZE	PROJECT No:	REVISION	MAXIMO ID:			SUPERSEDES: 5003-00001-90			DRAWING NUMBER			TYP-03-00001_90	
A3	TOTAL SHEETS:	1.1																										
SHT SIZE	PROJECT No:	REVISION																										
MAXIMO ID:																												
SUPERSEDES: 5003-00001-90																												
DRAWING NUMBER																												
TYP-03-00001_90																												
1.1	28/01/22	WS	UPDATED WITH SA WATER REVIEW REQUIREMENTS	SS	JUSTIN HAMRA	SACHIN PANDEY	JUSTIN HAMRA	This drawing is the property of the SOUTH AUSTRALIAN WATER CORPORATION and shall not be copied or modified in part or in whole without authorization.																				
0.1	03/11/20	PAN	UPDATED TITLE BLOCK & MINOR UPDATES	SS	<i>Justin Hamra</i>	TROY O'BRIEN	SIGNATURE:																					
CURRENT REV CONTRACTOR:				CURRENT REV PROJECT:				CONTRACTOR:																				

TABLE 1  
DEVICE TYPE

CODE	DEVICE TYPE	EXAMPLE
A	ASSEMBLIES, SUBASSEMBLIES	PLC, IO MODULES
B	TRANSDUCERS	
C	CAPACITORS	
D	BINARY ELEMENTS, DELAY DEVICES, STORAGE DEVICES	
E	MISCELLANEOUS	
F	PROTECTIVE DEVICES	FUSE, SURGE DIVERTER
G	GENERATORS, POWER SUPPLIES	
H	SIGNALLING DEVICES	
J	-	
K	RELAYS, CONTACTORS	
L	INDUCTORS, REACTORS	
M	MOTORS	
N	ANALOG ELEMENTS 	
P	MEASURING EQUIPMENT, TESTING EQUIPMENT	POWER METER
Q	SWITCHING DEVICES FOR POWER CIRCUITS	
R	RESISTORS	
S	SWITCHING DEVICES FOR CONTROL CIRCUITS, SELECTOR SWITCHES	
T	TRANSFORMERS, VOLTAGE REGULATORS (POWER)	
U	MODULATORS, CHANGERS 	RADIO, VSD
V	TUBES, SEMICONDUCTORS	
W	TRANSMISSION PATHS, WAVEGUIDES, ANTENNAS	
X	TERMINALS, PLUGS, SOCKETS	
Y	ELECTRICALLY OPERATED MECHANICAL DEVICES	
Z	NETWORKS, HYBRID TRANSFORMERS, FILTERS, EQUALIZERS, LIMITERS	SIGNAL SPLITTER TRANSIENT BARRIER

NOTE 1: MNEMONICS CAN BE FOUND IN TS 0300  
 NOTE 2: CABLE TYPES CAN BE FOUND IN TS 0300  
 NOTE 3: CONDUCTOR SIZING AND INSULATION RATING CAN BE FOUND IN TS 0300

