

Gedney, Oliver

From: Polly Harris-Gorf
Sent: 22 June 2021 09:19
To: _planningadvice
Subject: FW: H16-0225-21 CONDITION DETAILS APPLICATION AT Millfield Nursery Spalding Common Spalding
Attachments: We sent you safe versions of your files; 715281 - Millfield Nursery, Spalding Technical Submission - 28.05.2021.pdf;
l_ocella_dvTarget_dv_pl_filesH16-0225-212Ang_1.pdf

6SUP (Additional Technical Submission regarding Anglian Water concerns)

From: Lee Russell <Lee.Russell@seagatehomes.co.uk>
Sent: 21 June 2021 17:17
To: Polly Harris-Gorf <pharris-gorf@sholland.gov.uk>; Drinkwater Rachel <rDrinkwater2@anglianwater.co.uk>
Cc: Mark Dennis <Mark.Dennis@seagatehomes.co.uk>
Subject: RE: H16-0225-21 CONDITION DETAILS APPLICATION AT Millfield Nursery Spalding Common Spalding

Mimecast Attachment Protection has deemed this file to be safe, but always exercise caution when opening files.

This message originated from outside your organization

Hi Polly,

This information should be with Anglian Water through the s104 submission, and I therefore trust they are aware of it.

Nevertheless its :

peak inflow from the sewers to the pumping station is 1.31 l/s (refer to pg 4 of pump spec).

Pump rate is 4.8 l/s.

I've attached the pump spec, which is what AW should have, and copy in the AW vetting engineer who can hopefully clarify back to you its suitability?

Rachel – Re. H16-0225-21, PLN-0124492 - Can you confirm suitability for the planning officer please to allow planning cond discharge – ive attached the query raised on inflow, not sure if this was by yourself ?

Regards

Lee



Lee Russell
Technical Director

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From: Polly Harris-Gorf <pharris-gorf@sholland.gov.uk>
Sent: 21 June 2021 15:48
To: Lee Russell <Lee.Russell@seagatehomes.co.uk>

Cc: Mark Dennis <Mark.Dennis@seagatehomes.co.uk>

Subject: RE: H16-0225-21 CONDITION DETAILS APPLICATION AT Millfield Nursery Spalding Common Spalding

Dear Lee

Please find attached Anglian Waters response regarding Condition 17.

Yours sincerely

Polly Harris Gorf | Principal Planning Officer | South Holland District Council
Council Offices, Priory Road, Spalding, PE11 2XE
DDI: 01775 764504

www.sholland.gov.uk

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Paradigm Pumps
Boulton Road
Reading
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RG2 0NH

MILLFIELD NURSERY, SPALDING FOUL WATER PUMP STATION TO THE SSG DCG V2 STANDARDS – PROJECT 715281

Anglian Water – Design and Construction Guidance V2

Produced by Paradigm Pump Services on behalf of Seagate Homes (UK) Ltd



Issue	Date	Reason	Issued	Approved	Revisions Show In
A	11/03/2021	For approval	T. Gulley	G. Gulley	
B	28/05/2021	For approval	T. Gulley	G. Gulley	RED

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Overview / Summary page

<i>Water authority</i>	Anglian Water
<i>Design & Construction Guidelines Version</i>	2.0
<i>Site name</i>	Millfield Nursery, Spalding
<i>Site location</i>	Spalding Common
<i>Location drawing number</i>	12175-WMS-ZZ-XX-DR-C-39201-S8-P6-S104_LAYOUT-21.05.11
<i>Client</i>	Seagate Homes (UK) Ltd
<i>Produced by</i>	Paradigm
<i>Pump station location</i>	South east corner of site
<i>Anticipated adoption date</i>	TBC
<i>Pump station type</i>	Type 3
<i>Liquid handled</i>	Foul
<i>Unit type</i>	Private Residential
<i>Number of units / size</i>	145 houses
<i>Emergency storage volume</i>	8,874 Litres
<i>Diameter of wet well</i>	3.000m
<i>Depth of wet well</i>	5.500m
<i>Size of Valve chamber</i>	1800mm x 2400mm
<i>Depth of valve chamber</i>	1500mm
<i>Wet well Cover Size</i>	1500mm x 900mm
<i>Valve chamber cover Size</i>	2400mm x 1800mm
<i>Inlet Manhole cover size</i>	675mm x 657mm
<i>Pipework size</i>	80mm
<i>Rising main size / specification</i>	110mm OD SDR 11
<i>Rising main length</i>	397m
<i>Surge analysis required</i>	No
<i>Compound size</i>	8.500m x 11.000m
<i>Pumps</i>	XFP 80C VX.2
<i>Pump size</i>	2.2kW
<i>Head</i>	7.73m
<i>Flow rate</i>	4.80L/sec
<i>Retention time full usage</i>	1.75 Hours
<i>Retention time Half usage</i>	3.51 Hours

Overview

The Mechanical & Electrical proposal within this submission is based on Anglian Waters' local practice for pumping stations document dated 22nd June 2020 in accordance with the Sewerage Sector Guidance Appendix C, Design and Construction Guidance approved version 2.0 dated 10th March 2020.

The proposed pump station location and rising main details can be found on drawings provided by Wm Saunders Partnership Limited Liability Partnership trading as William Saunders under separate cover.

Inflow and discharge rates

The pump station, is designed to serve the foul flows from 145 residential plots which, based on Anglian Waters' addendum, gives a calculated peak flow of 1.31L/sec. Inflow calculations can be found under Appendix A.

The design pump rate has been set at a minimum of 4.80L/sec in line with the Design and Construction Guidance (DCG) clause D6.3.1 which would provide excess of the 0.75m/s minimum velocity within the wet well and valve chamber pipework.

Emergency storage calculations

Based on the storage requirements given in Anglian Water' addendum, for 145 properties there will be a requirement for an emergency storage volume of 8,874 Litres. (Appendix A).

The 3.0m Diameter x 5.500m deep wet will accommodate 8,426 litres and the inlet manhole will store the remainder. This will be above the high level alarm of -1.850m and the top water level of -0.658m.

Details of the drainage layout can be found in the information provided by William Saunders under separate cover.

Rising main

The rising main consists of 397m of 110mm OD SDR11 pressure pipe with a 89.1mm nominal bore. The rising main falls for 26.4m to W01 at a fall of 1:28. The rising main then rises for 133.6m to AV1 at a rise of 1:385. The rising main then falls for 90.0m to W02 at a fall of 1:151. From there the rising main rises for 147.0m to the final outfall at a rise of 1:294. All the gradients are greater than the minimum fall of 1:300 and minimum rise of 1:500 in line with the DCG clause D6.3.3.

For further details of the pumping main route and profile we would refer you to the information provided by William Saunders under separate cover.

On the basis the pumping main is 397 metres long and is less than the 500 metres referred to within DCG clause D6.3.3m, a surge assessment has not been undertaken on the profile.

Pump duty requirements

We have undertaken a set of our own head loss calculations to determine the pump duty, a copy of this can be found enclosed within appendix A.

To meet the required pump duty of 4.80L/sec against a total calculated head of **7.73m** we have selected submersible sewage pumps from Sulzer XFP80 C VX.2 range with 2.2kW motors suitable for a 400V/3ph/50Hz electrical supply (Appendix C).

As the motor ratings are less than the 7.5kW detailed in DCG clause F2.3.16.2 we do not propose to fit the pumps with a seal leakage detection system.

Each pump would be fitted with a blue rope lifting system with each end suitably looped and held by a carabiner to a snap hook bracket at the top of the wet well either side of the upper guide rail bracket.

Pump station layout

The pumps pipework and valves would be installed within concrete chambers constructed by others to the layout as shown on Paradigm Pump Services' drawing shown in appendix D.

Paradigm Pump Services' contract would terminate a short distance outside the foul water chamber in a PN16 flange ended pipe.

An appropriately rated ductile iron to PE rising main coupling will be required to connect the pump station pipework to the rising main.

An 80mm valve chamber drain would be installed incorporating a sludge valve connected to a spindle terminating just below the access cover level. This can then be operated with a tee key at cover level.

As this site is serving a large site, an inlet chamber complete with a cast iron penstock has been added to this installation to isolate all flows going to the pump station to allow for future works to be completed safely within the wet well without the hazard of incoming flows.

Retention time and septicity

Based on a half-developed site the retention time within the system is **3.51** hours and for the fully developed site **1.75** Hours.

As these are well below the 6-hour figure after which septicity is considered to be a problem and as a result, we do not propose to install any permanent or temporary septicity control equipment.

Cabling

Pumps and level control cabling will be wired back to the control panel via an intermediate junction box held within a kiosk as outlined on the Paradigm drawing shown in appendix D as per Anglian Waters' addendum clause F3.4.5.4.1.

We have allowed for sealing the three 100mm pump cable ducts and level control cable duct with a Filoform duct seal as per DCG V2 clause F3.4.4.13.

Control equipment

Automatic level control would be via a Pulsar ultrasonic level controller augmented by two separate float switches for high level and back up control, all wired back to a multi compartment control panel complying with the latest DCG standards.

The control panel would be installed within a floor fixing GRP kiosk of dimensions 2,500mm wide x 1,750mm high x 750mm deep.

Please refer to Appendix E for our updated Wiring Diagrams and Kiosk Layout to DCG.

Flow and Pressure Monitoring

As per DCG V2 clause F4.4.1, each non-return valve and the joining tee piece upstream of the isolation valve on each pump riser will be fitted with a ½" BSP tapping point with a quarter turn ball check valve and will be plugged with a cap. As the flow rate is less than 70 L/sec as per the DCG V2 clause D7.6.1, we do not propose to fit a flow meter.

Telemetry

Telemetry must be arranged between the developer and Anglian Water. We have attached a guide on the steps required to achieve this in appendix F.

Access covers

Inlet Chamber

675mm x 675mm D400 access cover will be installed.

Wet well

1500mm x 900mm Steelway Prolift FACTA B access cover will be installed incorporating internal fall protection and safety barriers.

