

**CONSTRUCTION NOTES:**

1. SWITCHBOARD TYPE FORM 2, TO AS3439.1 - 1993.
2. DEGREE OF PROTECTION IP65, TO AS1939.
3. CUBICLE MANUFACTURE FROM 3mm ALUMINIUM.
4. MANUFACTURE ESCUTCHEONS, GEAR TRAYS FROM 2mm MILD STEEL
5. INTERNAL DOORS - a. HINGES, LENLOK, CHROME PLATED, LIFT-OFF.  
b. OPENING 105 DEGREES.  
c. DOORS TO BE SECURED BY THUMB SCREWS  
THUMB SCREW TO BE SECURED BY 'NUTSERTS' IN CUBICLE BODY.
6. EXTERNAL DOORS -a. HINGES LENLOK, CHROME PLATED,  
LIFT-OFF, TOP HINGE 5mm  
b. TOP LOCK 100 NIGHTLATCH, ABLOY 201 CYLINDERS  
5AP100 KEYING SYSYTEM, M3 KEYS BY STEWARTS LOCKSMITHS  
c. BOTTOM LOCK 213 DEADBOLT, ABLOY 201 CYLINDERS  
5AP100 KEYING SYSYTEM, M3 KEYS BY STEWARTS LOCKSMITHS  
d. METERING COMPARTMENT KEYED POWER INDUSTRY LOCK PI.K523  
e. OPENING 135 DEGREES.  
f. SEALED WITH NEOPRENE STRIPS.  
g. STIFFEN WERE REQUIRED.
7. LOG BOOK/DRAWING HOLDER 300 X 300 X 60
8. GEAR TRAYS TO BE OF MAXIMUM WIDTH POSSIBLE

9. GLAND PLATES TO COVER FULL WIDTH AND DEPTH OF COMPARTMENT.  
AND TO BE MANUFACTURED FROM 3mm ALUMINIUM
10. GLAND PLATES SEALED WITH NEOPRENE STRIPS.
11. GEAR TRAYS TO BE OF MAXIMUM HEIGHT POSSIBLE
12. FIT ALL DOORS WITH STAINLESS STAY RODS TO SECURE IN THE OPEN POSITION.
13. FIT RECESSED HANDLES (100x40x20) TO OUTER DOORS
14. FINISH - a. INTERNAL DOORS, ESCUTCHEONS, GEAR TRAYS  
AND GLAND PLATES POWDER COAT - GLOSS WHITE.  
b. EXTERNAL - POWDER COAT, EUCALYPTUS GREEN TO AS2700 COLOUR G52
15. PLINTH 75 X 40 X 6mm (TOE OUT) HOT DIPPED GALVANISED  
AND INSULATED MEMBRANE FITTED FROM ALUMINIUM CUBICLE
16. FIX CABINET BASE TO FOUNDATION WITH M16 CHEMICAL ANCHORS.
17. 2 No VENTILATION LOUVRES. ONE AT BOTTOM OF ONE SIDE THE OTHER AT THE TOP OF OTHER SIDE.

**DOOR LABELS**

- L1 - ELECTRICITY METERS
- L2 - DISTRIBUTION & COMMON CONTROL
- L3 - DISTRIBUTION
- L4 - COMMON CONTROL
- L5 - MS1, Q1, Q2, Q3, Q4, Q5, Q6,

The original drawing was hand signed by the person whose name or initials appear printed and marked thus (e) in the signature blocks

		DESIGNED SEW		DRAWN SEW		 20 Corporate Drive Moorabbin 3189	WATER SUPPLY STANDARD FLOW METER CUBICLE (METERED SUPPLY) GENERAL ARRANGEMENT DIAGRAM		DO NOT SCALE		
		DESIGN CHECK SEW		CHECKED SEW					SCALE:		
0 ORIGINAL DRAWING TITLE BOX FILLED OUT		11/04/18		K.H.					DRAWING NUMBER		
REV.		REVISION		DATE		APP'D		E-FM-STD-001		0	
								NUMERAL		REV	

THE ORIGINAL DRAWING WAS HAND SIGNED BY THE PERSON WHOSE NAME  
OR INITIALS APPEAR PRINTED AND MARKED THUS (\*) IN THE SIGNATURE BLOCKS.

CO-ORDINATION CHECK	INITIALS	DATE	DRAWING NUMBER
			L
			NUMERAL
			REV

REV	ZONE	DESCRIPTION	DATE	APP'D
1		CHANGED SUPPLY TUBE AND FITTING TO 1/2" ADDED LABEL 21 06/22	07/22	S.B.
2		UPDATED PART NUMBERS	07/22	S.B.
3		GAUGE SNUBBERS ADDED	07/21	S.B.
4		PRESSURE GAUGE & PRESSURE SWITCH REVISED	07/21	M.L.
5		ISSUED FOR CONSTRUCTION	02/21	

DESIGNED	STUART BENNETT
DRAWN	
DESIGN CHECK	
DRAFT CHECK	
PROJECT MGR.	
DATE	06/22

GENERAL FILE No	
DATE	06/22

DESIGNED	STUART BENNETT
DRAWN	
DESIGN CHECK	
DRAFT CHECK	
PROJECT MGR.	
DATE	06/22

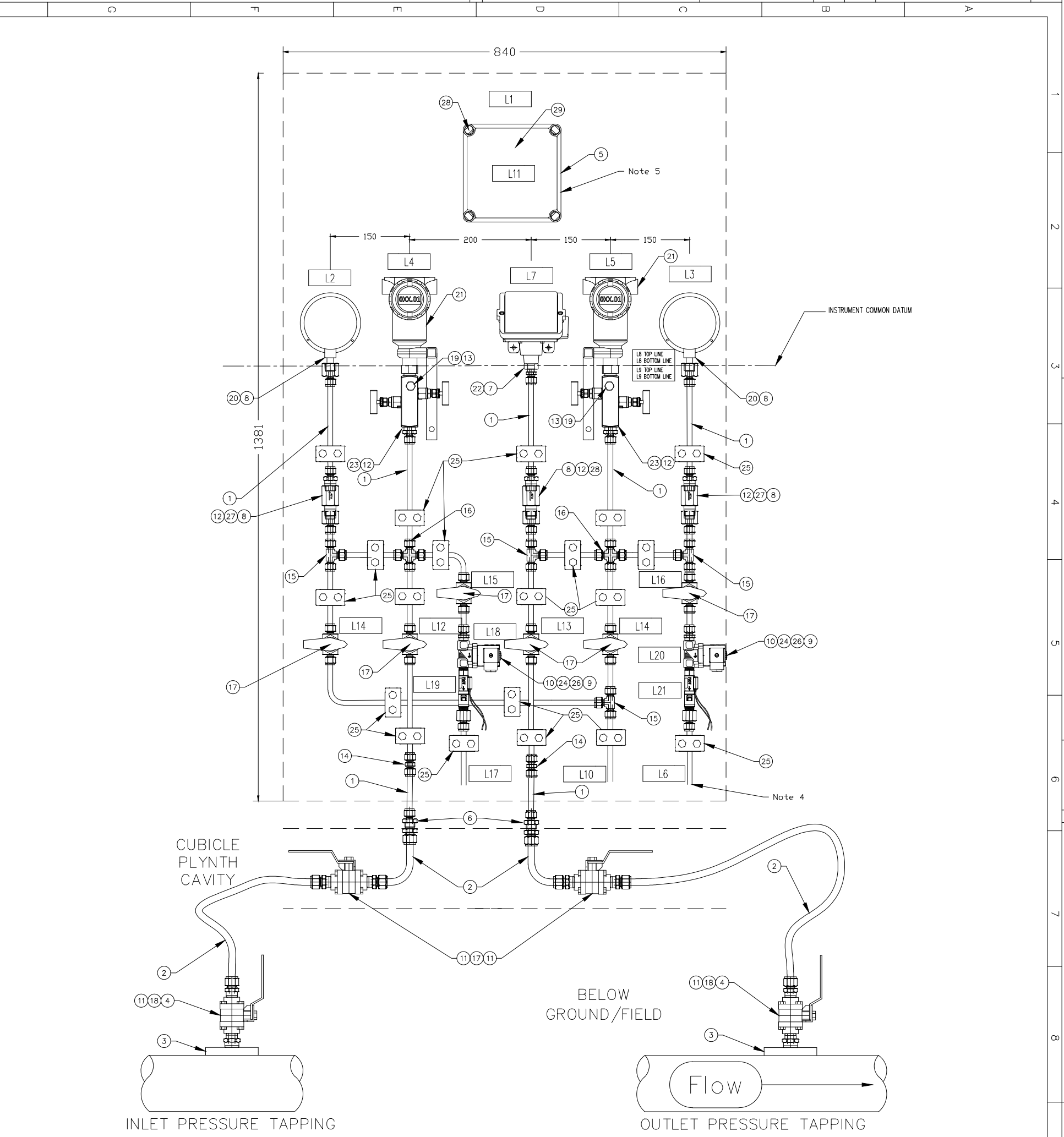
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DATE	06/22

GENERAL ARRANGEMENT	
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ITEM	NAME	DESCRIPTION	PART NUMBER	QTY
29	GEAR PLATE	GEAR TRAY FOR FIBOX EKHA	EKHVT	1
28	THUMB SCREWS	THUMB SCREWS FOR FIBOX LID	HS 10255	4
27	SNUBBER	STAINLESS STEEL 1/2" NPT GAUGE SNUBBER	SS-8-SA-EW	3
26	FLOW SWITCH	POLYPROPYLENE FLOW SWITCH 1.9 L/MIN, 3/8" M-NPT	P3-32	2
25	TUBE CLAMP	3/8" POLYPROPYLENE TUBE SUPPORT CLAMP	304-S1-PP-6T	20
24	SOLENOID	BURKETT 2/2 WAY SERVO COUPLED SOLENOID VALVE TYPE 6213 EV	221599	2
23	MANIFOLD	EMERSON MANIFOLD	P/N 0306RT22BA11	2
22	PRESSURE SWITCH	UNITED ELECTRICS J402 WITH MIN OF 2 CHANGEOVER SWITCHES ( RANGE TO SUIT )	J402	1
21	PRESSURE TRANSMITTER	EMERSON 3051 SERIES	3051TGXA2B21XXXXXXXXXX	2
20	PRESSURE GAUGE	WIKA INDUSTRIAL BOURDON TUBE 150mm ( RANGE IN MWG TO SUIT ) SS 1/2" NPT LOWR MOUNT, S/S SURFACE MOUNTING FLANGE 316L	232.50	2
19	PLUG	SS TUBE PLUG FOR 1/4" TUBE FITTING	SS-400-P	2
18	VALVE	SS 63 SERIES 3 PIECE BALL VALVE 1/2"	SS-63TF12	4
17	VALVE	SS 1 PIECE 40 SERIES BALL VALVE. 6.0Cv, 3/8" TUBE	SS-4456	6
16	UNION CROSS	SS TUBE, UNION CROSS, 3/8" TUBE	SS-600-4	2
15	UNION TEE	SS TUBE FITTING, UNION TEE 3/8" TUBE	SS-600-3	4
14	CONNECTOR	SS TUBE FITTING, FM CONNECTOR 3/8" TUBE X 3/8" TUBE	SS-600-6	2
13	CONNECTOR	SS TUBE/MALE CONN, 1/4" TUBE x 1/4" MALE NPT	SS-400-1-4	2
12	CONNECTOR	SS Male CONN. 3/8" TUBE X 1/2" Male NPT	SS-600-1-8	5
11	CONNECTOR	SS MALE CONNECTOR 1/2" M-NPT X 1/2" TUBE	SS-810-1-8	6
10	CONNECTOR	SS TUBE M-CONN. 3/8" TUBE TO 3/8" M-NPT	SS-600-1-6	2
9	CONNECTOR	SS TUBE FITTING, FM-CON, 3/8" TUBE X 3/8" FM-NPT	SS-600-7-6	2
8	CONNECTOR	SS TUBE FITTING M-CONN, 3/8" TUBE X 1/2" FM NPT	SS-600-7-8	5
7	CONNECTOR	SS TUBE FITTING, M-CON, 3/8" TUBE X 1/4" M-NPT	SS-600-1-4	1
6	CONNECTOR	SS TUBE FITTING, BULKHEAD RED UNION, 1/2" x 3/8" TUBE	SS-600-61-8	2
5	JUNCTION BOX	200 X 200mm IP67 PLASTIC JUNCTION BOX	EKHA 130 T	1
4	HEX NIPPLE	3/4" x 1/2" REDUCING STAINLESS STEEL HEX NIPPLE	SS-12-HRN-8	2
3	TAPPING	3/4" NPT TAPPING POINT		2
2	TUBING	1/2" OD NYLON TUBE PRESSURE RATING TO SUIT ( IN UG CONDUIT ) Inlet - Natural / Transparent Nylon Tube Outlet - Black Nylon Tube.	Blackwoods Part No's - Natural 04190709 - Black 05257460	TBA
1	TUBING	3/8" OD TUBE SS 0.9mm WALL		TBA