TABLE 2  
DRAWING CONVENTION

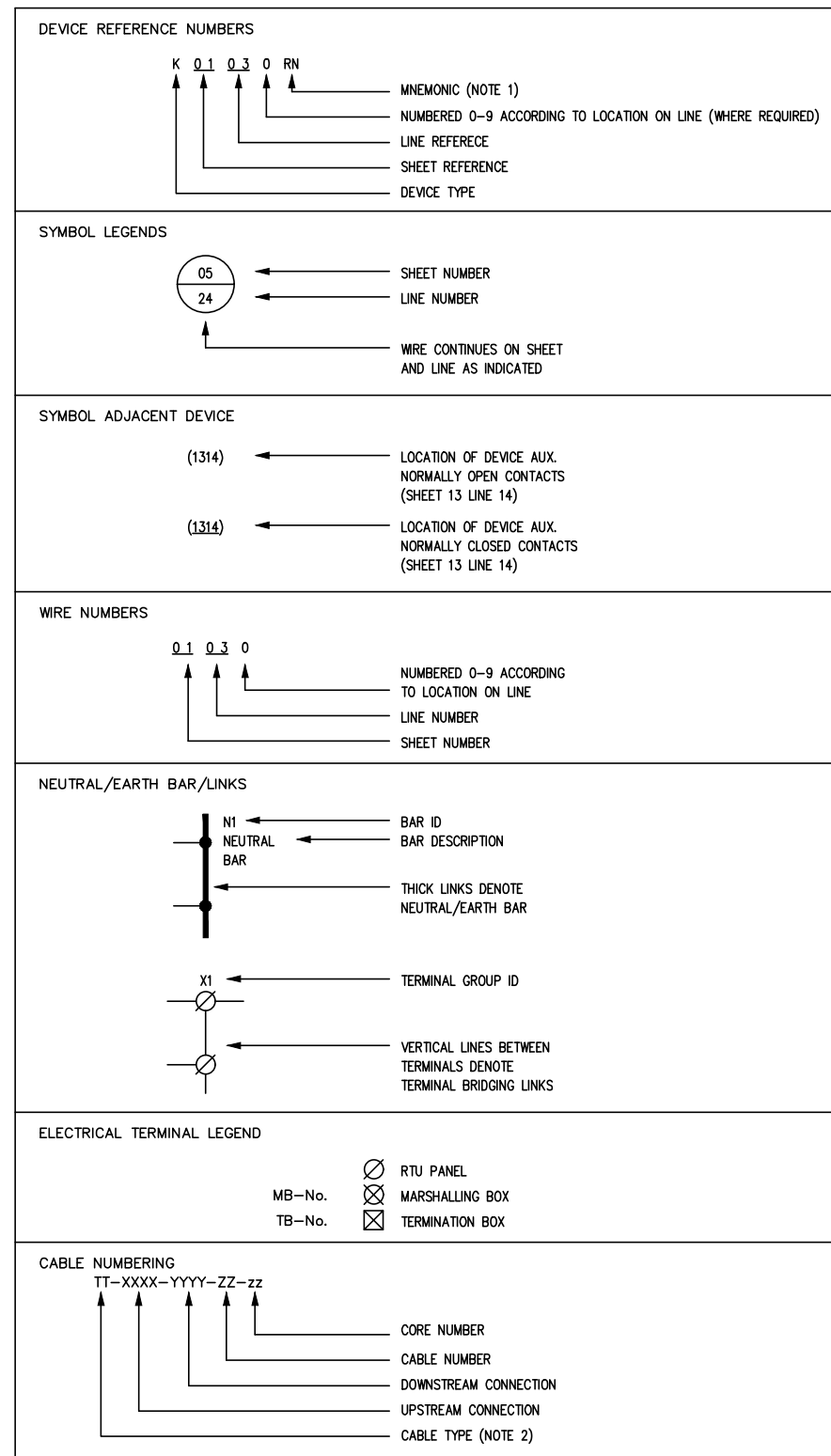





TABLE 3  
WIRING STANDARD

APPLICATION DESCRIPTION	COLOUR
400VAC L-L POWER	
L1 PHASE	RED
L2 PHASE	WHITE
L3 PHASE	BLUE
NEUTRAL	BLACK
EARTH	GRN/YEL
CURRENT TRANSFORMERS	PHASE COLOUR
230VAC POWER AND CONTROL	
ACTIVE	WHITE
NEUTRAL	BLACK
110VAC POWER AND CONTROL	
ACTIVE	WHITE
NEUTRAL	BLACK
24VAC CONTROL	
ACTIVE	BROWN
NEUTRAL (0VAC)	BLACK
24VDC CONTROL	
POSITIVE	GREY
NEGATIVE	PINK
12VDC CONTROL	
POSITIVE	GREY
NEGATIVE	PINK
ANALOG LOOPS 	
UNSCREENED	VIOLET
SCREENED	AS SUPPLIED
PLC/RTU SIGNAL WIRING	
24VAC	BROWN
24VDC	GREY
0VDC	PINK
PLC/RTU CRITICAL DIGITAL SIGNALS	
CRITICAL	ORANGE
DATA	
BUSINESS NETWORK	BLUE
PLANT CONTROL	GREEN
DEVICE LEVEL	RED
NON-ETHERNET	YELLOW

REVISION PANEL				DESIGN PANEL				SWITCHBOARD 0 - 100A MAIN SWITCHBOARD				A3 SHT SIZE		TOTAL SHEETS: PROJECT No:		1.1 REVISION	
REV	DATE	DRN	DETAILS	APR	CURRENT REV 28/01/22	DESIGNED: 14/02/2018	AUTHORISED: 14/02/2018	 This drawing is the property of the SOUTH AUSTRALIAN WATER CORPORATION and shall not be copied or modified in part or in whole without authorization.				MAXIMO ID:					
					AUTHORISED: JUSTIN HAMRA	SACHIN PANDEY	JUSTIN HAMRA					SUPERSEDES: 5003-00001-99					
					SIGNATURE: 	TROY O'BRIEN	SIGNATURE: ORIGINAL SIGNED					DRAWING NUMBER					
1.1	28/01/22	WS	UPDATED WITH SA WATER REVIEW REQUIREMENTS	SS		REVIEWED: 14/02/2018	JONATHON NICHOLLS					TYP-03-00001_99					
0.1	03/11/20	PAN	UPDATED TITLE BLOCK	SS				DRAWING CONVENTION AND WIRING STANDARD									
CURRENT REV CONTRACTOR:				CURRENT REV PROJECT:				CONTRACTOR:									