Valve Chamber

2400 x 1800 Steelway Prolift FACTA B access cover will be installed incorporating internal fall protection and safety barriers.

Lifting equipment

We propose that a Lloyds Rota Lifting Davit will be provided complete with a single cast in type davit socket all rated for 500kg SWL.

Access ladder

A galvanised steel ladder has been proposed within the valve chamber complete with a retractable hand hold as outlined on the drawing in appendix D.

Baffle plate

A stainless steel baffle plate will be installed around the 150mm opening

Appendices

Appendix A – Calculations

Client's Name	William Saunders		Project Ref	715281	
Site Address	Seagate Homes (UK) Ltd		Issue	2	
	Millfield Nursery, Spalding		Date	28/05/21	

Adopting Authority	Anglian Water	
Station Type Foul / Storm	Foul	
Number of Dwellings	145	
Number of Duty Pumps	1	
Number of Pumps	2	

Cover Level	2.900
VC Outlet	1.700
Flood Level	-0.658
Inlet	-0.946
HLA	-1.850
P2 Start	-1.950
P1 Start	-2.100
Mid Water	-2.200
Stop Level	-2.300
Dead Area	300
Base Level	-2.600

Wet Well Diameter	3000	mm
Calc Chamber Depth	5.146	m
Actual Chamber Depth	5.500	m
Max Theoretical Starts	15.00	
Actual Starts	3.29	
Dwf Inflow Per Day	53242.19	
No. of Main Clears per Day	13.69	
Retention Hrs Full Usage	1.75	
Retention Hrs Half Usage	3.51	

Depth to Outlet	1.200
Inlet To Stop	1.354
Depth Below Inlet	1.654
Take Duty From	-2.200
Mid Water	

High Point	1.097	
Length to High Point	160.0	
Rising Main Length	397.0	
Peak Inflow	1.31	
Discharge Rate	4.80	
Rising Main I.D	89.1	
Velocity in Main	0.77	
Storage	8.874	litres
Storage In Inlet Manhole	472	litres
Storage In Gravity Sewers	0	litres
Capacity Between HLA & FL	8.426	litres
Total Storage Volume	8.898	litres
Volume Per M	7.069	litres
Depth Between Starts	100	mm
Theoretical Op Volume	288	litres
Actual Op Volume	1.414	litres
Rising Main Volume	2.475	litres
Combined Main and Op Vol	3.889	litres

Discharge	1.000
FALL	
	-0.70

110mm SDR11 PE100

Retention Calcs Assume Ascending Main

	Rising Main	Common 2	Common 1	Individual 3	Individual 2	Individual 1
Flow Rate (l/sec)	4.80	4.80	4.80	4.80	4.80	4.80
Static Head (M)	3.20					
Pipe Diameter (mm)	89.10	80	80	80	80	80
Velocity (M/sec)	0.77	0.95	0.95	0.95	0.95	0.95
Roughness Factor	0.30	0.30	0.30	0.30	0.30	0.30
Pipe length (M)	397			3.0	4.3	
Duckfoot Bend						1
Short Radius Bends				1	1	
Long Radius Bends	9					
Tee Straight through				1		
Tee through branch				1		
Radial Tee thro Branch						
Sluice Valve				1		
Non Return Valve				1		
Bellmouth inlet						
Sharp Taper						
Standard Taper	1					
Equivalent Pipe Length (M)	411.4342	1.76	0	15.08	7.02	2.72
Reynolds Number	6.0E+04	6.7E+04	6.7E+04	6.7E+04	6.7E+04	6.7E+04
Darcy-Weisbach Friction Factor	0.0290	0.0296	0.0296	0.0296	0.0296	0.0296
Velocity Head	0.030	0.046	0.046	0.046	0.046	0.046
Hydraulic (Piezometric) gradient	0.0098	0.0172	0.0172	0.0172	0.0172	0.0172
Friction Head Loss	4.046	0.030	0.000	0.259	0.121	0.047

Calc Duty Point	4.80	L/S	Total Head	7.73	M	Static Head	3.20	M
Pump Selection	XFP 80C VX.2		Impeller	2		kW Rating	2.2	
Actual Duty	5.17	L/S	Head	8.45	M			
			Ideal Pump Flow	12.30	L/S			
			% of Best Efficiency Point	42.0	%			

Appendix B – Storage Calculations

Storage In Manholes

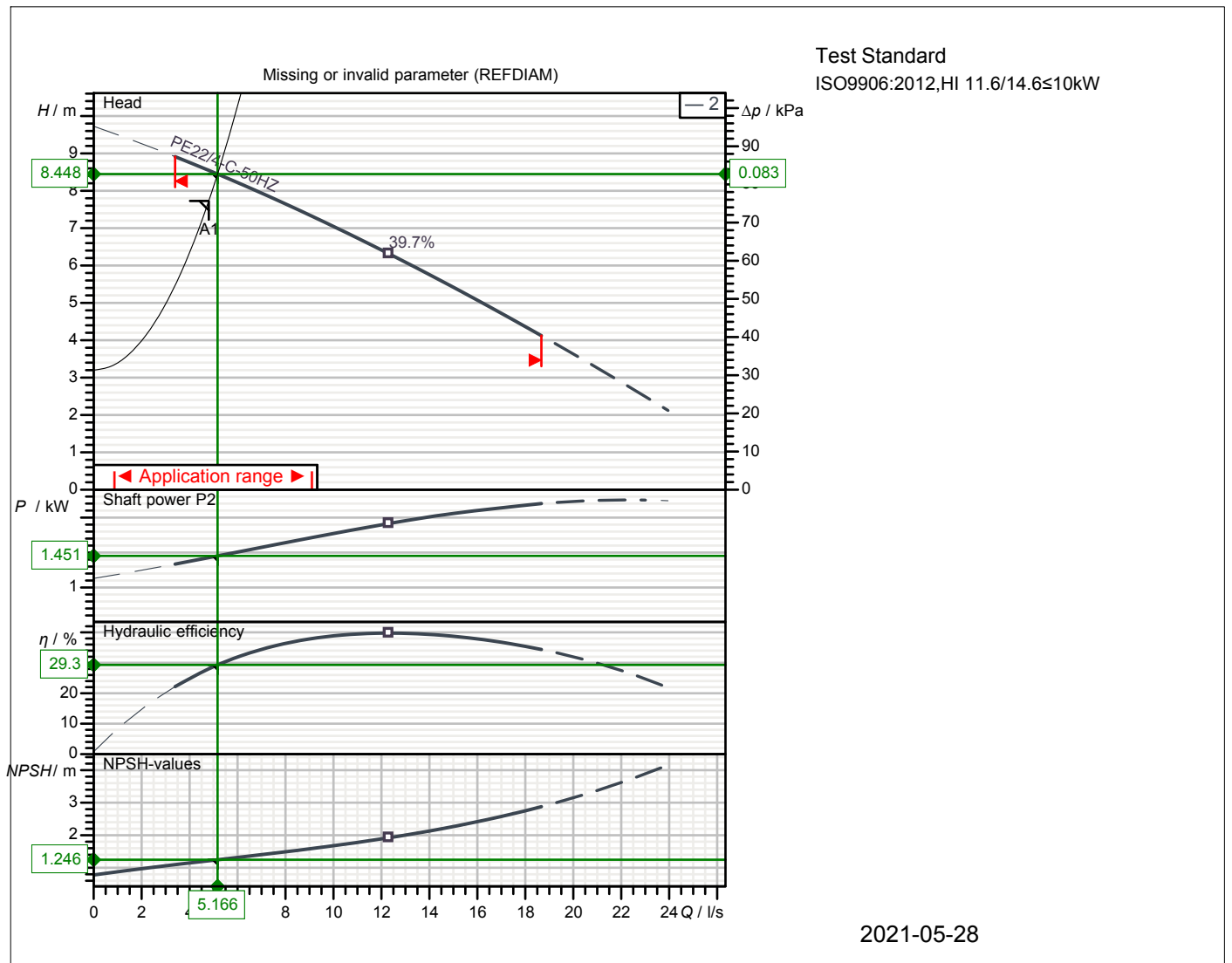
[illegible]

Storage In Gravity Sewers

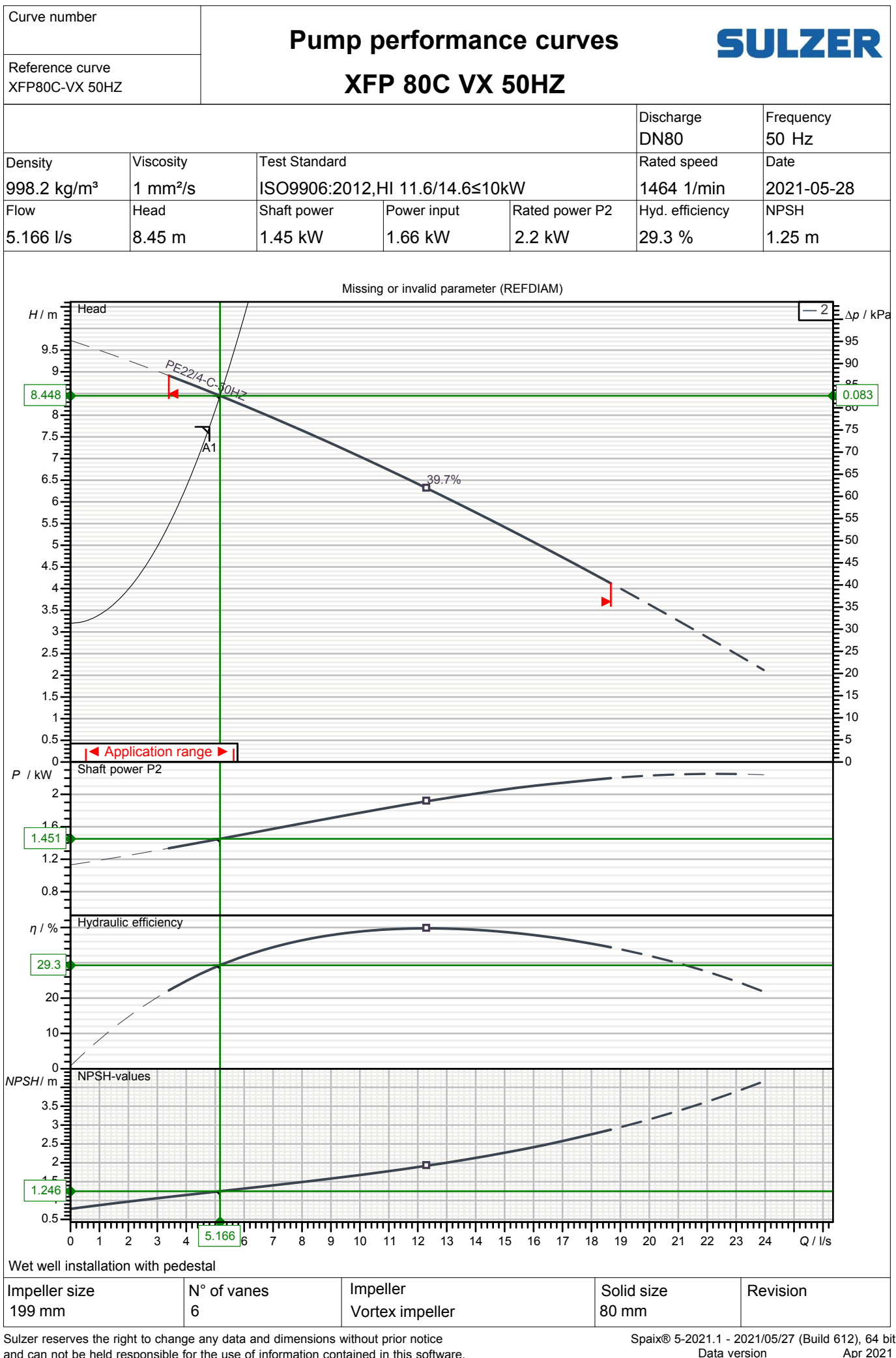
[illegible]