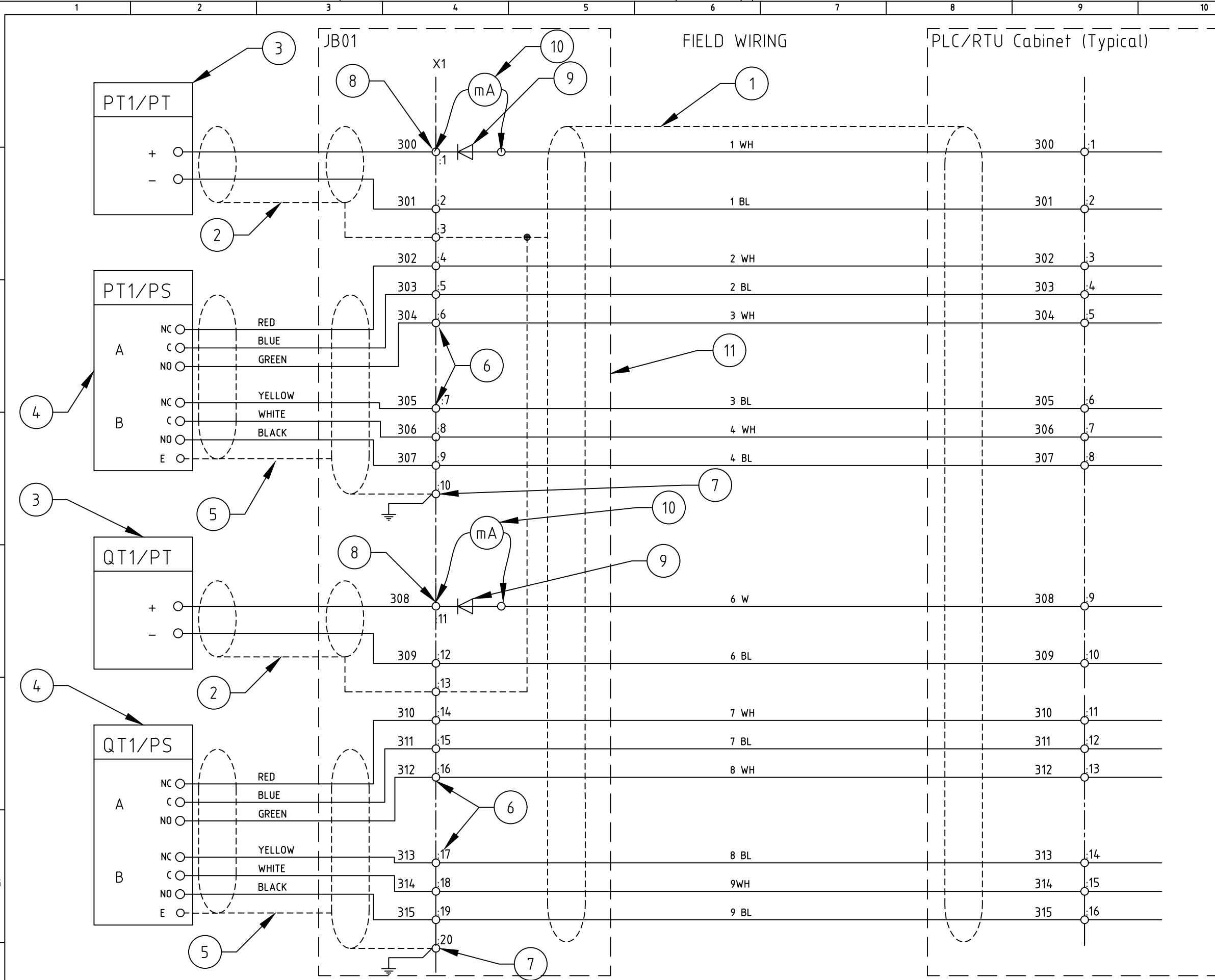
ITEM	DESCRIPTION
L1	SITE ID (REFER SPECIFICATION)
L2	INLET PRESSURE GAUGE
L3	OUTLET PRESSURE GAUGE
L4	PT1/PT CALIBRATION 0 - (XXX) MWG (SITE SPECIFIC)
L5	QT1/PT CALIBRATION 0 - (XXX) MWG (SITE SPECIFIC)
L6	OUTLET LINE FLUSH TO PRV PIT SUMP
L7	QT1/PS XXX MOR IN MWG (XXX - SITE SPECIFIC) XXX MOF IN MWG (XXX - SITE SPECIFIC)
L8	TRANSMITTER REF DATUM (SITE SPECIFIC) mAHD WATER MAIN (CENTRE LINE)
L9	(SITE SPECIFIC) mAHD
L10	DRAIN
L11	INSTRUMENT JUNCTION BOX JB XX (XX - SITE SPECIFIC)
L12	INLET SUPPLY ISOLATION VALVE
L13	OUTLET SUPPLY ISOLATION VALVE
L14	DRAIN ISOLATION VALVE
L15	AUTO FLUSH ISOLATION VALVE PRV INLET
L16	AUTO FLUSH ISOLATION VALVE PRV OUTLET
L17	INLET LINE FLUSH TO PRV PIT SUMP
L18	INLET LINE FLUSHING SOLENOID
L19	INLET LINE FLUSHING FLOW SWITCH
L20	OUTLET LINE FLUSHING SOLENOID
L21	OUTLET LINE FLUSHING FLOW SWITCH

REFERENCE DRAWINGS:  
 - E-B-STD-001 RTU CONNECTIONS AND SYSTEM DIAGRAM  
 - SEWL-STD-031 TELEMETRY MAST AND SWITCHBOARD MOUNTING DETAILS  
 - E-B-STD-002 PRV CONTROL CUBICLE GENERAL ARRANGEMENT

NOTES:  
 1. ALL TUBING USED ON PANEL TO BE SS 0.9mm WALL  
 2. ALL SS TO BE FIXED TO PANEL USING STAUFF CLAMPS OR EQUIVALENT  
 3. ALL INSTRUMENTS TO BE MOUNTED AT COMMON DATUM  
 4. ALL DRAIN LINES TO DISCHARGE DIRECTLY TO SITE DRAINAGE  
 5. PROVIDE DISCONNECT TERMINALS WITHIN JUNCTION BOX

DRAWING NUMBER  
E-PRV-STD-006  
REV  
A

DATE  
INITIALS  
COORDINATION CHECK



- Notes:
- 10 Pair Overall Screened Instrument Cable - Electra Cables Part No. EAS7310P or equivalent.
  - Single Pair Overall Screened Instrument Cable - Electra Cables Part No. EAS7301P or equivalent.
  - Siemens 7MF4033 with display.
  - United Electrics J402 with two change over switches.
  - 6 Core Overall Screened Data Cable - Electra Cables Pat No. EAS7206 or Equivalent.
- Terminals to Be Screw Connect Type - Schneider Linergy LIne or Equivalent.
- NSYTRV22 Pass Through Terminal
  - NSYTRV22PE Earth Terminal
  - NSYTRV22TB Removeable Carrier Terminal
  - NSYTRSSV2 Diode Carrier
  - Calibration Test points
  - Instrument Wet Panel JBox
  - Pairs 5 and 10 to be terminated and marked as spares (Not shown on drawing)
- Reference Drawings:  
E-WP-STD-00X - Water Supply Wet Panel General Arrangement - Pump Stations.

THE ORIGINAL DRAWING WAS HAND SIGNED BY THE PERSON WHOSE NAME OR INITIALS APPEAR PRINTED AND MARKED THIS WAY IN THE SIGNATURE BLOCKS.

REV	ZONE	DESCRIPTION	DATE	APP'D
A		ISSUED FOR CONSTRUCTION	06/19	S.B.

DESIGNED STUART BENNETT	DRAWN STUART BENNETT	PROJECT MGR.
DESIGN CHECK	DRAFT CHECK	GENERAL FILE No
APPROVED	DATE	



**WATER SUPPLY STANDARDS**  
WET PANEL INSTRUMENTATION  
TYPICAL WIRING SCHEMATIC - PRESSURE REDUCING STATIONS

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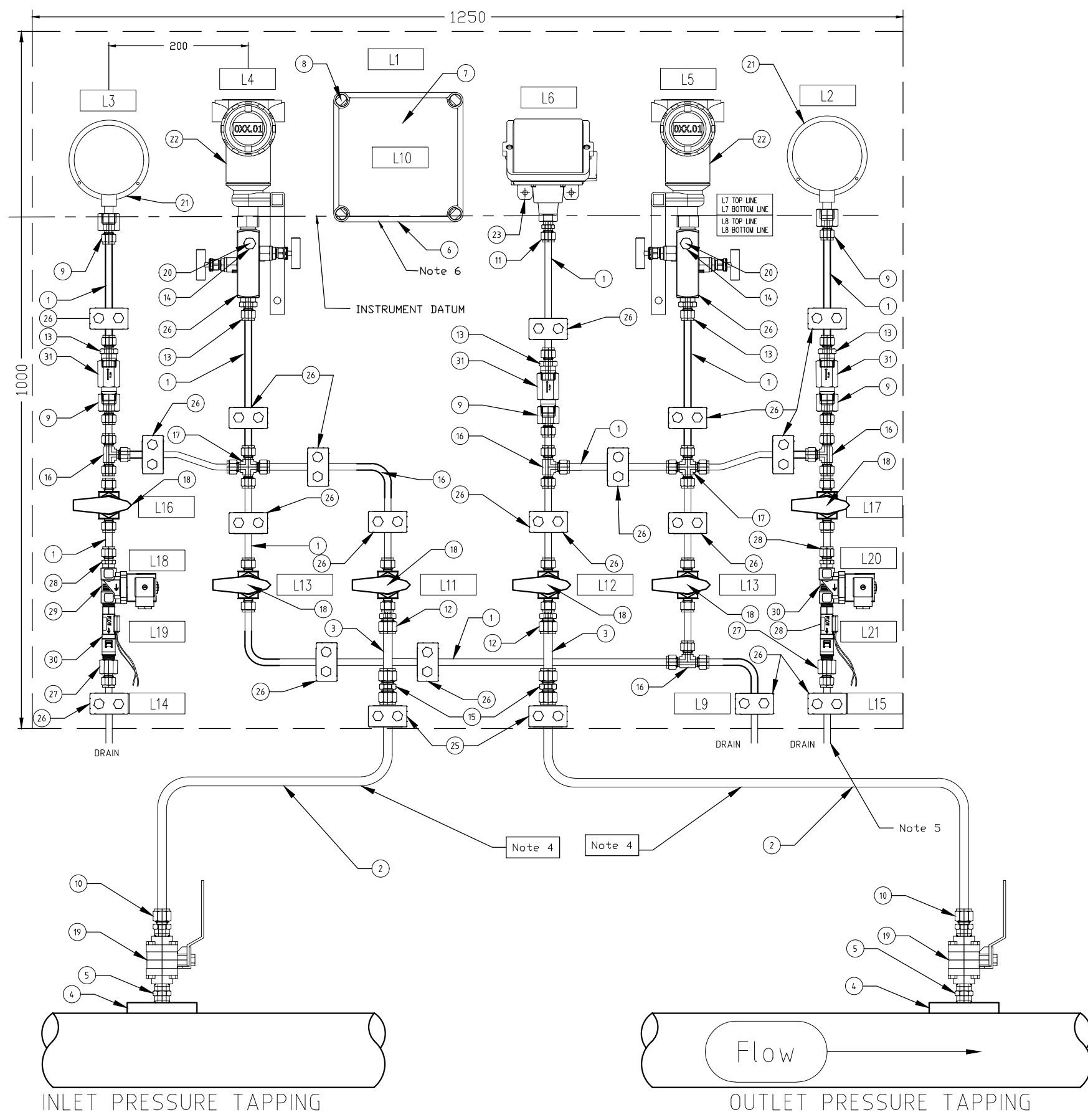
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INITIALS

CO-ORDINATION CHECK



WATER SUPPLY STANDARD PARTS LIST - PRESSURE REDUCING STATION (IN BUILDING)				
ITEM	NAME	DESCRIPTION	PART NUMBER	QTY
31	SNUBBER	STAINLESS STEEL 1/2" NPT GAUGE SNUBBER	SS-8-SA-EW	3
30	FLOW SWITCH	POLYPROPYLENE FLOW SWITCH 1.9 L/MIN, 3/8" M-NPT	P3-32	2
29	SOLENOID	BURKETT 2/2 WAY SERVO COUPLED SOLENOID VALVE TYPE 6213 EV	221599	2
28	CONNECTOR	SS TUBE FITTING, M-CON, 3/8" TUBE x 3/8" M-NPT	SS-600-1-6	2
27	CONNECTOR	SS TUBE FITTING, FM-CON, 3/8" TUBE x 3/8" FM-NPT	SS-600-7-6	2
26	TUBE CLAMP	3/8" POLYPROPYLENE TUBE SUPPORT CLAMP	304-S1-PP-6T	19
25	TUBE CLAMP	1/2" POLYPROPYLENE TUBE SUPPORT CLAMP		2
24	MANIFOLD	EMERSON MANIFOLD	P/N 0306RT22BA11	2
23	PRESSURE SWITCH	UNITED ELECTRICS J402 WITH MINIMUM OF 2 CHANGEVER SWITCHES (RANGE TO SUIT - MAY REQUIRE AN ALTERNATIVE FITTING TO ITEM 10)	J402	1
22	PRESSURE TRANSMITTER	EMERSON	3051TGXA2B21XXXXXXXXXX	2
21	PRESSURE GAUGE	WIKA INDUSTRIAL BOURDON TUBE 160mm (RANGE IN MWG TO SUIT) SS 1/2" NPT LOWR MOUNT, S/S SURFACE MOUNTING FLANGE 316L	232.50	2
20	PLUG	SS TUBE PLUG FOR 1/4" TUBE FITTING	SS-400-P	2
19	VALVE	STAINLESS STEEL 3-PIECE 63 SERIES BALL VALVE	SS-63TF8	2
18	VALVE	SS 1 PIECE 40 SERIES BALL VALVE. 6.0cv, 3/8" TUBE	SS-4456	6
17	UNION CROSS	SS TUBE, UNION CROSS, 3/8" TUBE	SS-600-4	2
16	UNION TEE	SS TUBE FITTING, UNION TEE 3/8" TUBE	SS-600-3	4
15	CONNECTOR	SS TUBE FITTING, CONNECTOR 1/2" x 1/2" TUBE	SS-810-6	2
14	CONNECTOR	SS TUBE FITTING, M-CON, 1/4" TUBE x 1/4" M-NPT	SS-400-1-4	2
13	CONNECTOR	SS TUBE FITTING, M-CON, 3/8" TUBE x 1/2" M-NPT	SS-600-1-8	5
12	CONNECTOR	SS 1/2" OD TUBE TO 3/8" PORT CONNECTOR	SS-810-R-6	2
11	CONNECTOR	SS TUBE FITTING, M-CON, 3/8" TUBE x 1/4" M-NPT	SS-600-1-4	1
10	CONNECTOR	SS TUBE FITTING M-CONN, 1/2" TUBE x 1/2" M-NPT	SS-810-1-8	2
9	CONNECTOR	SS TUBE FITTING M-CONN, 3/8" TUBE x 1/2" FM NPT	SS-600-7-8	5
8	THUMB SCREWS	THUMB SCREWS FOR FIBOX LID	HS 10255	4
7	GEAR PLATE	GEAR TRAY FOR FIBOX EKHA	EKHVT	1
6	JUNCTION BOX	200 X 200mm IP67 PLASTIC JUNCTION BOX	EKHA 130 T	1
5	HEX NIPPLE	SS 1/2" HEX NIPPLE.	SS-8-HN	2
4	TAPPING	1/2" NPT TAPPING POINT		2
3	TUBING	INLET - Clear / Natural / Transparent Nylon Tube OUTLET - Black Nylon Tube.	Blackwoods Part No's: - Natural 04190709 - Black 05257460	TBA
2	TUBING	1/2" OD TUBE SS 0.9mm WALL		TBA
1	TUBING	3/8" OD TUBE SS 0.9mm WALL		TBA