Appendix C – Pump Data

XFP 80C VX 50HZ



Operating data specification		Power input		1.66 kW
Flow	5.166 l/s	Head		8.45 m
Efficiency	29.3 %	Shaft power		1.45 kW
NPSH	1.25 m	Fluid		Water
Temperature	20 °C	Nature of system		Single head pump
No. of pumps	1			
Pump data				
Type	XFP 80C VX 50HZ	Make		SULZER
Series	XFP PE1-PE3	Impeller		Vortex impeller
N° of vanes	6	Impeller size		199 mm
Free passage	80 mm	Suction flange		DN80
Discharge flange	DN80	Type of installation		Wet well installation with pedestal
Moment of inertia	0.0083 kg m ²			
Motor data				
Rated voltage	400 V	Frequency		50 Hz
Rated power P2	2.2 kW	Nominal Speed		1440 1/min
Number of poles	4	Efficiency		86.8 %
Power factor	0.8	Rated current		4.6 A
Starting current	29.8 A	Rated torque		14.6 Nm
Starting torque	21.2 Nm	Degree of protection		IP 68
Insulation class	H	No. starts per hour		15



Frequency
50 Hz

PE1

Motor performance curve

SULZER

PE22/4-C-50HZ

Rated power
2.2 kW

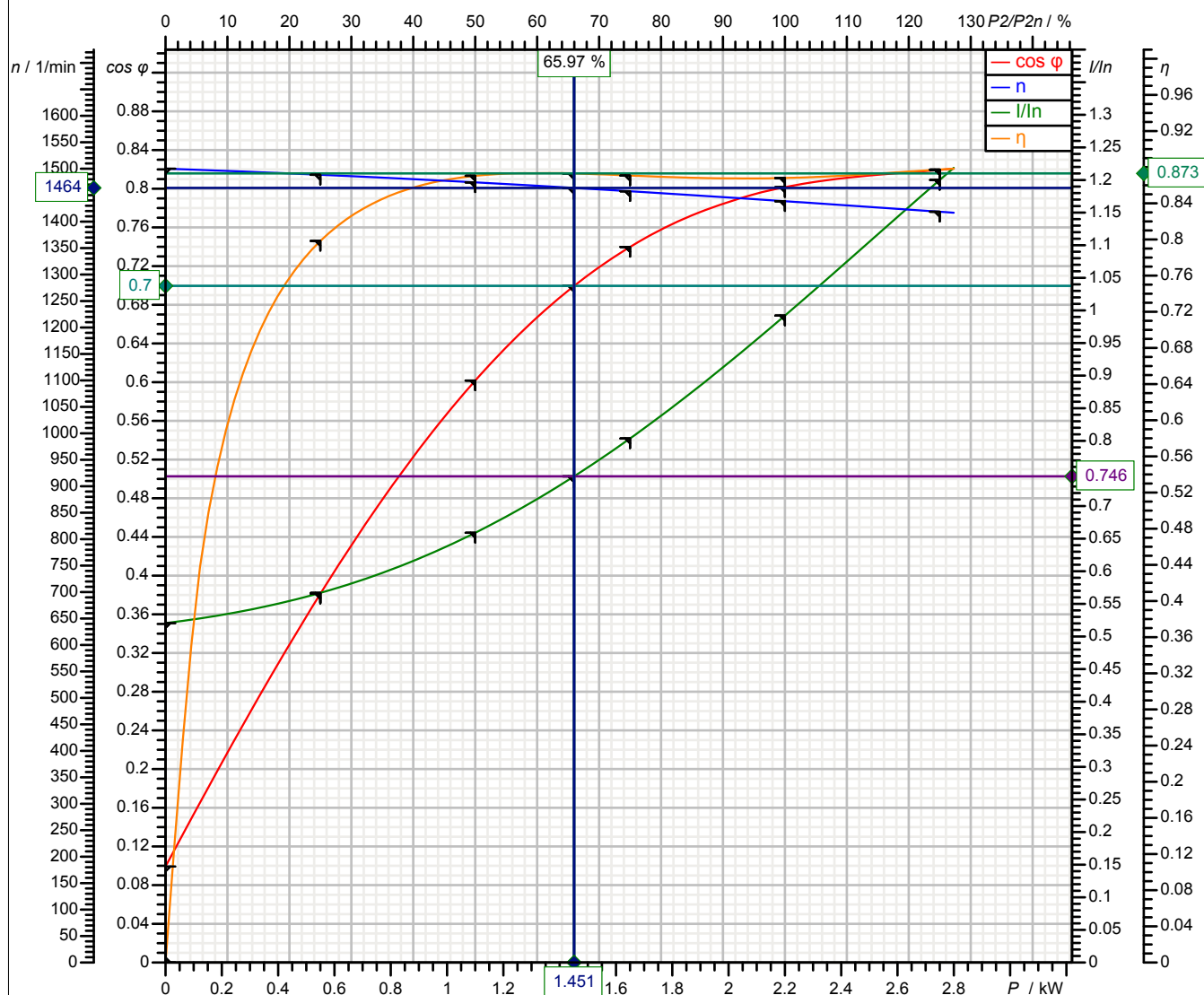
Service factor
1

Nominal Speed
1440 1/min

Number of poles
4

Rated voltage
400 V

Date
2021-05-28



Symbol	No load	25 %	50 %	75 %	100 %	125 %
P2 / kW	0	0.55	1.1	1.65	2.2	2.75
P1 / kW	0.1646	0.6889	1.264	1.895	2.534	3.135
I / A	2.394	2.608	3.031	3.697	4.564	5.52
cos φ	0.09926	0.3813	0.6017	0.7398	0.8016	0.8195
n / 1/min	1500	1489	1474	1457	1439	1419
s / %	0	0.7635	1.719	2.839	4.09	5.418
M / Nm	0	3.528	7.125	10.81	14.6	18.51
η / %	0	79.84	87.05	87.08	86.81	87.74

Tolerance according to VDE 0530 T1 12.84 for rated power

Starting current
29.8 A

Starting torque
21.2 Nm

Moment of inertia
0.008 kg m²

No. starts per hour
15

SULZER

Massblatt XFP 80C-VX Nassinstallation
Dimension sheet WET-WELL Installation
Dimensioni Installazione sommersa
Hoja de dimensiones instalación sumergida
Plan d'encombrement Installation noyee

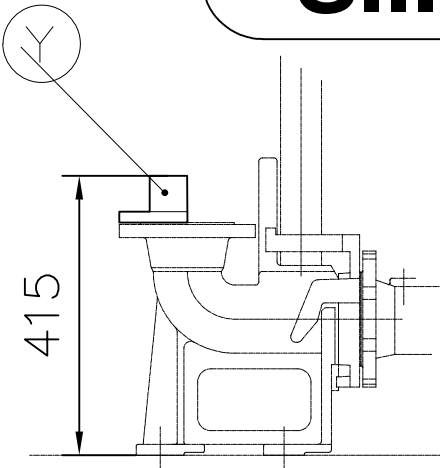
No: AN-M.22.609 - 06
Drawn: 11.08.10 / D.Whelan
Issue Date: 10/01/2018
Anderungen vorbehalten
Technical changes reserved
Con riserva di modifiche
Con reserva de modificaciones
Sous réserve de modification

50Hz

Typ Type Tipo	Gewicht Weight Poids Peso (kg)
PE 15/4	107
PE 22/4	117
PE 29/4	117

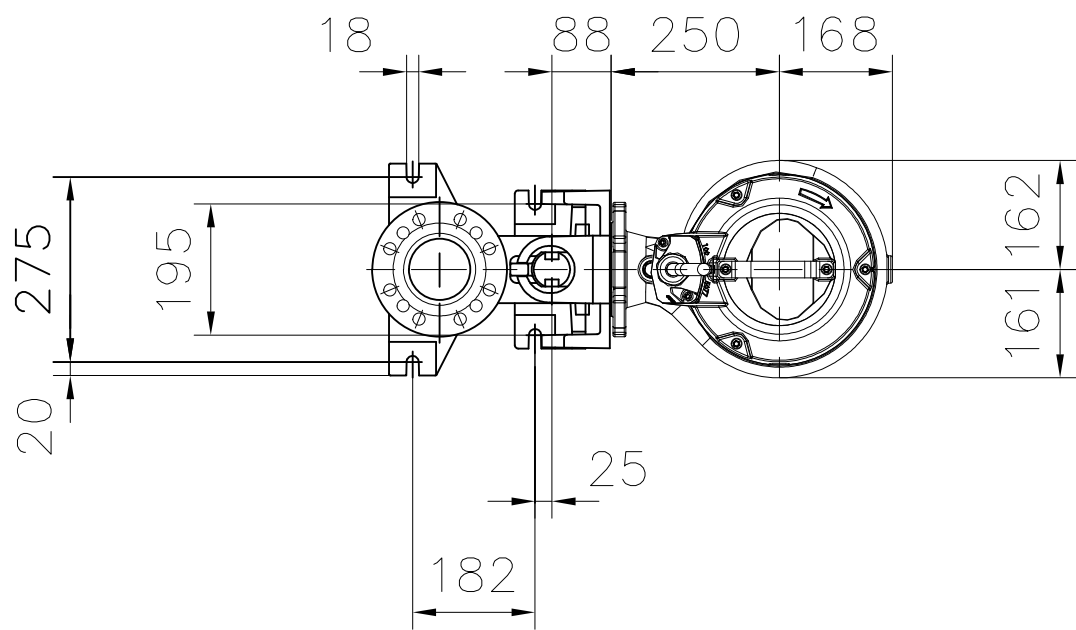
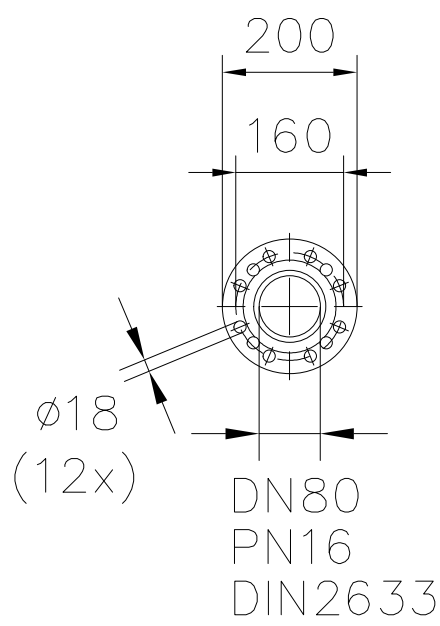
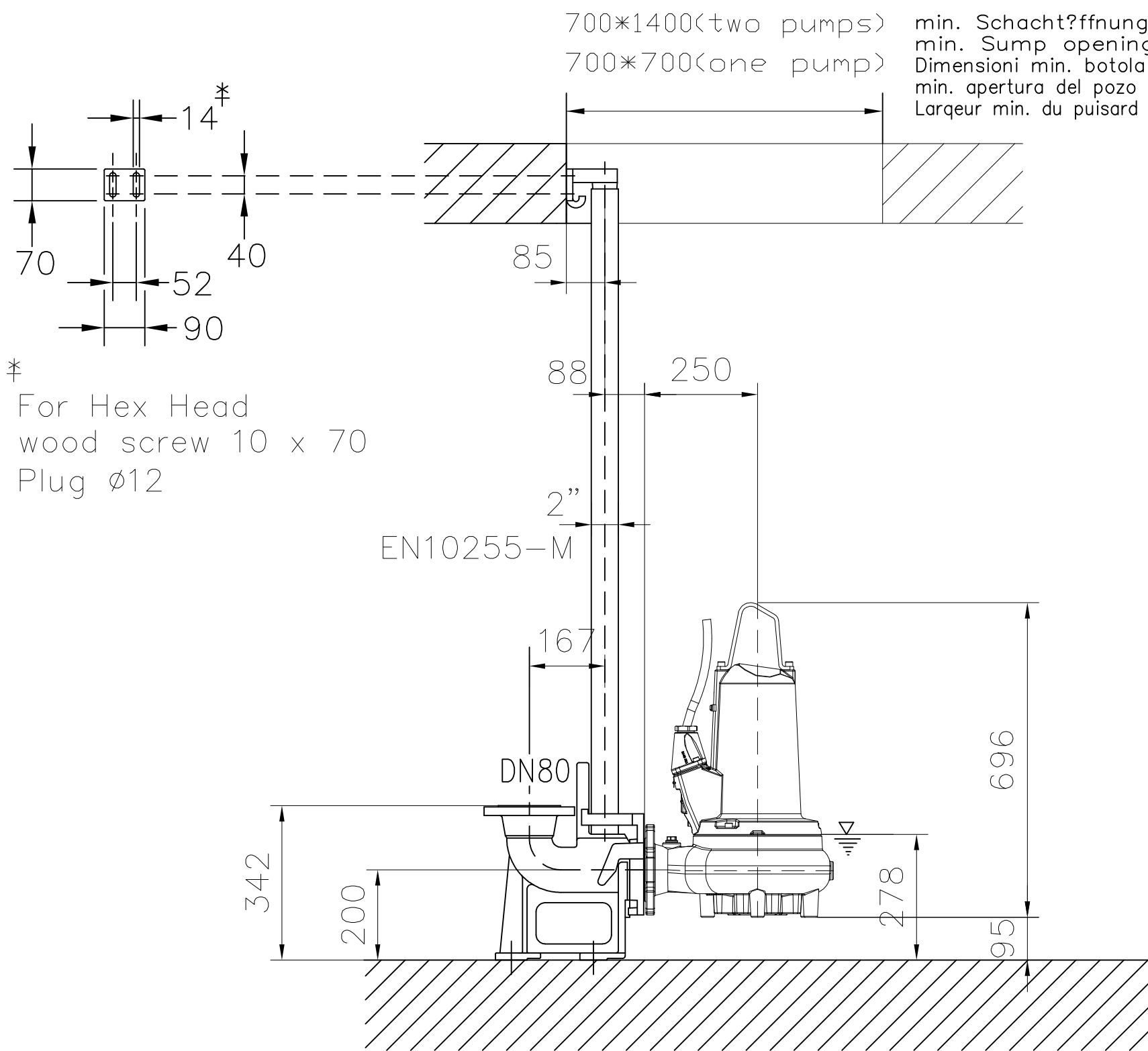
Part No.	Y(mm)
DN 80	
6 232 0649	
6 232 0650	ø 90

S.I.



60Hz

Typ Type Tipo	Gewicht Weight Poids Peso (kg)
PE 18/4W	117
PE 22/4	117
PE 28/4W	117
PE 35/4	117



Gewicht: Beinhaltet Pumpe, Halterung (Füsstück) und Kabel (50 Hz = 10 m; 60 Hz = 15 m)
Weight: includes pump, slider bracket and cable (50 Hz = 10 m; 60 Hz = 15 m)
Peso: include pompa, pezzo intermedio a cavo (50 Hz = 10 m; 60 Hz = 15 m)
Peso: Incluye bomba, soporte deslizante y cable (50 Hz = 10 m; 60 Hz = 15 m)
Poids: incluant la pompe, le coulisseau et le câble (50 Hz = 10 m; 60 Hz = 15 m)

Guss-Allgemeintoleranzen nach DIN1680 - GTB16
General tolerances for castings in acc. to DIN1680-GTB16
Tolleranze generali delle fusioni secondo DIN1680-GTB16
Tolerancias generales para la fundición seg. de DIN1680-GTB16
Tolérance générale de la fonderie selon DIN1680-GTB16

SULZER

Massblatt XFP 80C-VX Nassinstallation
Dimension sheet WET-WELL Installation
Dimensioni Installazione sommersa
Hoja de dimensiones instalación sumergida
Plan d'encombrement Installation noyee

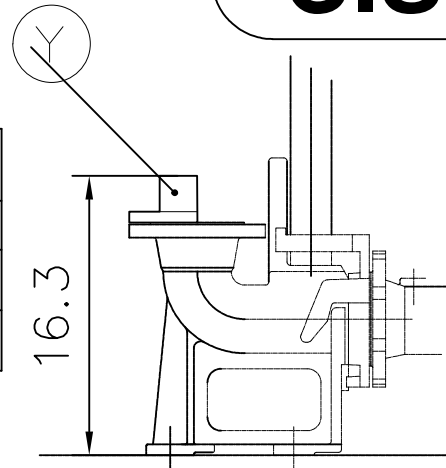
No: AN-M.22.609 - 06
Drawn: 11.08.10 / D.Whelan
Issue Date: 10/01/2018
Anderungen vorbehalten
Technical changes reserved
Con riserva di modifiche
Con reserva de modificaciones
Sous réserve de modification

50Hz

Typ Type Tipo	Gewicht Weight Poids Peso (lbs)
PE 15/4	236
PE 22/4	258
PE 29/4	258