- REFERENCE DRAWINGS:
- E-B-STD-001 RTU CONNECTIONS AND SYSTEM DIAGRAM
  - SEWL-STD-031 TELEMETRY MAST AND SWITCHBOARD MOUNTING DETAILS
  - E-B-STD-005 WATER SUPPLY WET PANEL WIRING SCHEMATIC

- NOTES:
1. ALL TUBING USED ON PANEL TO BE SS 0.9mm WALL
  2. ALL SS TO BE FIXED TO PANEL USING STAUFF CLAMPS OR EQUIVALENT
  3. ALL INSTRUMENTS TO BE MOUNTED AT COMMON DATUM
  4. ITEM 2 TO BE SUBSTITUTED WITH ITEM 3 FOR UNDERGROUND TAPPING POINTS
  5. ALL DRAINS TO DISCHARGE DIRECTLY TO SITE DRAINAGE
  6. PROVIDE DISCONNECT TERMINALS WITHIN JUNCTION BOX TO FACILITATE EASY TESTING

WATER SUPPLY STANDARD LABELS - PRS IN BUILDING	
ITEM	DESCRIPTION
L1	SITE ID (REFER SPECIFICATION)
L2	OUTLET PRESSURE GAUGE
L3	INLET PRESSURE GAUGE
L4	PT1/PT CALIBRATION 0 - (XXX) MWG (SITE SPECIFIC)
L5	QT1/PT CALIBRATION 0 - (XXX) MWG (SITE SPECIFIC)
L6	QT1/PS XXX MOR IN MWG (XXX - SITE SPECIFIC) XXX MOF IN MWG (XXX - SITE SPECIFIC)
L7	TRANSMITTER REF DATUM (SITE SPECIFIC) mAHD
L8	WATER MAIN CENTRE LINE (SITE SPECIFIC) mAHD
L9	DRAIN
L10	INSTRUMENT JUNCTION BOX JB XX (XX - SITE SPECIFIC)
L11	INLET PRESSURE ISOLATION
L12	OUTLET PRESSURE ISOLATION
L13	DRAIN ISOLATION
L14	INLET LINE FLUSH TO DRAIN
L15	OUTLET LINE FLUSH TO DRAIN
L16	INLET LINE FLUSH ISOLATION
L17	SUCTION LINE FLUSH ISOLATION
L18	INLET LINE FLUSH SOLENOID
L19	INLET LINE FLUSH FLOW SWITCH
L20	OUTLET LINE FLUSH SOLENOID
L21	OUTLET LINE FLUSH FLOW SWITCH

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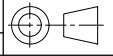
REV	ZONE	DESCRIPTION	DATE	APP'D
A		STANDARD DRAWING	08/22	J.S.

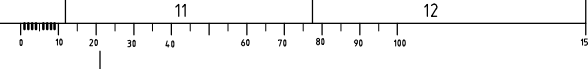

**PID Controls Pty Ltd**  
 Instrumentation & Electrical  
 ABN: 97601 132 316 ACN: 60101320316  
 P.O. Box 3196  
 Morningside, 3931  
 P: 0457 580 477  
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DESIGNED <b>STUART BENNETT</b>	DRAWN <b>STUART BENNETT</b>	PROJECT MGR.
DESIGN CHECK	DRAFT CHECK	GENERAL FILE No
APPROVED		DATE



**WATER SUPPLY STANDARDS**  
**WET PANEL INSTRUMENTATION**  
**PRESSURE REDUCING STATION LAYOUT (IN BUILDING)**

DO NOT SCALE		
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DESIGNED	STUART BENNETT
DESIGN CHECK	STUART BENNETT
DRAWN	STUART BENNETT
DRAFT CHECK	
APPROVED	JAYSON STREET
DATE	7/09/2020

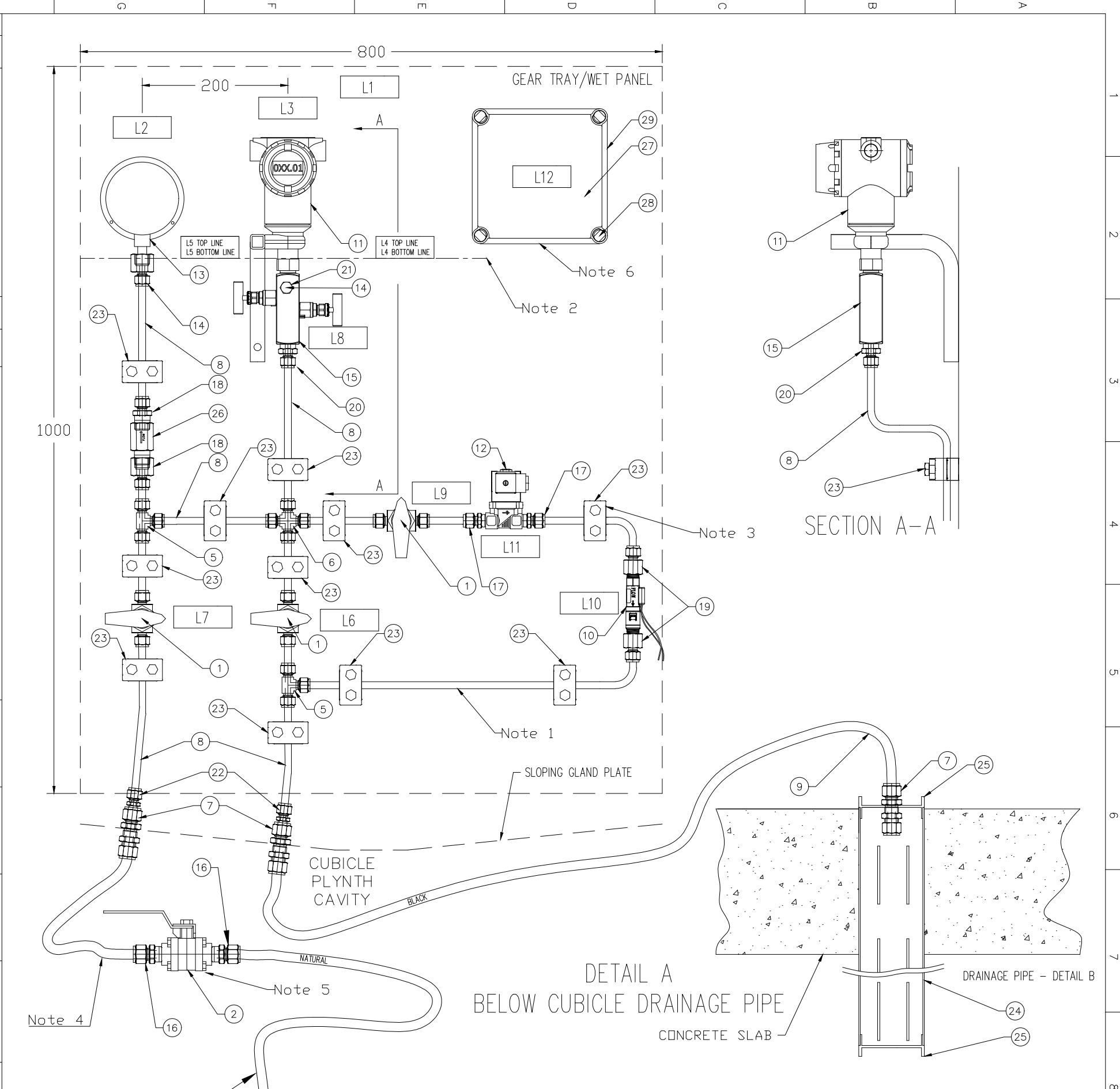
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WATER SUPPLY STANDARDS
WET PANEL INSTRUMENTATION GENERAL ARRANGEMENT

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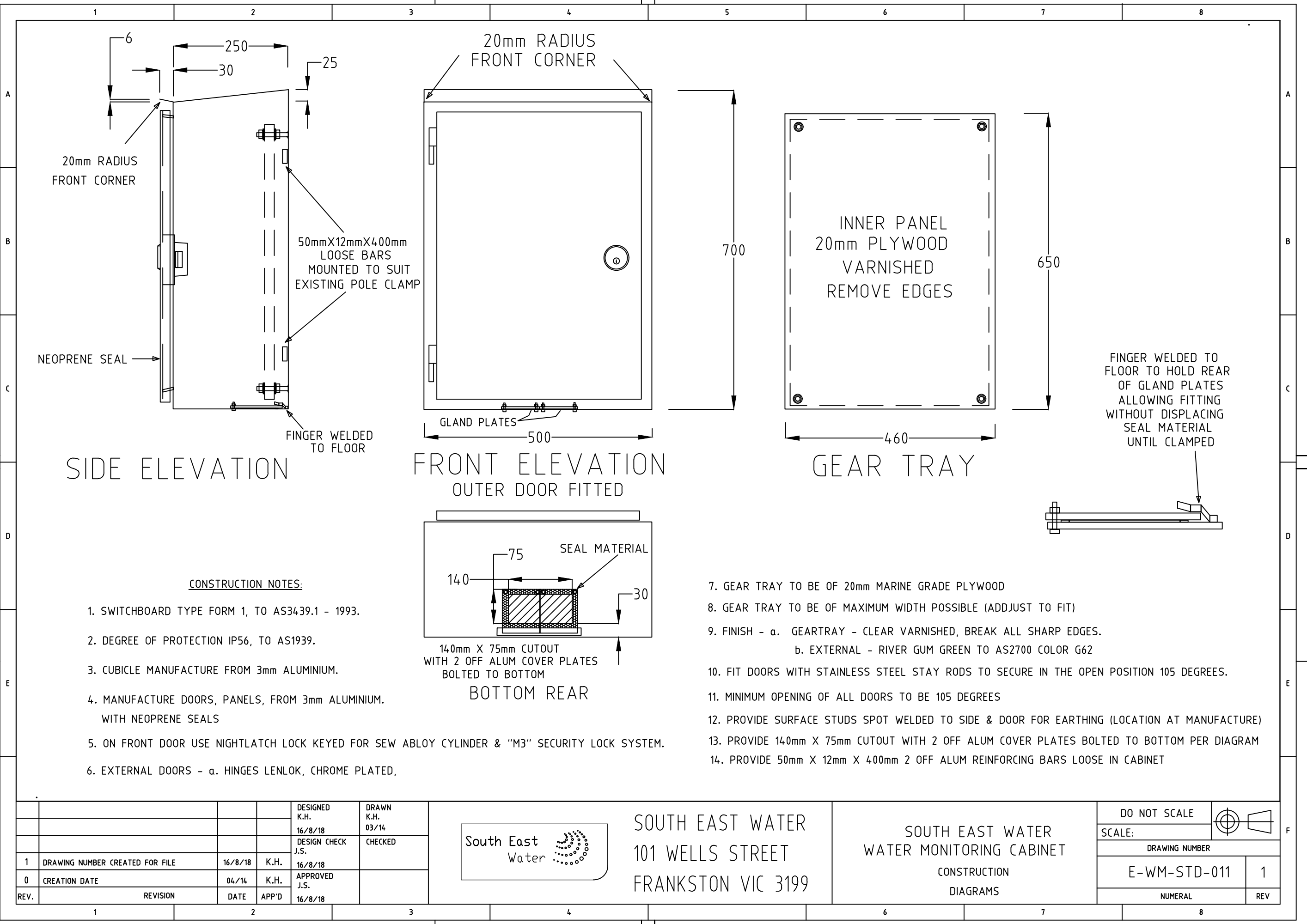
- NOTES**
- ALL TUBING ON PANEL TO BE SS 0.9mm WALL
  - ALL INSTRUMENTS TO BE MOUNTED AT A COMMON DATUM
  - ALL TUBING TO MOUNTED WITH SWAGELOCK TUBE MOUNTING BLOCKS OR EQUIVALENT
  - THIS ITEM MUST USE THE NYLON TUBE AS LISTED UNDER ITEM 9 WHEN THE TUBING MATERIAL BETWEEN VALVES LABELLED AS ITEM 2 IS METALLIC
  - THIS VALVE TO BE POSITIONED BELOW GLAND PLATE IN PLYNTH CAVITY
  - PROVIDE DISCONNECT TERMINALS WITHIN JUNCTION BOX TO FACILITATE EASY TESTING
- REFERENCE DRAWINGS**
- E-B-STD-001 RTU CONNECTIONS AND SYSTEM DIAGRAM
  - SEW-STD-031 TELEMETRY MAST AND SWITCHBOARD MOUNTING DETAILS

Label	Description
L1	SITE ID - REFER SPECIFICATION
L2	WATER MAIN PRESSURE
L3	PT1/PT CALIBRATION 0 - (X) MWG
L4	TRANSMITTER REF DATUM (SITE SPECIFIC) mAHD
L5	WATER MAIN (CENTRE LINE) (SITE SPECIFIC) mAHD
L6	DRAIN
L7	MAIN WATER ISOLATOR
L8	VENT ISOLATE
L9	SOLENOID ISOLATION VALVE
L10	FLUSH FLOW SWITCH
L11	FLUSH SOLENOID
L12	INSTRUMENT JUNCTION BOX JB XX (XX - SITE SPECIFIC)