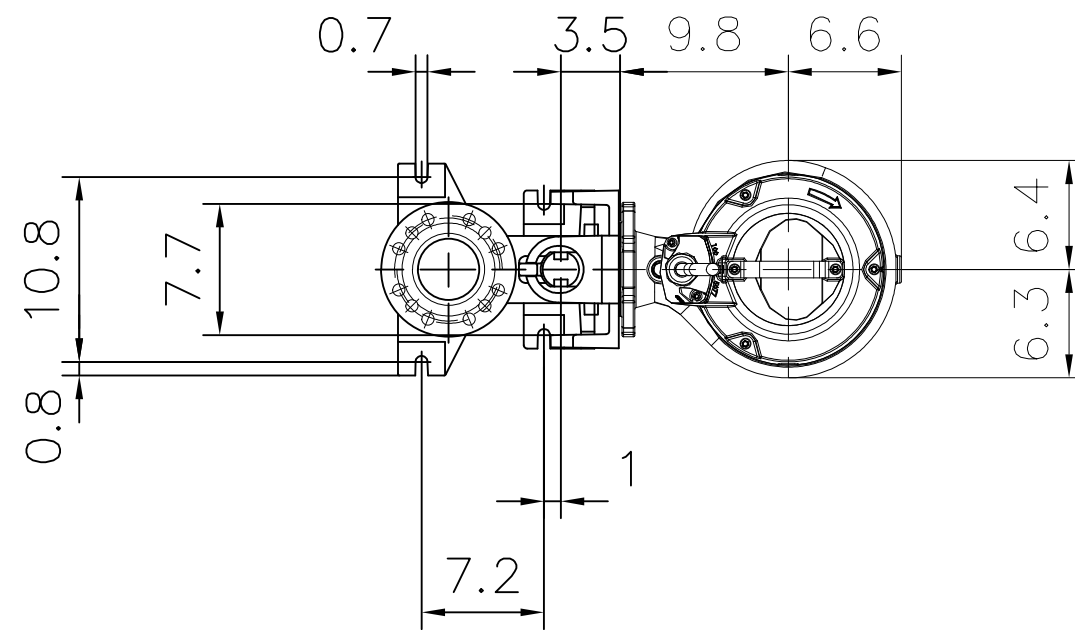
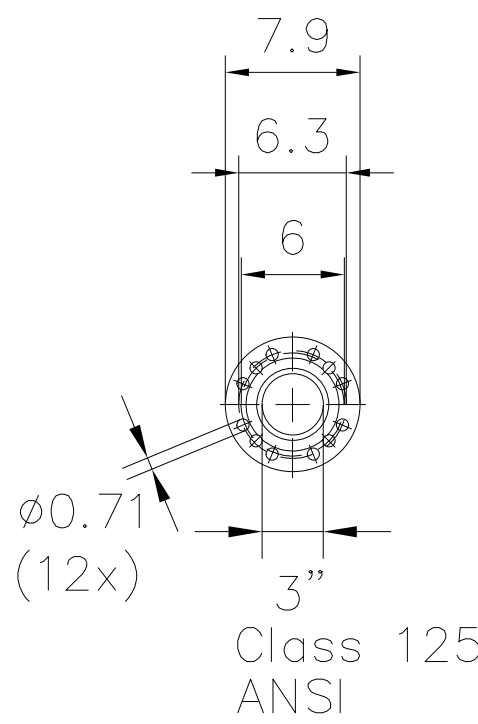
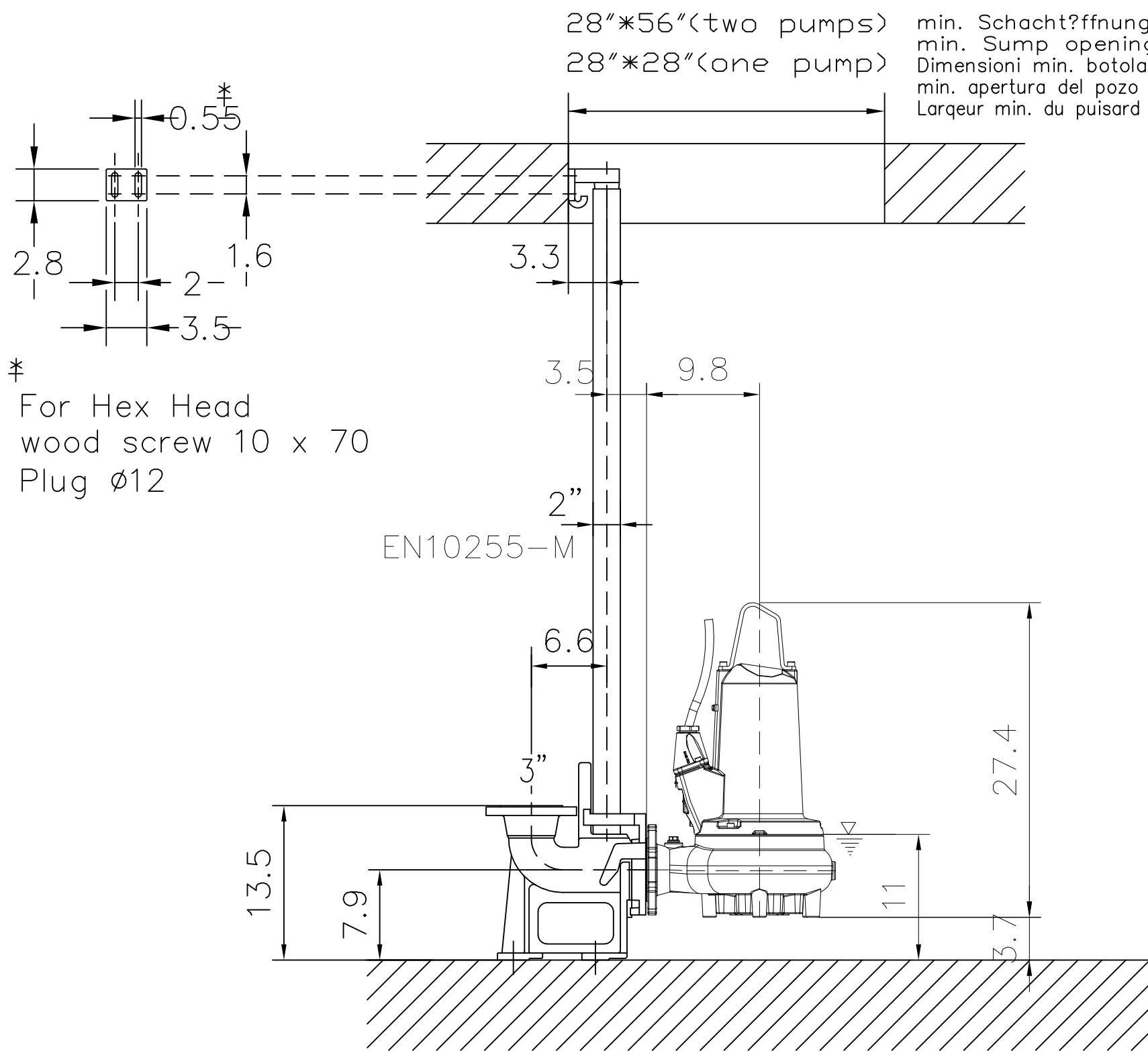
Part No.	Y(mm)
DN 80	
6 232 0649	
6 232 0650	ø 90

U.S.



60Hz

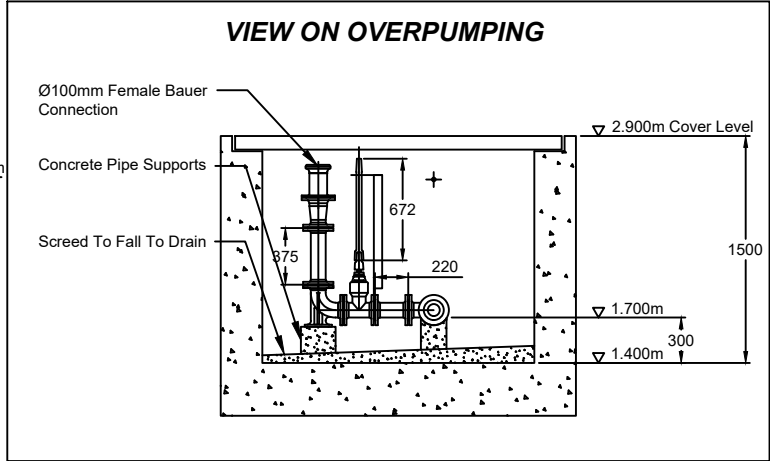
Typ Type Tipo	Gewicht Weight Poids Peso (lbs)
PE 18/4W	258
PE 22/4	258
PE 28/4W	258
PE 35/4	258



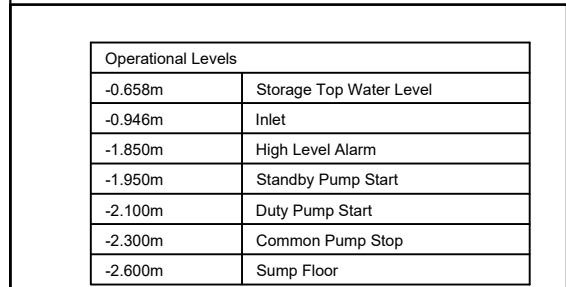
Gewicht: Beinhaltet Pumpe, Halterung (Füsstück) und Kabel (50 Hz = 10 m; 60 Hz = 15 m)
Weight: includes pump, slider bracket and cable (50 Hz = 10 m; 60 Hz = 15 m)
Peso: include pompa, pezzo intermedio a cavo (50 Hz = 10 m; 60 Hz = 15 m)
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Guss-Allgemeintoleranzen nach DIN1680 - GTB16
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Tolerancias generales para la fundición seg. de DIN1680-GTB16
Tolérance générale de la fonderie selon DIN1680-GTB16

Appendix D – Drawings



DRAWING N°.	SHEET N°.	REVISION
715281_T2	01	B



PUMP INFORMATION	
Pump Type	<i>XFP 80C VX.2</i>
Motor Rating	<i>2.2kW</i>
Pipe / Valve Size	<i>Ø80mm</i>
Impeller	<i>Vortex</i>
Control System	<i>Pulsar Ultrasonic Ultrasonic Transducer And Controller Complete With Two Back Up Float Switches</i>
Final Connection	<i>Ductile Iron</i>
Termination	<i>DN80 PN16 Flange</i>
Pipe O.D.	<i>Ø98mm</i>
Flange Diameter	<i>PN16</i>

- 1 ALL DIMENSIONS IN MILLIMETRES, ALL IN METERS IN METRES
ACQ, UNLESS OTHERWISE STATED
- 2 ALL EXTRANEOUS METAL WORK IS TO BE EQUILATERALLY
BONDED WITH SAFETY ELECTRICAL EARTH (DO NOT REMOVE
LABELS FITTED)
- 3 ALL CIVIL WORK BY OTHERS INCLUDING MAKING GOOD
AROUND PIPES AFTER INSTALLATION BENCHING FIXING
ACCESS COVERS AND LAMING GABLE DUCTS
- 4 STRUCTURAL DETAIL ILLUSTRATIVE ONLY
- 5 BENCHING TO BE PERFORMED AS LAID DOWN IN 'SEWERAGE
SECTOR GUIDANCES (SSG) DESIGN AND CONSTRUCTION
GUIDANCE V2 (DOGV2)' AND TO LOCAL ADOPTING AUTHORITY
SPECIFICATIONS
- 6 BENCHING TO BE PERFORMED AFTER PUMP INSTALLATION
- 7 ALL DUCTS 100 I.D. MIN COMPLETE WITH DRAW WROTES AND
AVOIDING ACUTE CHANGES OF DIRECTION SERVICE DUCTS
TO SUPPLIER'S SPECIFICATIONS
- 8 DIRECTION OF DUCTS SHOWN DIAGRAMMATICALLY - ALL
DUCTS TO BE LAID ON MOST DIRECT LINE TO SUIT SERVICE
BEING CARRIED
- 9 SITE PLAN ILLUSTRATIVE IF NO SPECIFIC DETAILS
PREVIOUSLY PROVIDED
- 10 LEVEL CONTROLS SHOWN NOTIONALLY, TO BE POSITIONED
AWAY FROM OBSTRUCTIONS, LEVELS READILY ADJUSTABLE
AFTER INSTALLATION
- 11 DRAWINGS ARE INDICATIVE WITH REGARD TO CIVIL WORKS
AND SHOULD NOT BE USED FOR CONSTRUCTION

B	27/05/21	Second Issue	T.G.	J.A.	G.G.
A	11/03/21	First Issue	T.G.	J.A.	G.G.
REV	DATE	DESCRIPTION	DRN	CHK	APR

FOR APPROVAL



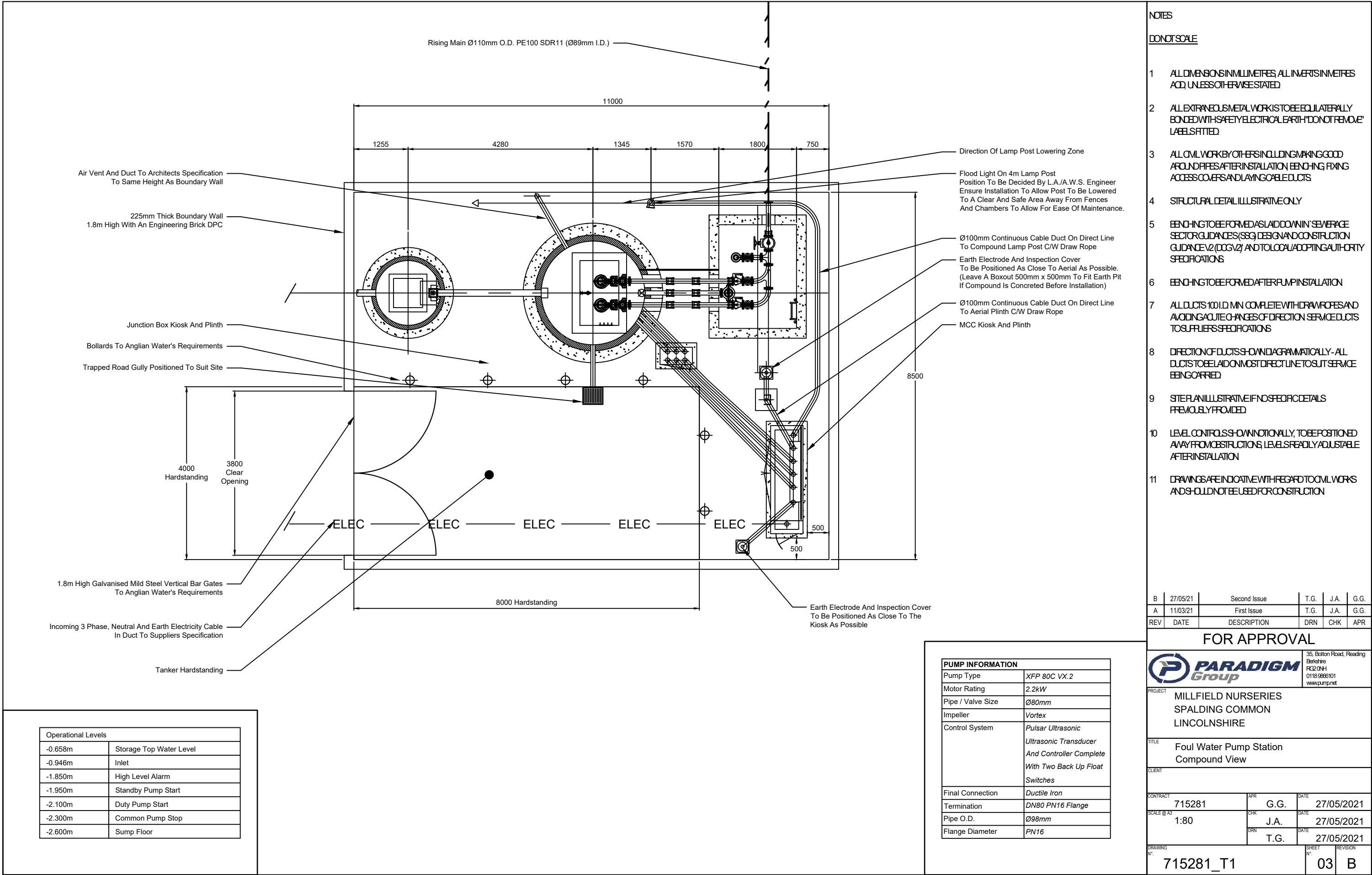
PROJECT	MILLFIELD NURSERIES SPALDING COMMON LINCOLNSHIRE
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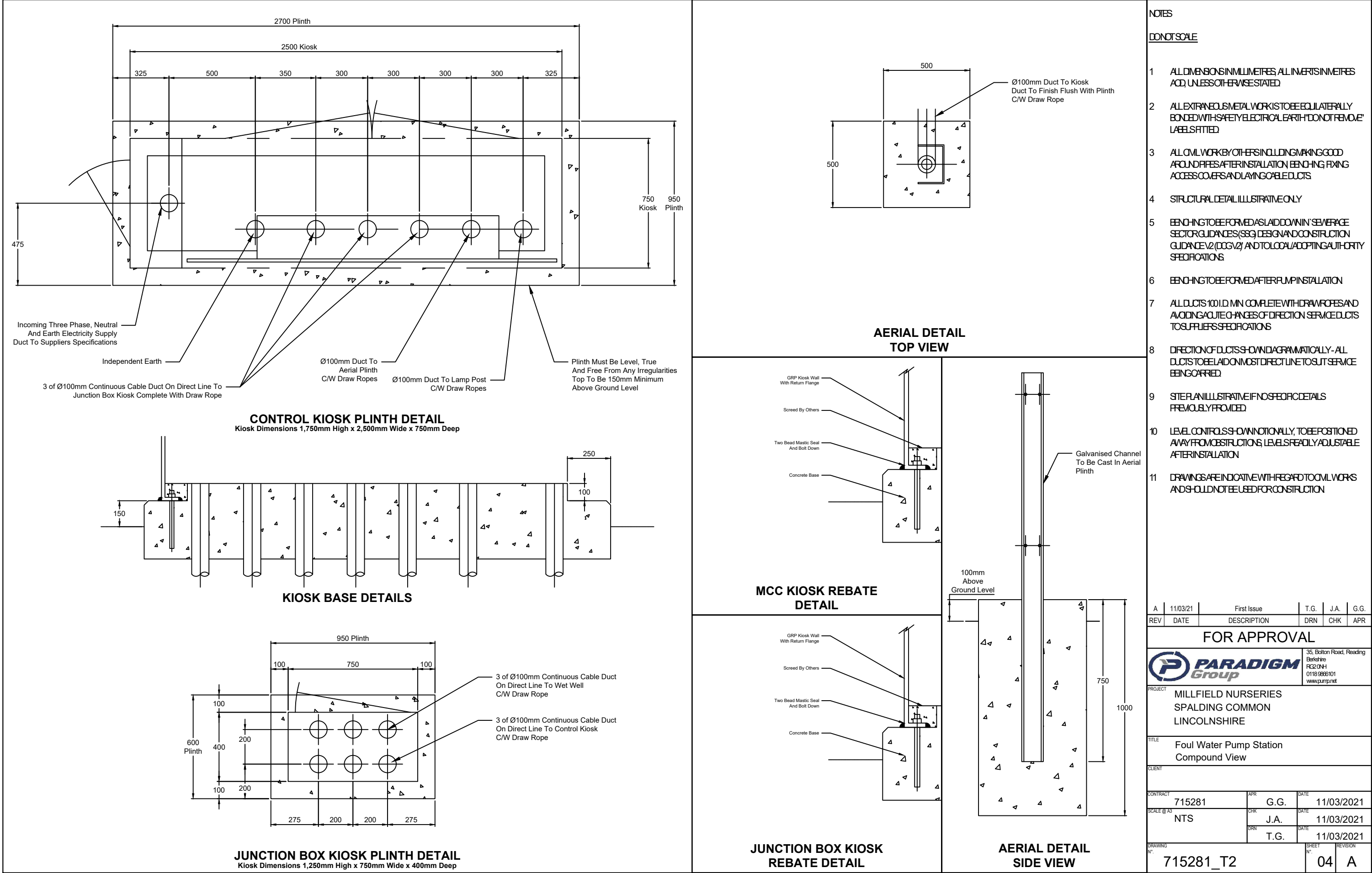
TITLE	Foul Water Pump Station Top View
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CLIENT