No	Item	Description	Part Number	Qty
29	JUNCTION BOX	190 X 190 x 130mm FIBOX Plastic J Box IP67, TRANSPARENT LID	EKHA 130 T	1
28	THUMB SCREWS	THUMB SCREWS FOR FIBOX LID	HS 10255	4
27	GEAR PLATE	GEAR TRAY FOR FIBOX EKHA	EKHVT	1
26	SNUBBER	STAINLESS STEEL 1/2" NPT GAUGE SNUBBER	SS-8-SA-EW	1
25	PIPE CAP	90MM PVC PUSH IN SW CAP		2
24	SLOTTED PIPE	90MM X 600MM PVC SW SLOTTED AGI PIPE WITH FABRIC FILTER SOCK		1
23	TUBE CLAMP	3/8" POLYPROPYLENE TUBE SUPPORT CLAMP	304-S1-PP-6T	11
22	CONNECTOR	SS CONNECTOR 3/8" TUBE TO 1/2" PORT CONNECTOR	SS-600-R-8	2
21	CONNECTOR	SS CONNECTOR 1/4" NPT M TO 1/4" TUBE	SS-400-1-4	1
20	CONNECTOR	SS TUBE FITTING, M-CON, 3/8" TUBE X 1/2" M-NPT	SS-600-1-8	2
19	CONNECTOR	SS TUBE FITTING, FM-CON, 3/8" TUBE X 3/8" FM-NPT	SS-600-7-6	2
18	CONNECTOR	SS TUBE FITTING, FM CON 3/8" TUBE X 1/2" FM NPT	SS-600-7-8	2
17	CONNECTOR	SS TUBE FITTING, M-CON, 3/8" TUBE x 3/8" M-NPT	SS-600-1-6	2
16	CONNECTOR	SS MALE CONNECTOR 1/2" M-NPT X 1/2" TUBE	SS-810-1-8	3
15	MANIFOLD	ROSEMOUNT R306 Manifold (BLOCK & BLEED)	0306RT22BA11	1
14	PLUG	1/4" TUBE PLUG	SS-400-P	1
13	PRESSURE GAUGE	WIKA BOURDON TUBE 100mm (RANGE IN MWG TO SUIT) SS 1/2" NPT LOWR MOUNT, S/S SURFACE MOUNTING FLANGE 316L	232.50	1
12	SOLENOID	BURKETT 2/2 WAY SERVO COUPLED SOLENOID VALVE Type 6213 EV	221599	1
11	PRESSURE TRANSMITTER	EMERSON - ROSEMOUNT PRESSURE TRANSMITTER	3051TGXA2B21XXXXXXX	1
10	FLOW SWITCH	POLYPROPYLENE FLOW SWITCH 1.9 L/MIN, 3/8" M-NPT	P3-32	1
9	TUBING	FOR BELOW GROUND TAPPING POINTS - 1/2" OD NYLON TUBING PA12 Shore 65D as per DIN 74324. INLET - NATURAL/TRANSPARENT NYLON TUBE, OUTLET - BLACK NYLON TUBE	Blackwoods Part No's: - Natural 04190709 - Black 05257460	TBA
		FOR ABOVE GROUND TAPPING POINTS - 1/2" OD TUBE SS 0.9mm WALL		TBA
8	TUBING	3/8" OD SS TUBING 0.9mm WALL		TBA
7	UNION	SS TUBE FITTING, 1/2" BULK HEAD UNION	SS-810-61	3
6	UNION CROSS	TUBE FITTING, 3/8" UNION CROSS	SS-600-4	1
5	UNION TEE	SS TUBE FITTING, UNION TEE, 3/8" TUBE	SS-600-3	2
4	HEX NIPPLE	3/4" X 1/2" MNPT SS HEX NIPPLE	SS-12-HRN-8	1
3	TAPPING	3/4" NPT TAPPING POINT		1
2	VALVE	SS 63 SERIES 3 PIECE BALL VALVE 1/2" NPT	SS-63TF8	2
1	VALVE	SS 1 PIECE 40 SERIES BALL VALVE, 6.0 Cv, 3/8" TUBE	SS-4456	3

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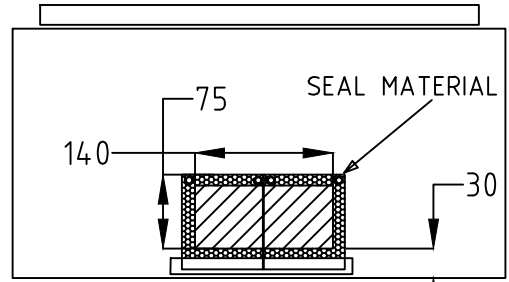
The original drawing was hand signed by the person whose name or initials appear printed and marked thus (s) in the signature blocks



SIDE ELEVATION

FRONT ELEVATION  
OUTER DOOR FITTED

GEAR TRAY



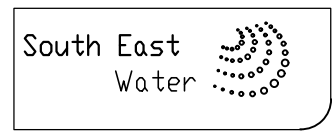
BOTTOM REAR

CONSTRUCTION NOTES:

1. SWITCHBOARD TYPE FORM 1, TO AS3439.1 - 1993.
2. DEGREE OF PROTECTION IP56, TO AS1939.
3. CUBICLE MANUFACTURE FROM 3mm ALUMINIUM.
4. MANUFACTURE DOORS, PANELS, FROM 3mm ALUMINIUM. WITH NEOPRENE SEALS
5. ON FRONT DOOR USE NIGHTLATCH LOCK KEYED FOR SEW ABLOY CYLINDER & "M3" SECURITY LOCK SYSTEM.
6. EXTERNAL DOORS - a. HINGES LENLOK, CHROME PLATED,

7. GEAR TRAY TO BE OF 20mm MARINE GRADE PLYWOOD
8. GEAR TRAY TO BE OF MAXIMUM WIDTH POSSIBLE (ADJUST TO FIT)
9. FINISH - a. GEARTRAY - CLEAR VARNISHED, BREAK ALL SHARP EDGES. b. EXTERNAL - RIVER GUM GREEN TO AS2700 COLOR G62
10. FIT DOORS WITH STAINLESS STEEL STAY RODS TO SECURE IN THE OPEN POSITION 105 DEGREES.
11. MINIMUM OPENING OF ALL DOORS TO BE 105 DEGREES
12. PROVIDE SURFACE STUDS SPOT WELDED TO SIDE & DOOR FOR EARTHING (LOCATION AT MANUFACTURE)
13. PROVIDE 140mm X 75mm CUTOUT WITH 2 OFF ALUM COVER PLATES BOLTED TO BOTTOM PER DIAGRAM
14. PROVIDE 50mm X 12mm X 400mm 2 OFF ALUM REINFORCING BARS LOOSE IN CABINET

				DESIGNED K.H. 16/8/18	DRAWN K.H. 03/14
				DESIGN CHECK J.S.	CHECKED
1	DRAWING NUMBER CREATED FOR FILE	16/8/18	K.H.	16/8/18	
0	CREATION DATE	04/14	K.H.	APPROVED J.S.	
REV.	REVISION	DATE	APP'D	16/8/18	



SOUTH EAST WATER  
101 WELLS STREET  
FRANKSTON VIC 3199

SOUTH EAST WATER  
WATER MONITORING CABINET  
CONSTRUCTION  
DIAGRAMS

DO NOT SCALE		
SCALE:		
DRAWING NUMBER		
E-WM-STD-011		1
NUMERAL		REV

THE ORIGINAL DRAWING WAS HAND SIGNED BY THE PERSON WHOSE NAME OR INITIALS APPEAR PRINTED AND MARKED THUS (\*) IN THE SIGNATURE BLOCKS.

REV	ZONE	DESCRIPTION	DATE	APP'D
A		ISSUED FOR CONSTRUCTION	08/21	SB
B		UPDATED PART NUMBERS	04/22	SB
C		INCLUDED NYLON ISOLATION LINKS, UPDATED PART NUMBERS	07/22	SB

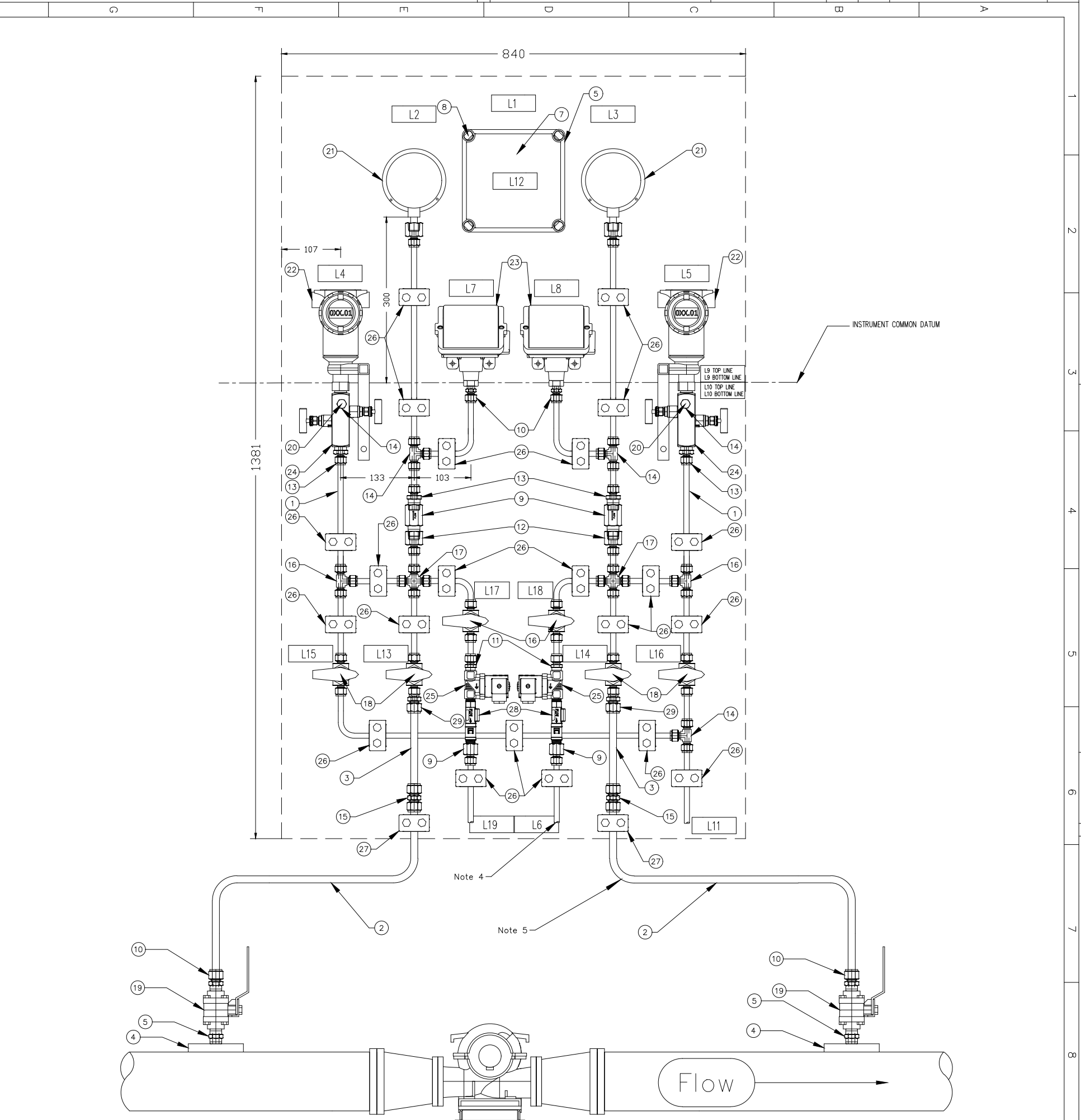
DESIGNED	STUART BENNETT
DRAWN	JAYSON STREET
PROJECT MGR.	
GENERAL FILE NO.	
DATE	08/21

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 Mornington, 3831  
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SUCTION PRESSURE TAPPING

DELIVERY PRESSURE TAPPING

ITEM	NAME	DESCRIPTION	PART NUMBER	QTY
29	REDUCER	SS REDUCER, 1/2" TUBE X 3/8" PORT CONNECTOR	SS-810-R-6	2
28	FLOW SWITCH	POLYPROPYLENE FLOW SWITCH 1.9 L/MIN, 3/8" M-NPT	P3-32	2
27	TUBE CLAMP	1/2" POLYPROPYLENE TUBE SUPPORT CLAMP	304-S1-PP-8T	2
26	TUBE CLAMP	3/8" POLYPROPYLENE TUBE SUPPORT CLAMP	304-S1-PP-6T	22
25	SOLENOID	BURKETT 2/2 WAY SERVO COUPLED SOLENOID VALVE TYPE 6213 EV	221599	2
24	MANIFOLD	EMERSON MANIFOLD	P/N 0306RT2BA11	2
23	PRESSURE SWITCH	UNITED ELECTRICS J402 WITH MINIMUM OF 2 CHANGEOVER SWITCHES (RANGE TO SUIT - MAY REQUIRE AN ALTERNATIVE FITTING TO ITEM 13)	J402	2
22	PRESSURE TRANSMITTER	EMERSON 3051 SERIES	3051TG2A2B21BB4D4M5	2
21	PRESSURE GAUGE	WIKA INDUSTRIAL BOURDON TUBE 100mm (RANGE IN MWG TO SUIT) SS 1/2" NPT LOWR MOUNT, S/S SURFACE MOUNTING FLANGE 316L	232.50	2
20	PLUG	SS TUBE PLUG FOR 1/4" TUBE FITTING	SS-400-P	2
19	VALVE	SS 63 SERIES 3 PIECE BALL VALVE	SS-63TF8	4
18	VALVE	SS 1 PIECE 40 SERIES BALL VALVE. 6.0Cv, 3/8" TUBE	SS-4456	6
17	UNION CROSS	SS TUBE, UNION CROSS, 3/8" TUBE	SS-600-4	2
16	UNION TEE	SS TUBE FITTING, UNION TEE 3/8" TUBE	SS-600-3	5
15	CONNECTOR	SS TUBE FITTING, 1/2" X 1/2" TUBE	SS-810-6	2
14	CONNECTOR	SS TUBE/MALE CONN, 1/4" TUBE X 1/4" M-NPT	SS-400-1-4	2
13	CONNECTOR	SS Male CONN. 3/8" TUBE X 1/2" M-NPT	SS-600-1-8	4
12	CONNECTOR	SS Male FM-CONN. 3/8" TUBE X 1/2" FM-NPT	SS-600-7-8	2
11	CONNECTOR	SS TUBE FITTING, M-CON, 3/8" TUBE X 3/8" M-NPT	SS-600-1-6	2
10	CONNECTOR	SS TUBE FITTING FM-CON, 1/2" TUBE X 1/2" FM-NPT	SS-810-1-8	2
9	SNUBBER	STAINLESS STEEL 1/2" NPT GAUGE SNUBBER	SS-8-SA-EW	2
8	THUMB SCREWS	THUMB SCREWS FOR FIBOX LID	HS 10255	4
7	GEAR PLATE	GEAR TRAY FOR FIBOX EKHA	EKHVT	1
6	JUNCTION BOX	190 X 190 X 130mm IP67 PLASTIC JUNCTION BOX	EKHA 130 T	1
5	HEX NIPPLE	1/2" STAINLESS STEEL HEX NIPPLE	SS-8-HN	2
4	TAPPING	1/2" NPT TAPPING POINT		2
3	TUBING	1/2" OD NYLON TUBE PRESSURE RATING TO SUIT Suction - Natural (Clear) Nylon Tube Delivery - Black Nylon Tube	Blackwoods Part No's - Natural 04190709 - Black 05257460	TBA
2	TUBING	1/2" OD TUBE SS 0.9mm WALL		TBA
1	TUBING	3/8" OD TUBE SS 0.9mm WALL		TBA