CONTRACT	715281	APR	G.G.	DATE	27/05/2021
SCALE @ A3	1:40	CHK	J.A.	DATE	27/05/2021
		DRN	T.G.	DATE	27/05/2021

DRAWING N°.	SHEET N°.	REVISION
715281_T2	02	B





NOTES

DONOT SCALE

- 1 ALL DIMENSIONS IN MILLIMETRES, ALL INVERTS IN METRES AOD, UNLESS OTHERWISE STATED
- 2 ALL EXTRANEOUS METAL WORK IS TO BE EQUILATERALLY BONDED WITH SAFETY ELECTRICAL EARTH "DONOT REMOVE" LABELS FITTED
- 3 ALL OML WORK BY OTHERS INCLUDING MAKING GOOD AROUND PIPES AFTER INSTALLATION, BENCHING, FIXING ACCESS COVERS AND LAYING CABLE DUCTS
- 4 STRUCTURAL DETAIL ILLUSTRATIVE ONLY
- 5 BENCHING TO BE FORMED AS LAID DOWN IN 'SEWERAGE SECTOR GUIDANCES (SSG) DESIGN AND CONSTRUCTION GUIDANCE V2 (DCGV2)' AND TO LOCAL/ADOPTING AUTHORITY SPECIFICATIONS
- 6 BENCHING TO BE FORMED AFTER PUMP INSTALLATION
- 7 ALL DUCTS 100 I.D. MIN COMPLETE WITH DRAW ROPES AND AVOIDING ACUTE CHANGES OF DIRECTION. SERVICE DUCTS TO SUPPLIER'S SPECIFICATIONS
- 8 DIRECTION OF DUCTS SHOWN DIAGRAMMATICALLY - ALL DUCTS TO BE LAID ON MOST DIRECT LINE TO SUIT SERVICE BEING CARRIED
- 9 SITE PLAN ILLUSTRATIVE IF NO SPECIFIC DETAILS PREVIOUSLY PROVIDED
- 10 LEVEL CONTROLS SHOWN NOTIONALLY, TO BE POSITIONED AWAY FROM OBSTRUCTIONS, LEVELS READILY ADJUSTABLE AFTER INSTALLATION
- 11 DRAWINGS ARE INDICATIVE WITH REGARD TO OML WORKS AND SHOULD NOT BE USED FOR CONSTRUCTION

A	11/03/21	First Issue	T.G.	J.A.	G.G.
REV	DATE	DESCRIPTION	DRN	CHK	APR

FOR APPROVAL

 PARADIGM <i>Group</i>	35, Bolton Road, Reading Berkshire RG2 0NH 0118 9866101 www.pumpnet
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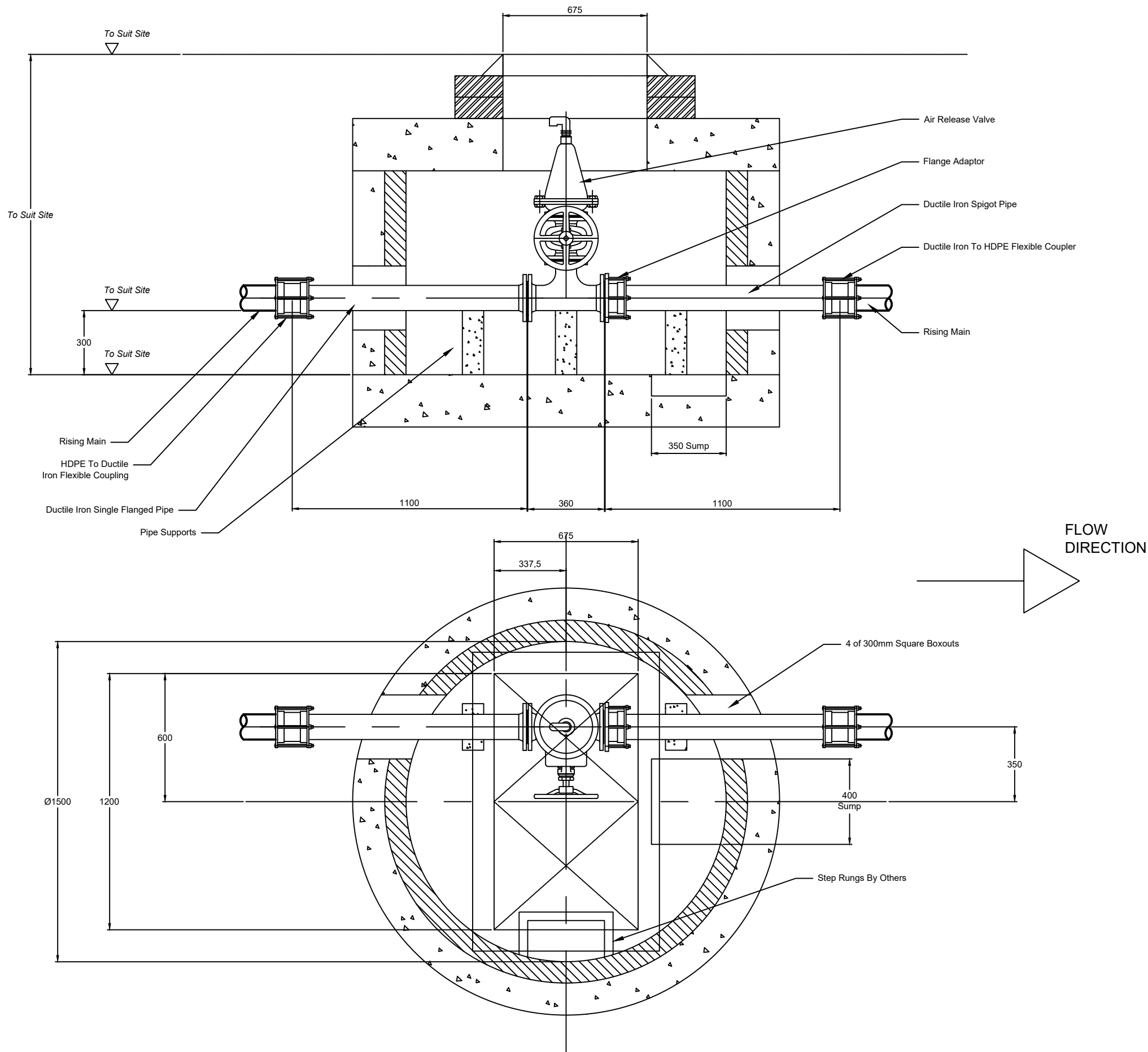
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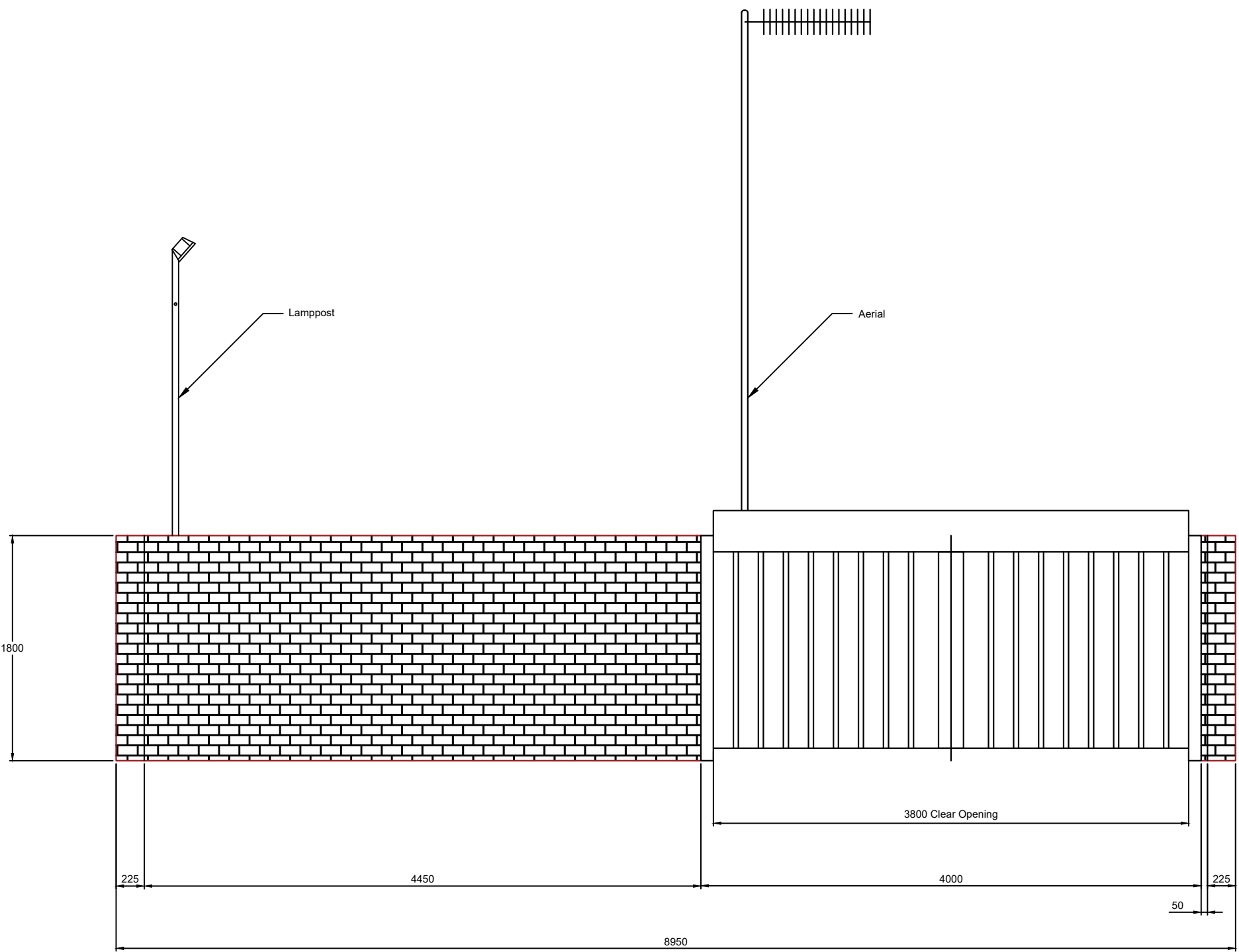
TITLE	Foul Water Pump Station Air Release Valve
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CLIENT	
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CONTRACT	715281	APR	G.G.	DATE	11/03/2021
SCALE @ A3	1:20	CHK	J.A.	DATE	11/03/2021
		DRN	T.G.	DATE	11/03/2021

DRAWINGS N°:	715281_T2	SHEET N°:	05	REVISION	A
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NOTES

DONOT SCALE

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REV	DATE	DESCRIPTION	DRN	CHK	APR