ITEM	DESCRIPTION
L1	SITE ID (REFER SPECIFICATION)
L2	SUCTION PRESSURE GAUGE
L3	DELIVERY PRESSURE GAUGE
L4	PT1/PT CALIBRATION 0 - (XXX) MWG (SITE SPECIFIC)
L5	QT1/PT CALIBRATION 0 - (XXX) MWG (SITE SPECIFIC)
L6	DELIVERY LINE FLUSH TO DRAIN/SUMP
L7	PT1/PS XXX MOR IN MWG (XXX - SITE SPECIFIC) XXX MOF IN MWG (XXX - SITE SPECIFIC)
L8	QT1/PS XXX MOR IN MWG (XXX - SITE SPECIFIC) XXX MOF IN MWG (XXX - SITE SPECIFIC)
L9	TRANSMITTER REFERENCE DATUM (SITE SPECIFIC) mAHD
L10	PUMP CENTRE LINE REFERENCE DATUM (SITE SPECIFIC) mAHD
L11	MAIN DRAIN LINE
L12	INSTRUMENT JUNCTION BOX JB XX (XX - SITE SPECIFIC)
L13	SUCTION PRESSURE ISOLATION VALVE
L14	DELIVERY PRESSURE ISOLATION VALVE
L15	SUCTION DRAIN ISOLATION VALVE
L16	DELIVERY DRAIN ISOLATION VALVE
L17	AUTO FLUSH ISOLATION VALVE SUCTION
L18	AUTO FLUSH ISOLATION VALVE DELIVERY
L19	SUCTION LINE FLUSH TO DRAIN/SUMP

REFERENCE DRAWINGS:  
 - E-B-STD-001 RTU CONNECTIONS AND SYSTEM DIAGRAM  
 - SEWL-STD-031 TELEMETRY MAST AND SWITCHBOARD MOUNTING DETAILS  
 - E-B-STD-002 PRV CONTROL CUBICLE GENERAL ARRANGEMENT

NOTES:  
 1. ALL TUBING USED ON PANEL TO BE SS 0.9mm WALL  
 2. ALL SS TO BE FIXED TO PANEL USING STAUFF CLAMPS OR EQUIVALENT  
 3. ALL INSTRUMENTS TO BE MOUNTED AT COMMON DATUM  
 4. ALL DRAIN LINES TO DISCHARGE DIRECTLY TO SITE DRAINAGE SYSTEM  
 5. FOR UNDERGROUND TAPPINGS ITEM 2 TO BE REPLACED WITH ITEM 3 WITH APPROPRIATE SUPPORTS

WATER PUMP STATION  
 CABINET WET PANEL LAYOUT (NARROW)  
 GENERAL ARRANGEMENT

DO NOT SCALE  
 SCALE: NTS  
 DRAWING NUMBER: E-WPS-STD-001  
 SHEET OF: C

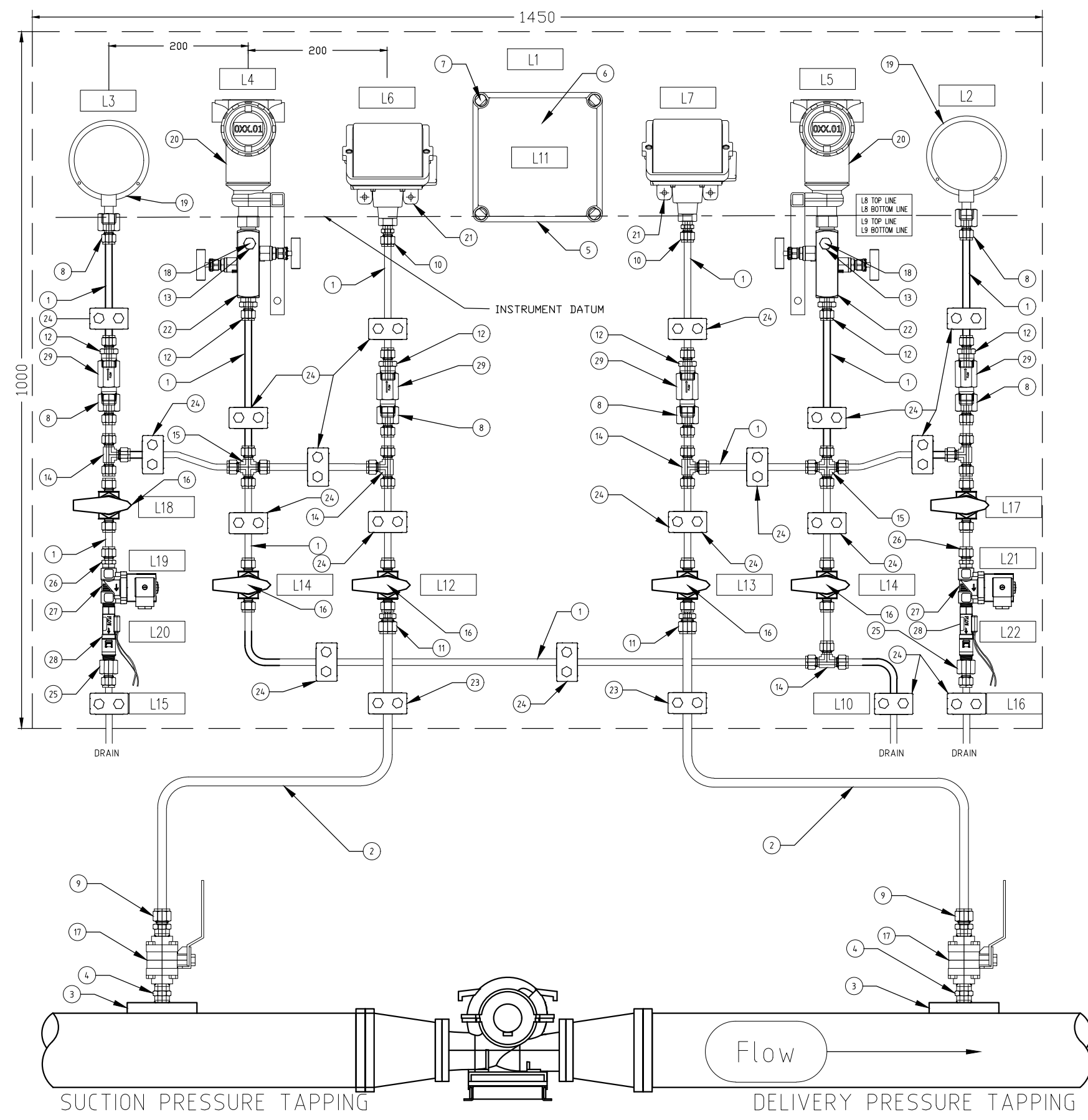
DRAWING NUMBER  
E-WP-STD-005

REV

DATE

INITIALS

CO-OPERATION CHECK



WATER SUPPLY STANDARD PARTS LIST - PUMP STATION WET PANEL				
ITEM	NAME	DESCRIPTION	PART NUMBER	QTY
29	SNUBBER	STAINLESS STEEL 1/2" NPT GAUGE SNUBBER	SS-8-SA-EW	4
28	FLOW SWITCH	POLYPROPYLENE FLOW SWITCH 0.95 L/MIN, 3/8" M-NPT	P3-31	2
27	SOLENOID	BURKETT 2/2 WAY SERVO COUPLED SOLENOID VALVE TYPE 67213	221598	2
26	CONNECTOR	SS TUBE M-CONN 3/8" TUBE TO 3/8" M-NPT	SS-600-1-6	2
25	CONNECTOR	SS TUBE FITTING, FM-CON, 3/8" TUBE X 3/8" FM-NPT	SS-600-7-6	2
24	TUBE CLAMP	3/8" POLYPROPYLENE TUBE SUPPORT CLAMP	304-S1-PP-6T	19
23	TUBE CLAMP	1/2" POLYPROPYLENE TUBE SUPPORT CLAMP		2
22	MANIFOLD	EMERSON MANIFOLD	P/N 0306RT22BA11	2
21	PRESSURE SWITCH	UNITED ELECTRICS J402 WITH MINIMUM OF 2 CHANGEVER SWITCHES ( RANGE TO SUIT )	J402	2
20	PRESSURE TRANSMITTER	EMERSON	3051TGXA2B21XXXXXXXXXX	2
19	PRESSURE GAUGE	WIKA INDUSTRIAL BOURDON TUBE 100mm (RANGE IN MWG TO SUIT) SS 1/2" NPT LOWR MOUNT, S/S SURFACE MOUNTING FLANGE 316L		2
18	PLUG	SS TUBE PLUG FOR 1/4" TUBE FITTING	SS-400-P	2
17	VALVE	STAINLESS STEEL 3-PIECE 63 SERIES BALL VALVE	SS-63TF8	2
16	VALVE	SS 1 PIECE 40 SERIES BALL VALVE. 6.0CV, 3/8" TUBE	SS-4456	4
15	UNION CROSS	SS TUBE, UNION CROSS, 3/8" TUBE	SS-600-4	2
14	UNION TEE	SS TUBE FITTING, UNION TEE 3/8" TUBE	SS-600-3	5
13	CONNECTOR	SS TUBE/MALE CONN, 1/4" TUBE x 1/4" MALE NPT	SS-400-1-4	2
12	CONNECTOR	SS Male CONN. 3/8" TUBE X 1/2" Male NPT	SS-600-1-8	6
11	CONNECTOR	SS 1/2" OD TUBE TO 3/8" PORT CONNECTOR	SS-810-R-6	2
10	CONNECTOR	SS TUBE M-CONN. 3/8" TUBE TO 1/4" M-NPT	SS-600-1-4	2
9	CONNECTOR	SS TUBE FITTING M-CONN, 1/2" TUBE X 1/2" M-NPT	SS-810-1-8	2
8	CONNECTOR	SS TUBE FITTING M-CONN, 3/8" TUBE X 1/2" FM NPT	SS-600-7-8	6
7	THUMB SCREWS	THUMB SCREWS FOR FIBOX LID	HS 10255	4
6	GEAR PLATE	GEAR TRAY FOR FIBOX EKHA	EKHVT	1
5	JUNCTION BOX	200 X 200mm IP67 PLASTIC JUNCTION BOX		1
4	HEX NIPPLE	SS 1/2" HEX NIPPLE.	SS-8-HN	2
3	TAPPING	1/2" NPT TAPPING POINT		2
2	TUBING	1/2" OD TUBE SS 0.9mm WALL		TBA
1	TUBING	3/8" OD TUBE SS 0.9mm WALL		TBA

REFERENCE DRAWINGS:  
 - E-B-STD-001 RTU CONNECTIONS AND SYSTEM DIAGRAM  
 - SEWL-STD-031 TELEMETRY MAST AND SWITCHBOARD MOUNTING DETAILS  
 - E-B-STD-005 WATER SUPPLY WET PANEL WIRING SCHEMATIC

NOTES:  
 - ALL TUBING USED ON PANEL TO BE SS 0.9mm WALL  
 - ALL SS TO BE FIXED TO PANEL USING STAUFF CLAMPS OR EQUIVALENT  
 - ALL INSTRUMENTS TO BE MOUNTED AT COMMON DATUM

WATER SUPPLY STANDARD LABELS - PUMP STATION WET PANEL	
ITEM	DESCRIPTION
L1	SITE ID (REFER SPECIFICATION)
L2	DELIVERY PRESSURE GAUGE
L3	SUCTION PRESSURE GAUGE
L4	QT1/PT CALIBRATION 0 - (XXX) MWG (SITE SPECIFIC)
L5	PT1/PT CALIBRATION 0 - (XXX) MWG (SITE SPECIFIC)
-	QT1/PS XXX MOR IN MWG (XXX - SITE SPECIFIC)
-	XXX MOF IN MWG (XXX - SITE SPECIFIC)
-	PT1/PS XXX MOR IN MWG (XXX - SITE SPECIFIC)
-	XXX MOF IN MWG (XXX - SITE SPECIFIC)
-	TRANSMITTER REF
-	AHD LEVEL XXX.X METERS (XXX.X - SITE SPECIFIC)
-	AHD LEVELS
-	OF PUMP C/LINE XXX.X METERS (XXX.X - SITE SPECIFIC)
L10	DRAIN
L11	INSTRUMENT JUNCTION BOX JB XX (XX - SITE SPECIFIC)
L12	SUCTION PRESSURE ISOLATION
L13	DELIVERY PRESSURE ISOLATION
L14	DRAIN ISOLATION
-	SUCTION LINE FLUSH
-	TO DRAIN
-	DELIVERY LINE FLUSH
-	TO DRAIN
L17	DELIVERY LINE FLUSH ISOLATION
L18	SUCTION LINE FLUSH ISOLATION
L19	SUCTION LINE FLUSH SOLENOID
L20	SUCTION LINE FLUSH FLOW SWITCH
L21	DELIVERY LINE FLUSH SOLENOID

REV	ZONE	DESCRIPTION	DATE	APP'D
E		PRESSURE GAUGE & PRESSURE SWITCH REVISED	07/21	M.L.
D		FLUSHING SOLENOIDS ADDED	03/21	J.S.
C		REDRAWN USING ACTUAL FITTINGS	09/20	S.B.
B		ALTERED TO SS FITTINGS / ROSEMOUNT TRANS	08/20	S.B.
F		SNUBBERS ADDED	09/21	J.S.

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 E: stuart@pidcontrols.com.au

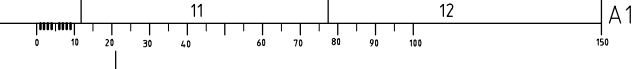
DESIGNED	DRAWN	PROJECT MGR.
STUART BENNETT	STUART BENNETT	
DESIGN CHECK	DRAFT CHECK	GENERAL FILE No
APPROVED	DATE	



WATER SUPPLY STANDARDS  
 WET PANEL INSTRUMENTATION  
 GENERAL ARRANGEMENT - PUMP STATIONS

DO NOT SCALE	
SCALE: NTS	
DRAWING NUMBER	
E-WP-STD-005	
SHEET	REV
1	F

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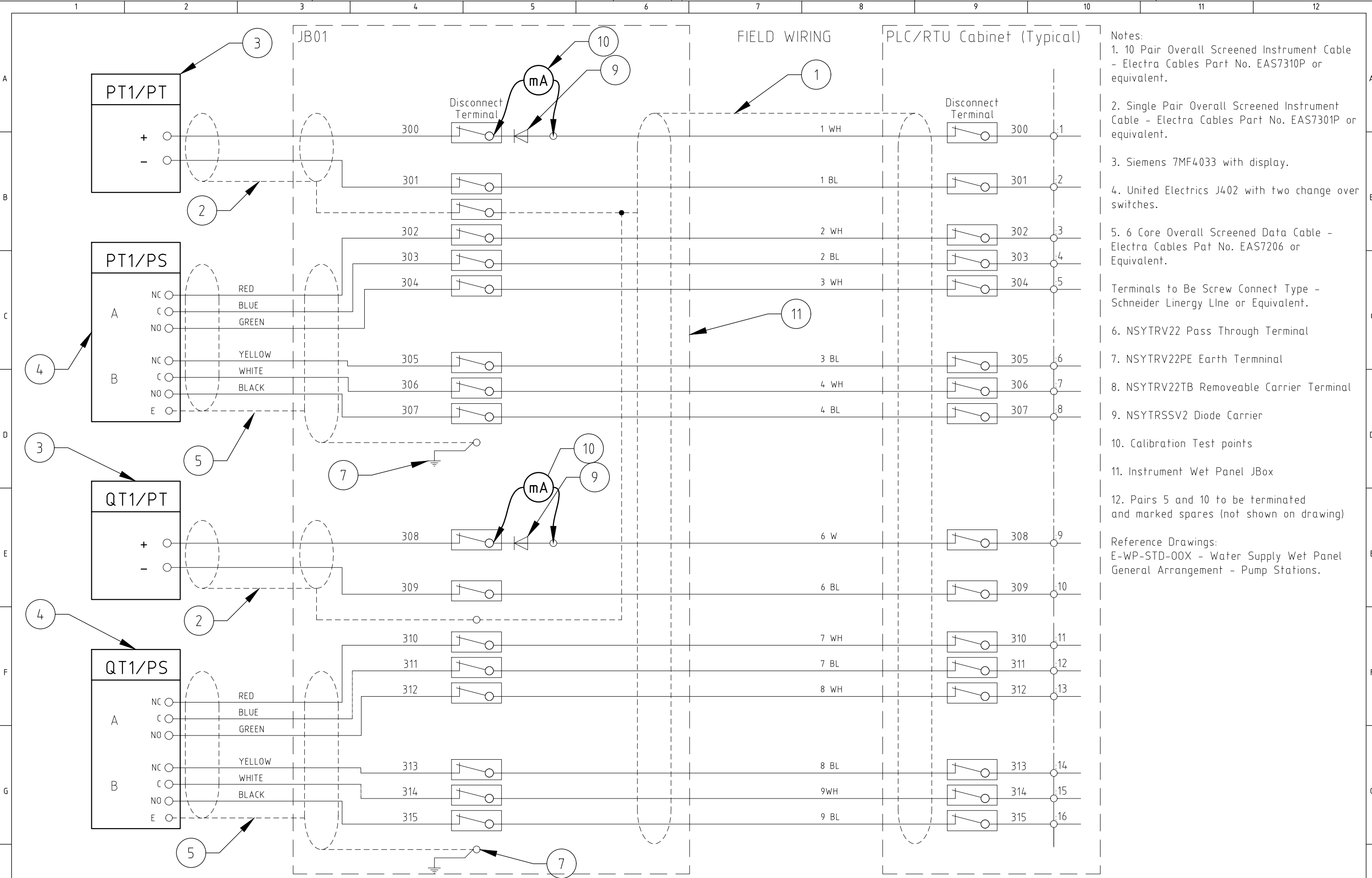




DRAWING NUMBER  
**E-WP-STD-006**  
 REV

DATE  
 INITIALS  
 CO-ORDINATION CHECK

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- Notes:
- 10 Pair Overall Screened Instrument Cable - Electra Cables Part No. EAS7310P or equivalent.
  - Single Pair Overall Screened Instrument Cable - Electra Cables Part No. EAS7301P or equivalent.
  - Siemens 7MF4033 with display.
  - United Electrics J402 with two change over switches.
  - 6 Core Overall Screened Data Cable - Electra Cables Pat No. EAS7206 or Equivalent.
- Terminals to Be Screw Connect Type - Schneider Linergy LIne or Equivalent.
- NSYTRV22 Pass Through Terminal
  - NSYTRV22PE Earth Terminal
  - NSYTRV22TB Removeable Carrier Terminal
  - NSYTRSSV2 Diode Carrier
  - Calibration Test points
  - Instrument Wet Panel JBox
12. Pairs 5 and 10 to be terminated and marked spares (not shown on drawing)
- Reference Drawings:  
 E-WP-STD-00X - Water Supply Wet Panel General Arrangement - Pump Stations.

REV	ZONE	DESCRIPTION	DATE	APP'D
B		DISCONNECT TERMINALS ADDED	20.07.22	M.L.
A		ISSUED FOR CONSTRUCTION	06/19	S.B.

DESIGNED STUART BENNETT	DRAWN STUART BENNETT	PROJECT MGR.
DESIGN CHECK	DRAFT CHECK	GENERAL FILE No
APPROVED	DATE	

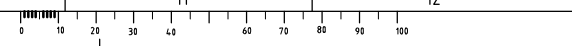


WATER SUPPLY STANDARDS

WET PANEL INSTRUMENTATION

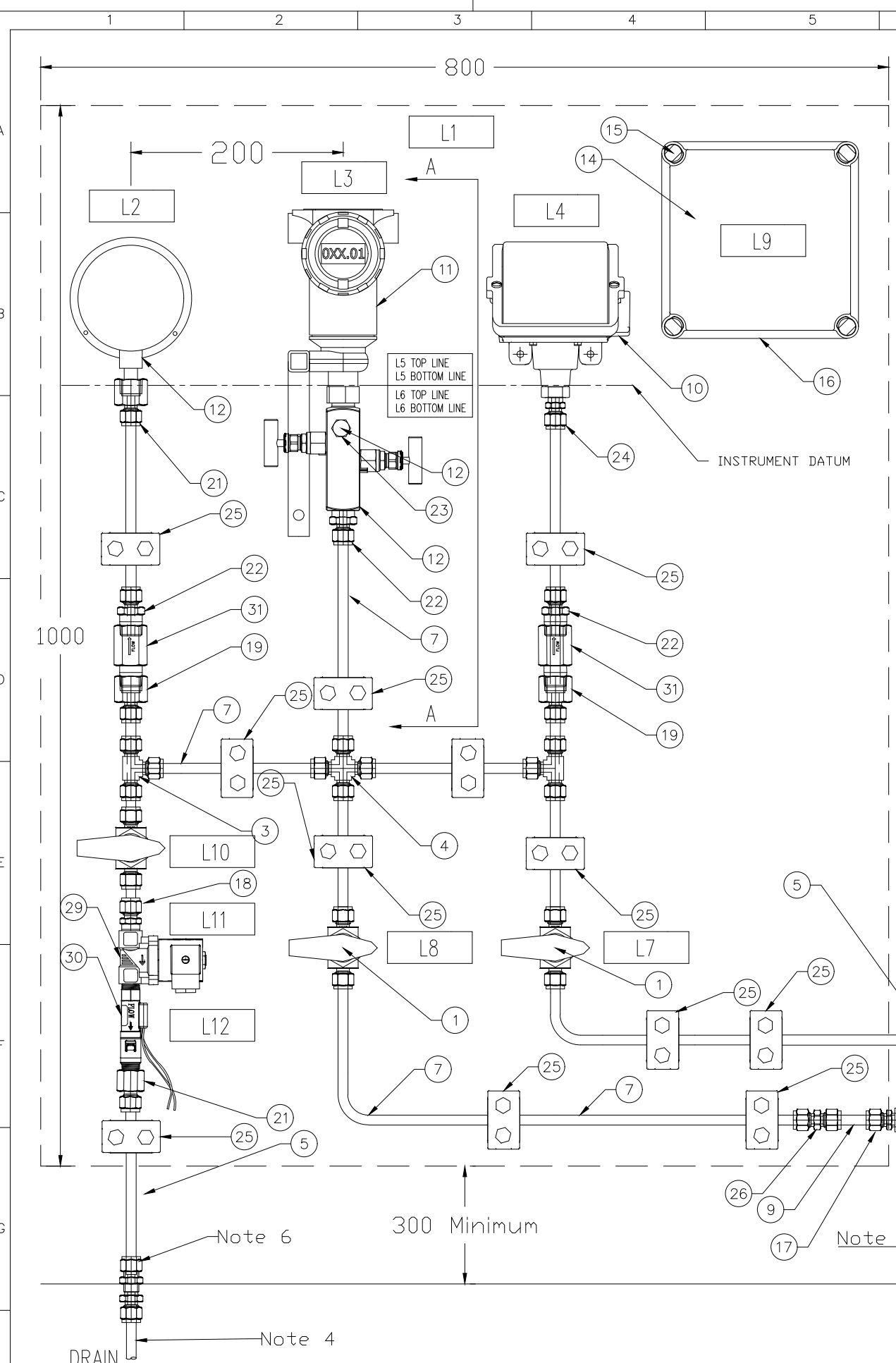
TYPICAL WIRING SCHEMATIC - PUMP STATIONS

DO NOT SCALE		
SCALE:	NTS	
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E-WP-STD-006		B
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1	12	



DRAWING NUMBER  
E-WT-STD-005 M  
REV

DATE  
INITIALS  
CO-ORDINATION CHECK

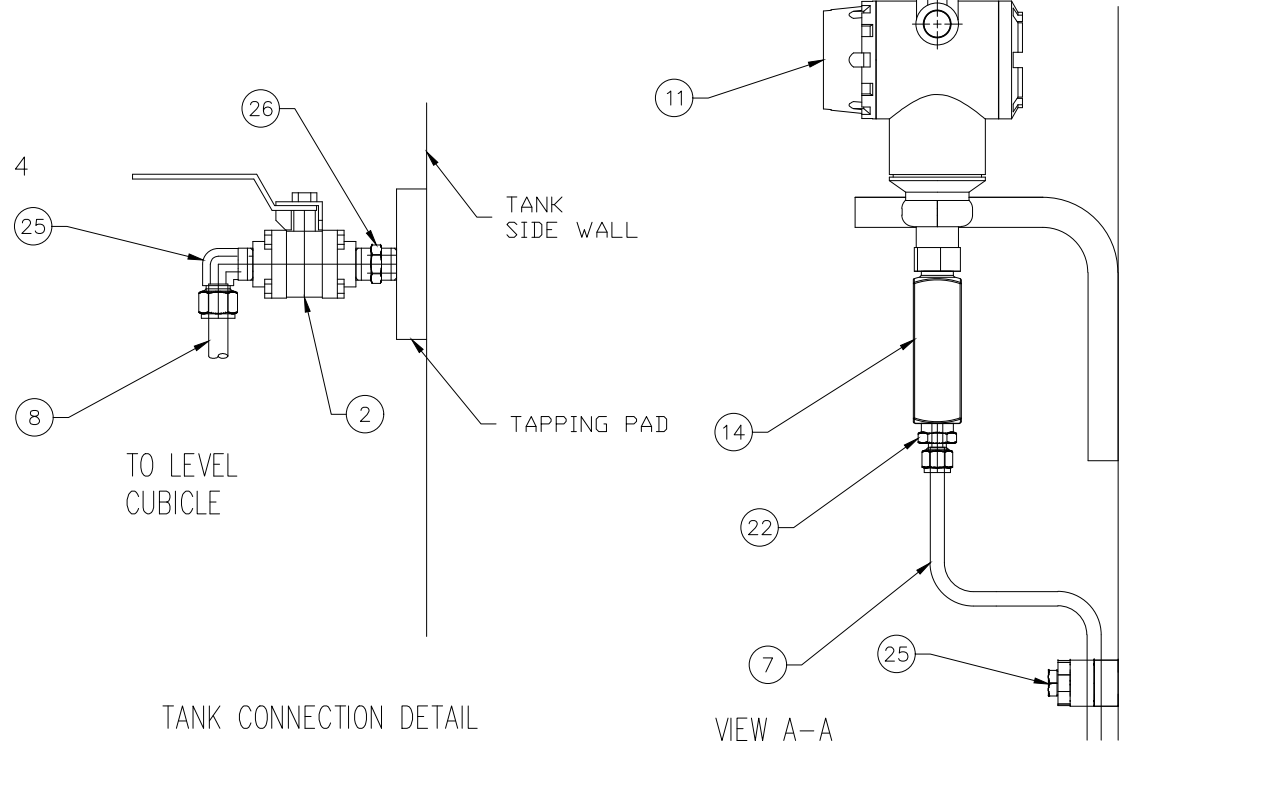


Label	Description
L1	SITE ID - REFER SPECIFICATION
L2	TANK PRESSURE (AT GAUGE AND VALVE)
L3	LT1/PT CALIBRATION 0 - (X) MWG
L4	LT1/PS - MOR IN MWG (SITE SPECIFIC) - MOF IN MWG (SITE SPECIFIC)
L5	TRANSMITTER REF DATUM AHD LEVEL (SITE SPECIFIC) METERS
L6	AHD LEVEL OF TANK FLOOR (SITE SPECIFIC) METERS
L7	DRAIN
L8	TANK ISOLATOR
L9	JBXX (Site Specific)
L10	FLUSHING LINE ISOLATOR
L11	FLUSHING LINE SOLENOID
L12	FLUSHING LINE FLOW SWITCH

REFERENCE DRAWINGS  
 - E-B-STD-001 RTU CONNECTIONS AND SYSTEM DIAGRAM  
 - SEWL-STD-031 TELEMETRY MAST AND SWITCHBOARD MOUNTING DETAILS

- NOTES
1. ALL TUBING ON PANEL TO BE SS 0.9mm WALL
  2. ALL INSTRUMENTS TO BE MOUNTED AT A COMMON DATUM
  3. ALL TUBING TO MOUNTED WITH SWAGELOCK TUBE MOUNTING BLOCKS OR EQUIVALENT
  4. ALL DRAIN LINES TO DISCHARGE DIRECTLY TO SITE DRAINAGE
  5. ALL BULKHEAD FITTINGS/LINES TO EXIT AT REAR OF CABINET (SHOWN AT SIDE FOR CLARITY)

Item No	Item	Description	Part Number	Qty
31	SNUBBER	STAINLESS STEEL 1/2" NPT GAUGE SNUBBER	SS-8-SA-EW	2
30	FLOW SWITCH	POLYPROPYLENE FLOW SWITCH 1.9 L/MIN, 3/8" M-NPT	P3-32	1
29	SOLENOID	BURKETT 2/2 WAY SERVO COUPLED SOLENOID VALVE TYPE 6213 EV	221599	1
26	HEX NIPPLE	1/2" SS HEX NIPPLE	SS-8-HN	1
25	TUBE CLAMP	3/8" POLYPROPYLENE TUBE SUPPORT CLAMP	304-S1-PP-6T	12
26	CONNECTOR	SS TUBE FITTING, TUBE CONNECTOR 3/8" X 3/8"	SS-600-6	1
25	CONNECTOR	SS TUBE FITTING ELBOW, 1/2" TUBE X 1/2" M-NPT	SS-810-2-8	1
24	CONNECTOR	SS TUBE FITTING, M-CON, 3/8" TUBE X 1/4" M-NPT	SS-600-1-4	1
23	CONNECTOR	SS TUBE FITTING, M-CON, 1/4" TUBE X 1/4" M-NPT	SS-400-1-4	1
22	CONNECTOR	SS TUBE FITTING, M-CON, 3/8" TUBE X 1/2" M-NPT	SS-600-1-8	3
21	CONNECTOR	SS TUBE FITTING, FM-CON, 3/8" TUBE X 3/8" FM-NPT	SS-600-7-6	2
20	CONNECTOR	SS TUBE FITTING, M-CON, 3/8" TUBE X 1/2" FM-NPT	SS-600-7-8	2
19	CONNECTOR	SS TUBE FITTING, M-CON, 3/8" TUBE X 3/8" M-NPT	SS-600-1-6	1
18	CONNECTOR	SS TUBE REDUCER 3/8" TUBE TO 1/2" PORT CONNECTOR	SS-600-R-8	1
17	JUNCTION BOX	190 X 190 X 130mm FIBOX Plastic Junction Box IP67, TRANSPARENT LID	EKHA 130 T	1
16	THUMB SCREWS	THUMB SCREWS FOR FIBOX LID	HS 10255	4
15	GEAR PLATE	GEAR TRAY FOR FIBOX EKHA	EKHVT	1
14	MANIFOLD	ROSEMOUNT R306 Manifold (BLOCK & BLEED)	0306RT22BA11	1
13	PLUG	1/4" TUBE PLUG	SS-400-P	1
12	PRESSURE GAUGE	WIKA INDUSTRIAL BOURDON TUBE 150mm (RANGE IN MWG TO SUIT) SS 1/2" NPT LOWR MOUNT, S/S SURFACE MOUNTING FLANGE 316L	232.50	1
11	PRESSURE TRANSMITTER	EMERSON - ROSEMOUNT PRESSURE TRANSMITTER	3051TGXA2B21XXXXXXXXXX	1
10	PRESSURE SWITCH	UNITED ELECTRICS J402 WITH MINIMUM 2 CHANGEOVER SWITCHES ( RANGE TO SUIT - MAY REQUIRE ALTERNATE FITTING FOR ITEM 23)	J402	1
9	TUBING	3/8" OD NYLON TUBE - NATURAL (PRESSURE RATING TO SUIT)	Blackwoods part number 04190602	TBA
8	TUBING	1/2" OD SS TUBING 0.9mm WALL		TBA
7	TUBING	3/8" OD SS TUBING 0.9mm WALL		TBA
6	UNION	SS TUBE FITTING, 1/2" BULK HEAD UNION	SS-810-61	1
5	UNION	SS TUBE FITTING, 3/8" BULK HEAD UNION	SS-600-61	2
4	UNION CROSS	TUBE FITTING, 3/8" UNION CROSS	SS-600-4	1
3	UNION TEE	SS TUBE FITTING, UNION TEE, 3/8" TUBE	SS-600-3	2
2	VALVE	SS 3 PIECE 63 SERIES BALL VALVE 1/2"	SS-63TF8	1
1	VALVE	SS 1 PIECE 40 SERIES BALL VALVE, 6.0 Cv, 3/8" TUBE	SS-4456	3



REV	ZONE	DESCRIPTION	DATE	APP'D
J		PRESSURE GAUGE & PRESSURE SWITCH REVISED	07/21	M.L.
I		FLUSHING SOLENOID AND FLOW SWITCH ADDED	03/21	J.S.
M		CHANGED TAPPING SIZE AND PARTS TO 1/2"	07/22	S.B.
L		UPDATED PART NUMBERS	04/22	S.B.
K		ADDED GAUGE SNUBBER	09/21	J.S.

**PID Controls Pty Ltd**  
 Instrumentation & Electrical  
 ABN: 97601 132 316 ACN: 60101320316  
 E: stuart@pidcontrols.com.au

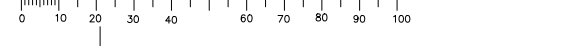
PID Controls Pty Ltd  
 ABN: 97601 132 316 ACN: 60101320316  
 PO Box 3196  
 Morningside, 3931  
 P: 0457 580 477  
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DESIGNED	DRAWN	PROJECT MGR.
STUART BENNETT	STUART BENNETT	
DESIGN CHECK	DRAFT CHECK	GENERAL FILE No
APPROVED	DATE	
JAYSON STREET	13/09/2021	



WATER SUPPLY STANDARDS  
 TANK LEVEL INSTRUMENTATION  
 MECHANICAL ARRANGEMENT - WATER TANKS

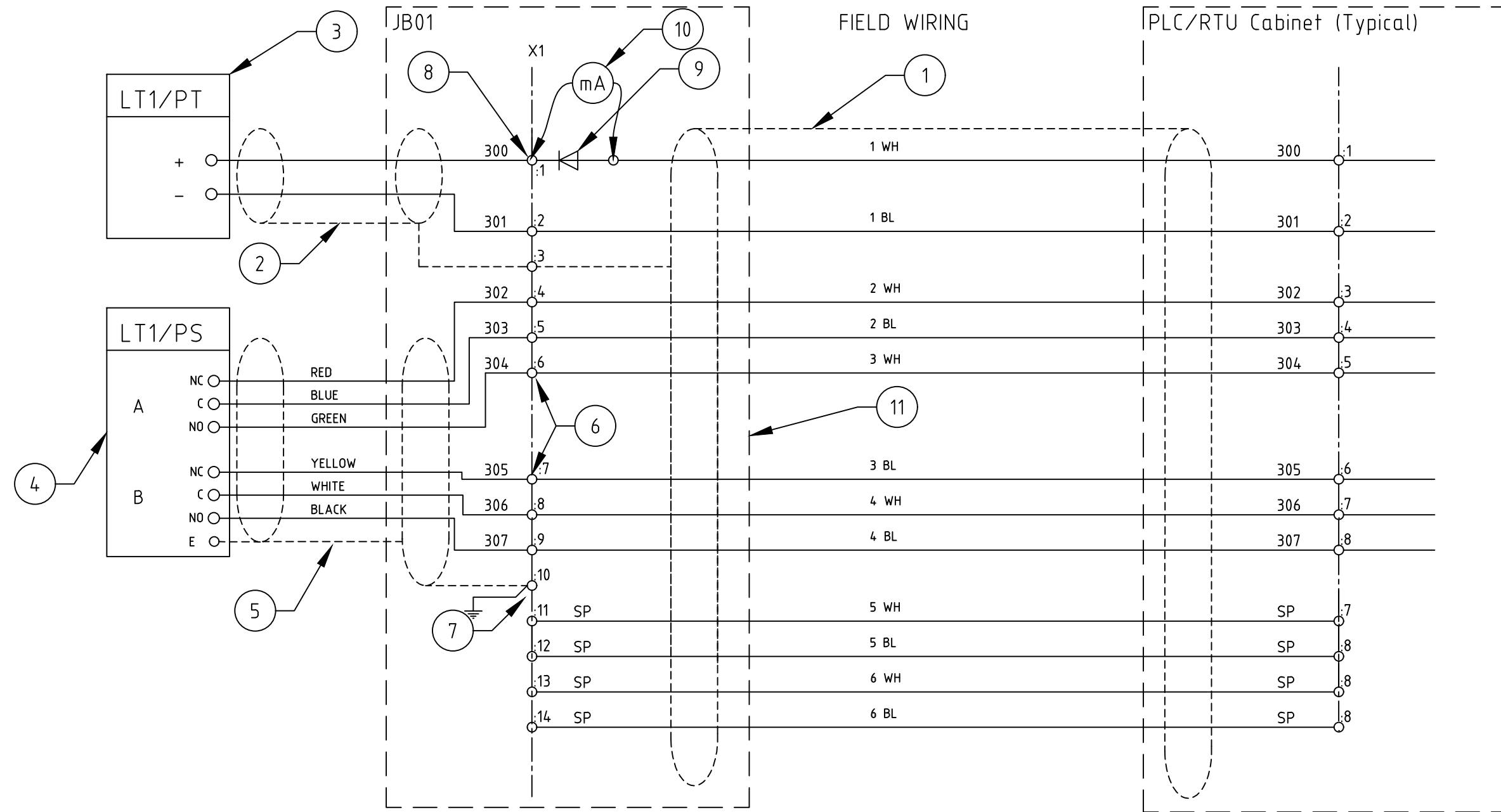
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E-WT-STD-005		M
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DRAWING NUMBER  
E-WT-STD-006  
REV A

DATE  
INITIALS  
CO-ORDINATION CHECK



- Notes:
- 6 Pair Overall Screened Instrument Cable - Electra Cables Part No. EAS7306P or equivalent.
  - Single Pair Overall Screened Instrument Cable - Electra Cables Part No. EAS7301P or equivalent.
  - Siemens 7MF4033 with display.
  - United Electrics J402 with two change over switches.
  - 6 Core Overall Screened Data Cable - Electra Cables Pat No. EAS7206 or Equivalent.
- Terminals to Be Screw Connect Type - Schneider Linergy LIne or Equivalent.
- NSYTRV22 Pass Through Terminal
  - NSYTRV22PE Earth Terminal
  - NSYTRV22TB Removeable Carrier Terminal
  - NSYTRSSV2 Diode Carrier
  - Calibration Test points
  - Instrument Wet Panel JBox
- Reference Drawings:  
E-WP-STD-00X - Tank Level Instrumentation - General Arrangement.

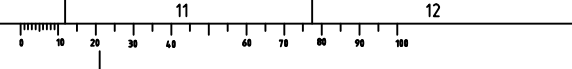
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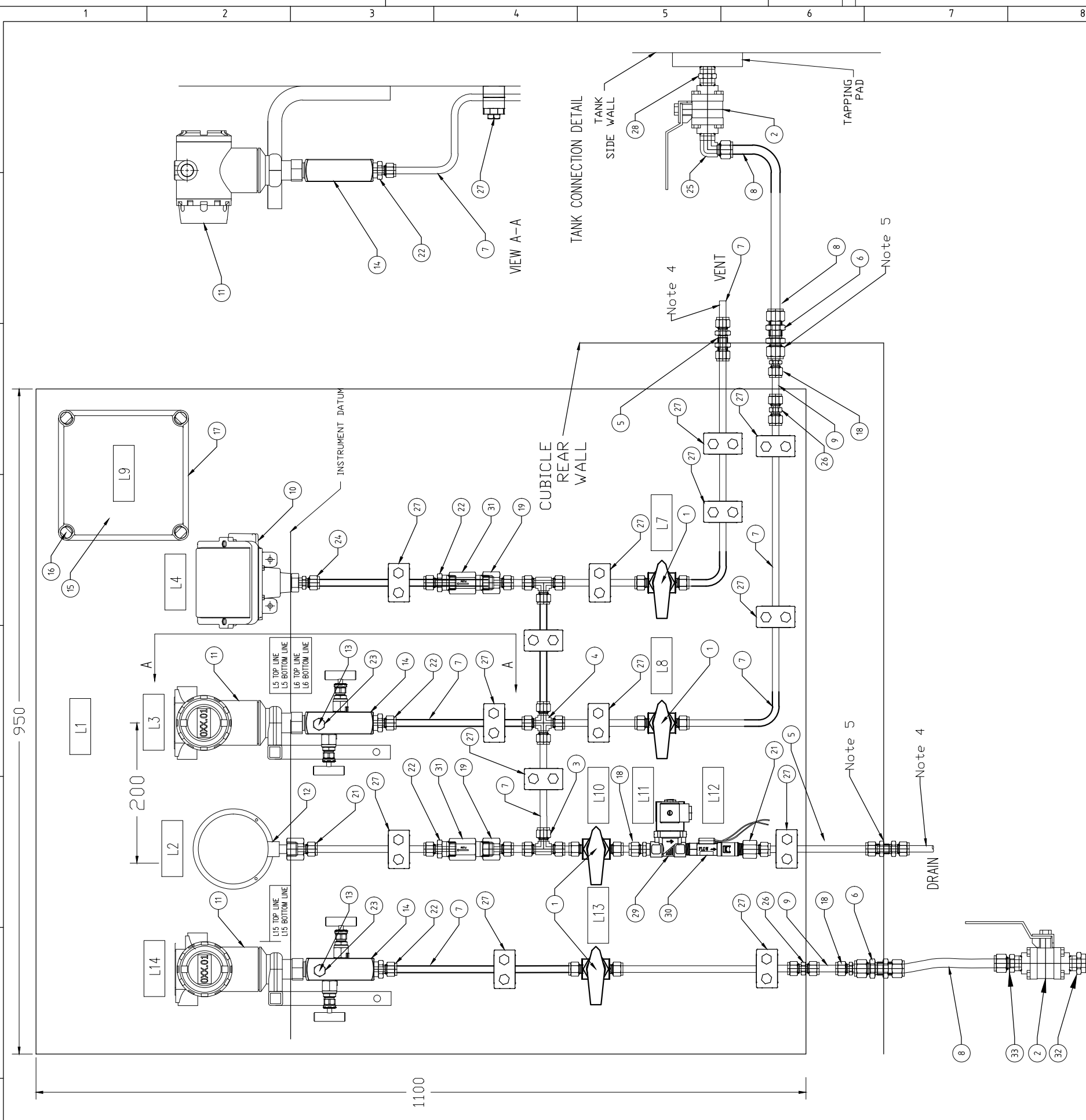
DESIGNED	STUART BENNETT	DRAWN	STUART BENNETT	PROJECT MGR.	
DESIGN CHECK		DRAFT CHECK		GENERAL FILE No	
APPROVED		DATE			



WATER SUPPLY STANDARDS  
TANK LEVEL INSTRUMENTATION  
TYPICAL WIRING SCHEMATIC - WATER TANKS

DO NOT SCALE		
SCALE:	NTS	
DRAWING NUMBER		
E-WT-STD-006		A
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WT with INLET PRESSURE SITE INSTRUMENTATION STANDARD PARTS LIST

Item No	Item	Description	Part Number	Qty
33	CONNECTOR	SS TUBE FITTING, M-CON, 1/2" TUBE X 1/2" M-NPT	SS-810-1-8	1
32	HEX NIPPLE	1/2" x 3/4" SS HEX REDUCING NIPPLE	SS-12-HRN-8	1
31	SNUBBER	STAINLESS STEEL 1/2" NPT GAUGE SNUBBER	SS-8-SA-EW	2
30	FLOW SWITCH	POLYPROPYLENE FLOW SWITCH 1.9 L/MIN, 3/8" M-NPT	P3-32	1
29	SOLENOID	BURKETT 2/2 WAY SERVO COUPLED SOLENOID VALVE TYPE 6213 EV	221599	1
28	HEX NIPPLE	1/2" SS HEX NIPPLE	SS-8-HN	1
27	TUBE CLAMP	3/8" POLYPROPYLENE TUBE SUPPORT CLAMP	304-S1-PP-6T	14
26	CONNECTOR	SS TUBE FITTING, TUBE CONNECTOR 3/8" X 3/8"	SS-600-6	2
25	CONNECTOR	SS TUBE FITTING ELBOW, 1/2" TUBE X 1/2" M-NPT	SS-810-2-8	1
24	CONNECTOR	SS TUBE FITTING, M-CON, 3/8" TUBE X 1/4" M-NPT	SS-600-1-4	1
23	CONNECTOR	SS TUBE FITTING, M-CON, 1/4" TUBE X 1/4" M-NPT	SS-400-1-4	2
22	CONNECTOR	SS TUBE FITTING, M-CON, 3/8" TUBE X 1/2" M-NPT	SS-600-1-8	3
21	CONNECTOR	SS TUBE FITTING, FM-CON, 3/8" TUBE X 3/8" FM-NPT	SS-600-7-6	2
20	CONNECTOR	SS TUBE FITTING, M-CON, 3/8" TUBE X 1/2" FM-NPT	SS-600-7-8	2
19	CONNECTOR	SS TUBE FITTING, M-CON, 3/8" TUBE X 3/8" M-NPT	SS-600-1-6	1
18	CONNECTOR	SS TUBE REDUCER 3/8" TUBE TO 1/2" PORT CONNECTOR	SS-600-R-8	2
17	JUNCTION BOX	190 X 190 X 130mm FIBOX Plastic Junction Box IP67, TRANSPARENT LID	EKHA 130 T	1
16	THUMB SCREWS	THUMB SCREWS FOR FIBOX LID	HS 10255	4
15	GEAR PLATE	GEAR TRAY FOR FIBOX EKHA	EKHVT	1
14	MANIFOLD	ROSEMOUNT R305 Manifold (BLOCK & BLEED)	0306RT2BA11	2
13	PLUG	1/4" TUBE PLUG	SS-400-P	2
12	PRESSURE GAUGE	WIKA INDUSTRIAL BOURDON TUBE 150mm (RANGE IN MWG TO SUIT) SS 1/2" NPT LOWR MOUNT, 5/5 SURFACE MOUNTING FLANGE 316L	232.50	1
11	PRESSURE TRANSMITTER	EMERSON - ROSEMOUNT PRESSURE TRANSMITTER	3051TGXA2B21XXXXXXX	2
10	PRESSURE SWITCH	UNITED ELECTRICS I402 WITH MINIMUM 2 CHANGE OVER SWITCHES (RANGE TO SUIT - MAY REQUIRE ALTERNATE FITTING FOR ITEM 23)	I402	1
9	TUBING	3/8" OD NYLON TUBE - NATURAL (PRESSURE RATING TO SUIT)	Blackwoods P/Number 04190602	TBA
8	TUBING	1/2" OD SS TUBING 0.9mm WALL	TBA	TBA
7	TUBING	3/8" OD SS TUBING 0.9mm WALL	TBA	TBA
6	UNION	SS TUBE FITTING, 1/2" BULK HEAD UNION	SS-810-61	2
5	UNION	SS TUBE FITTING, 3/8" BULK HEAD UNION	SS-600-61	2
4	UNION CROSS	TUBE FITTING, 3/8" UNION CROSS	SS-600-4	1
3	UNION TEE	SS TUBE FITTING, UNION TEE, 3/8" TUBE	SS-600-3	2
2	VALVE	SS 3 PIECE 63 SERIES BALL VALVE 1/2"	SS-63TF8	2
1	VALVE	SS 1 PIECE 40 SERIES BALL VALVE, 6.0 Cv, 3/8" TUBE	SS-4456	4

INLET PRESSURE TAPPING

- REFERENCE DRAWINGS:
- E-B-STD-001 RTU CONNECTIONS AND SYSTEM DIAGRAM
  - SEW-STD-031 TELEMETRY MAST AND SWITCHBOARD
- NOTES:
1. ALL TUBING ON PANEL TO BE SS 0.9mm WALL
  2. ALL INSTRUMENTS TO BE MOUNTED AT A COMMON DATUM
  3. ALL TUBING TO MOUNTED WITH SWAGELOCK TUBE MOUNTING BLOCKS OR EQUIVALENT
  4. ALL DRAIN LINES TO DISCHARGE DIRECTLY TO SITE DRAINAGE
  5. ALL BULKHEAD FITTINGS/LINES TO EXIT AT REAR OF CABINET (SHOWN AT SIDE FOR CLARITY)

STANDARD LABELS

Label	Description
L1	SITE ID - REFER SPECIFICATION
L2	TANK PRESSURE (AT GAUGE AND VALVE)
L3	L1/PT CALIBRATION 0 - (X) MWG
L4	L1/PS - MOR IN MWG (SITE SPECIFIC) - MOF IN MWG (SITE SPECIFIC)
L5	TRANSMITTER REF DATUM
L6	AHD LEVEL (SITE SPECIFIC) METERS
L7	AHD LEVEL OF TANK FLOOR (SITE SPECIFIC) METERS
L8	TANK ISOLATOR
L9	JBXX (Site Specific)
L10	FLUSHING LINE ISOLATOR
L11	FLUSHING LINE SOLENOID
L12	FLUSHING LINE FLOW SWITCH
L13	INLET PRESSURE ISOLATOR
L14	PT1/PT CALIBRATION 0 - (X) MWG
L15	WATER MAIN (CENTRE LINE) (SITE SPECIFIC) m/AHD

THE ORIGINAL DRAWING WAS HAND SIGNED BY THE PERSON WHOSE NAME OR INITIALS APPEAR PRINTED AND MARKED THIS (A) IN THE SIGNATURE BLOCKS.

REV	ZONE	DESCRIPTION	DATE	APP'D
A		Standard Drawing	8/22	J.S.

**PID Controls Pty Ltd**  
Instrumentation & Electrical

ABN: 97601 132 316 ACN: 60101320316

PID Controls Pty Ltd  
ABN: 97601 132 316 ACN: 60101320316  
STUART BENNETT  
DESIGNED  
STUART BENNETT  
DRAWN  
STUART BENNETT  
DESIGN CHECK  
DRAFT CHECK  
APPROVED  
JAYSON STREET  
DATE  
15/08/2022

DESIGNED	DRAWN	PROJECT MGR.
STUART BENNETT	STUART BENNETT	
DESIGN CHECK	DRAFT CHECK	GENERAL FILE No
APPROVED	DATE	
JAYSON STREET	15/08/2022	



WATER SUPPLY STANDARDS  
TANK LEVEL INSTRUMENTATION (INC. INLET PRESSURE)  
MECHANICAL ARRANGEMENT - WATER TANKS

DO NOT SCALE

SCALE: NTS

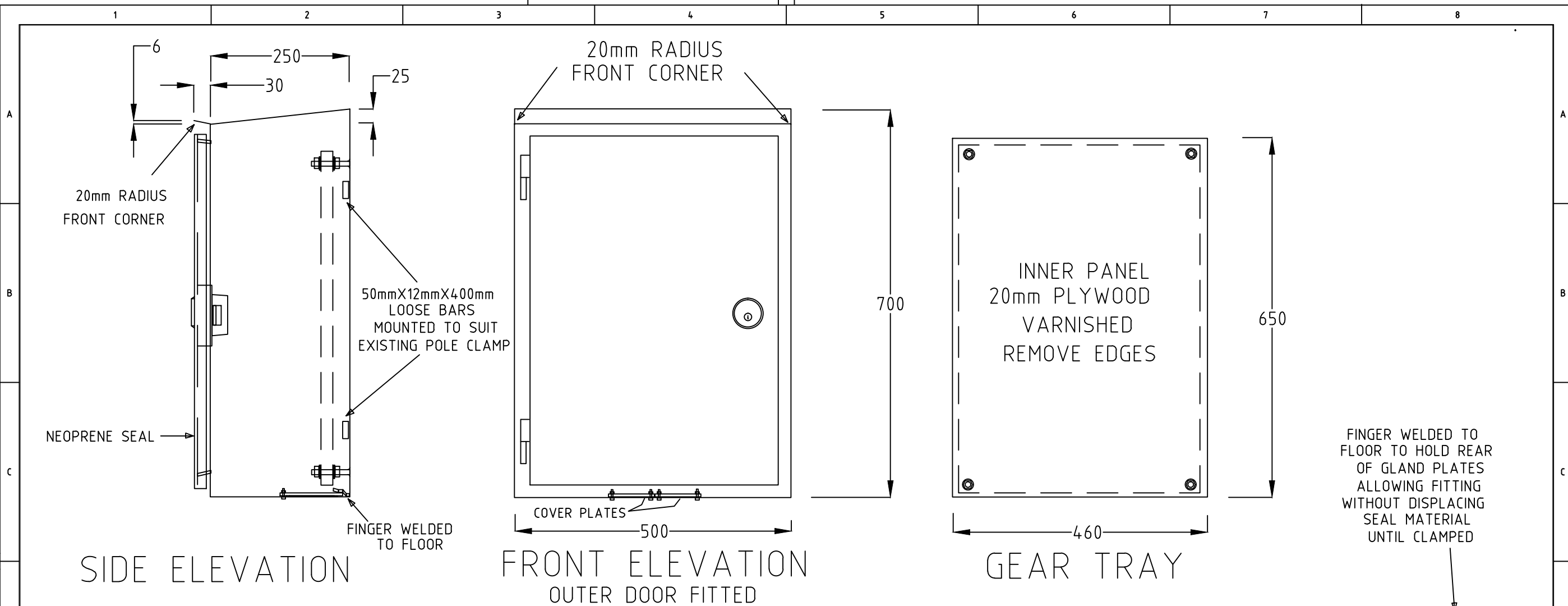
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**E-WT-STD-007**

SHEET OF 12

REV **A**

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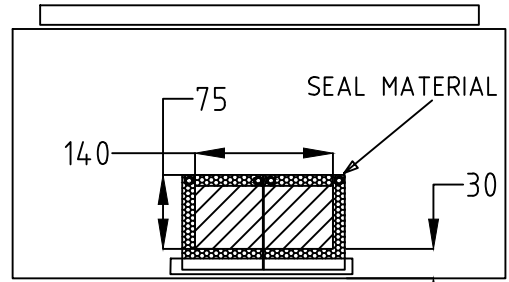
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SIDE ELEVATION

FRONT ELEVATION  
OUTER DOOR FITTED

GEAR TRAY



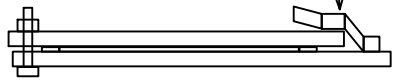
140mm X 75mm CUTOUT  
WITH 2 OFF ALUM COVER PLATES  
BOLTED TO BOTTOM  
BOTTOM REAR

CONSTRUCTION NOTES:

1. SWITCHBOARD TYPE FORM 1, TO AS3439.1 - 1993.
2. DEGREE OF PROTECTION IP56, TO AS1939.
3. CUBICLE MANUFACTURE FROM 3mm ALUMINIUM.
4. MANUFACTURE DOORS, PANELS, FROM 3mm ALUMINIUM.  
WITH NEOPRENE SEALS
5. ON FRONT DOOR USE NIGHTLATCH LOCK KEYED FOR SEW ABLOY CYLINDER & "M3" SECURITY LOCK SYSTEM.
6. EXTERNAL DOORS - a. HINGES LENLOK, CHROME PLATED,

7. GEAR TRAY TO BE OF 20mm MARINE GRADE PLYWOOD
8. GEAR TRAY TO BE OF MAXIMUM WIDTH POSSIBLE (ADJUST TO FIT)
9. FINISH - a. GEARTRAY - CLEAR VARNISHED, BREAK ALL SHARP EDGES.  
b. EXTERNAL - RIVER GUM GREEN TO AS2700 COLOR G62
10. FIT DOORS WITH STAINLESS STEEL STAY RODS TO SECURE IN THE OPEN POSITION 105 DEGREES.
11. MINIMUM OPENING OF ALL DOORS TO BE 105 DEGREES
12. PROVIDE SURFACE STUDS SPOT WELDED TO SIDE & DOOR FOR EARTHING (LOCATION AT MANUFACTURE)
13. PROVIDE 140mm X 75mm CUTOUT WITH 2 OFF ALUM COVER PLATES BOLTED TO BOTTOM PER DIAGRAM
14. PROVIDE 50mm X 12mm X 400mm 2 OFF ALUM REINFORCING BARS LOOSE IN CABINET

FINGER WELDED TO FLOOR TO HOLD REAR OF GLAND PLATES ALLOWING FITTING WITHOUT DISPLACING SEAL MATERIAL UNTIL CLAMPED



DESIGNED	DRAWN		
DESIGN CHECK	CHECKED		
APPROVED			
REV.	REVISION	DATE	APP'D

DESIGNED	DRAWN
DESIGN CHECK	CHECKED
APPROVED	



SOUTH EAST WATER  
40 COMMERCIAL DVE  
LYNBROOK 3975

SOUTH EAST WATER  
SPIDER LOGGER CABINET  
CONSTRUCTION  
DIAGRAMS

DO NOT SCALE	
SCALE:	
DRAWING NUMBER	
SEW-011	
NUMERAL	REV