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Berkshire
RG2 0NH
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www.pump.net

PROJECT
MILLFIELD NURSERIES
SPALDING COMMON
LINCOLNSHIRE

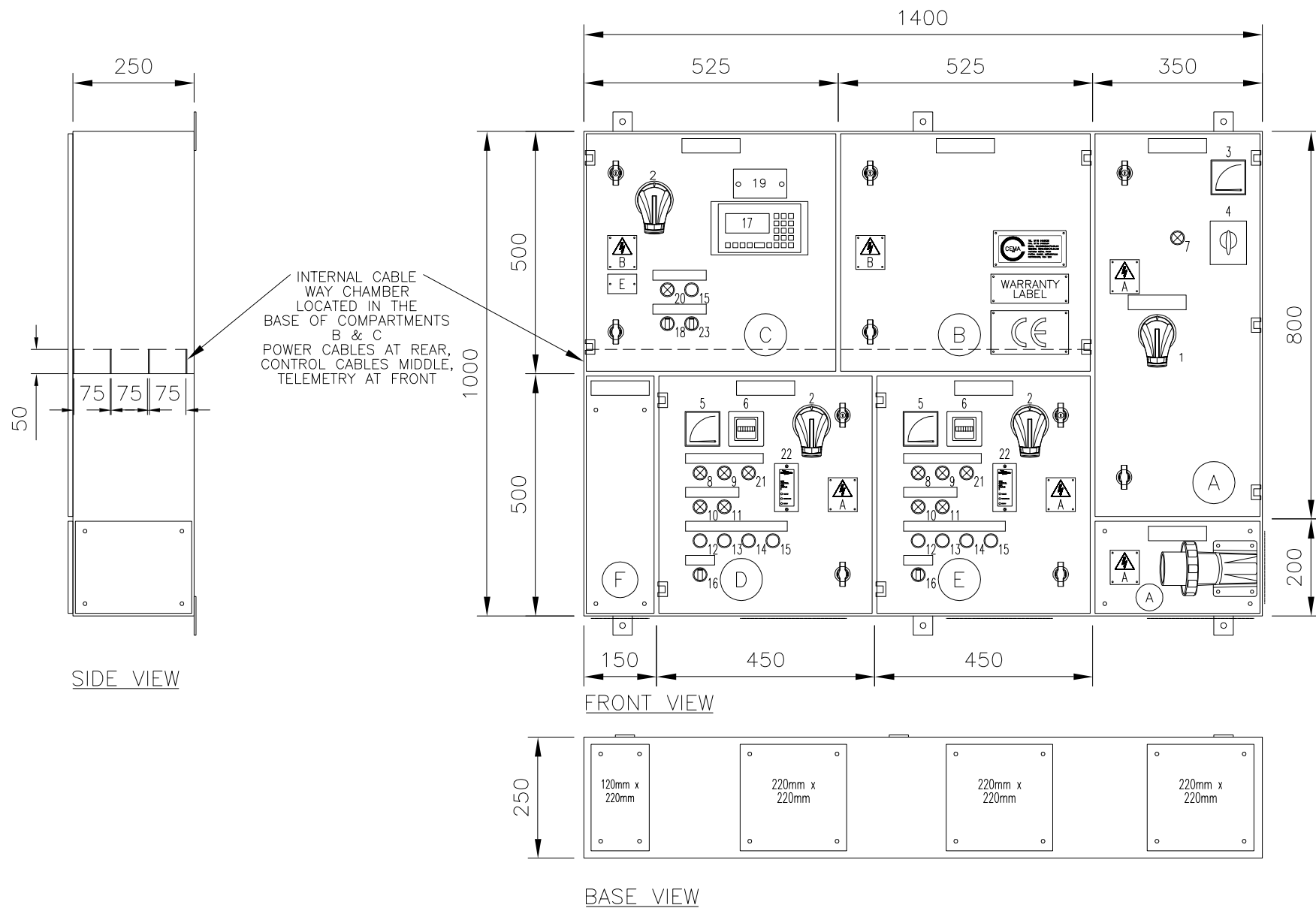
TITLE
Foul Water Pump Station
Front Boundary Details

CLIENT

CONTRACT	715281	APR	G.G.	DATE	27/05/2021
SCALE @ A3	NTS	CHK	J.A.	DATE	27/05/2021
		DRN	T.G.	DATE	27/05/2021

DRAWINGS N°:	715281_T2	SHEET N°:	07	REVISION	A
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Appendix E – Wiring Diagrams



2P	12.05.21	CUSTOMER COMMENTS; NOW DOL & FLOWMETER REMOVED	IS	HM	
1P	11.12.20	ORIGINAL	MK	HM	
REV	DATE	DESCRIPTION	BY	CHK	

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H.MANNERING



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CUSTOMER
PARADIGM SYSTEMS

PROJECT TITLE
SFA7 DUAL PUMP (FORM 4)
CONTROL PANEL

NAME OF SITE
SITE TBC

ASSEMBLY REFERENCE
SFA7 DUAL PUMP (FORM 4)
DOL STARTERS

DRAWING TITLE
GENERAL ARRANGEMENT OF
SFA7 DUAL PUMP PUMPING STATION
CONTROL PANEL

COMPARTMENT REFERENCE	REV
.	2P

COMPONENTS	DESCRIPTION
1	MAINS/OFF/GENERATOR CHANGEOVER ISOLATOR
2	FUSES SWITCH
3	0–500V VOLTMETER
4	VOLTMETER 7 POSITION SELECTOR SWITCH
5	AMMETER (DIN72)
6	HOURS RUN METER (DIN48)
7	SURGE PROTECTION FAILED INDICATOR (YELLOW)
8	AUTO AVAILABLE INDICATOR (WHITE)
9	RUNNING INDICATOR (GREEN)
10	MOTOR OVER TEMPERATURE INDICATOR (YELLOW)
11	MOTOR SEAL LEAK INDICATOR (YELLOW)
12	START PUSHBUTTON (WHITE)
13	STOP PUSHBUTTON (BLACK)
14	RESET PUSHBUTTON (YELLOW)
15	LAMP TEST PUSHBUTTON (WHITE)
16	HAND/OFF/AUTO CONTROL SWITCH
17	PULSAR ULTRA LITE
18	PULSAR ULTRA LITE ON/OFF CONTROL SWITCH
19	"DUTY ROTATION VIA THE ULTRASONIC LEVEL CONTROLLER"
20	PUMP STATION RUNNING IN BACKUP CONTROL INDICATOR (YELLOW)
21	TRIPPED INDICATOR (YELLOW)
22	MINICAS UNIT
23	PERSONNEL ON SITE ON/OFF CONTROL SWITCH

CONSTRUCTION NOTES
- PANEL TO BE A PRESS FORMED AND WELDED CONSTRUCTION TO FORM 4 TYPE 2. - PANEL INGRESS PROTECTION TO BE BSEN 60529, IP54. - PANEL ARRANGED FOR BOTTOM CABLE ENTRY, FRONT ACCESS ONLY. - PANEL FINISH EXTERNAL GLOSS ICE PLANT GREEN BS4800 14–C–35. - PANEL GEARPLATES AND GLANDPLATES TO BE GALVANISED. - PANEL DOORS FITTED WITH WING LOCKS; ONE LOCKABLE PER DOOR, KEY No.92369 - EARTH BAR 1No. 40mm x 10mm TINNED COPPER BAR. - CONTROL PANEL DOOR OPENINGS 90° - CONTROL PANEL THICKNESS; BODY 2mm/DOOR 2mm

LABELS	DESCRIPTION
A	WARNING DANGER 400V
B	WARNING DANGER 230V
C	ATEX LABEL

COMP'T	DESCRIPTION	TAG	RATED (A)	MOTOR (KW)	MOTOR FLC (A)	STARTING METHOD	COPPER (Cu)/CABLE (mmsq) (OPS W125–1)	GLANDPLATE EARTH (mmsq) (OPS W121–2)	COMP'T DEPTH (mm)	GEARPLATE	TIER HEAT LOSS (W)	TIER WEIGHTS (kg)
A	MAINS INCOMER		RATED: 63 FUSED: 32				16	20x5	FULL	TBC	TBC	TBC
A	GENERATOR SOCKET		RATED: 63 FUSED: 32				16	20x5	FULL	TBC		
B	TELEMETRY							6 (M6)	FULL	TBC		
C	ICA SECTION/COMMON CONTROLS		RATED: 20 FUSED: 6				6	6 (M6)	FULL	TBC		
D	PUMP No.1	TBC	RATED: 20 FUSED: 20	2.2	4.5	DOL	6	6 (M6)	FULL	TBC		
E	PUMP No.2	TBC	RATED: 20 FUSED: 20	2.2	4.5	DOL	6	6 (M6)	FULL	TBC		
F	CABLEWAY											
TOTAL											TBC	TBC

PLEASE NOTE, ALL OF THE ABOVE ARE INDICATIVE. CONFIRMATION SHALL BE POST FINAL DESIGN.

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ANGLIAN WATER DRAWING No.

NOTES:

1. AMBIENT AIR TEMPERATURE SHOULD NOT EXCEED +40°C AND ITS AVERAGE OVER 24 HOURS SHOULD NOT EXCEED 35°C.
THE LOWER LIMIT OF AMBIENT AIR TEMPERATURE IS –5°C.

2. THE AIR SHOULD BE CLEAN AND RELATIVE HUMIDITY SHOULD NOT EXCEED 50% AT MAXIMUM TEMPERATURE OF 40°C HIGHER RELATIVE HUMIDITY MAY BE PERMITTED AT LOWER TEMPERATURES, I.E. 90% AT 20°C. CARE SHOULD BE TAKEN OF MODERATE CONDENSATION WHICH MAY OCCASIONALLY OCCUR DUE TO VARIATIONS IN TEMPERATURE.

3. THE POLLUTION DEGREE NEEDS TO BE EQUAL OR LESS THAN POLLUTION DEGREE 3; NAMELY, CONDUCTIVE POLLUTION OCCURS OR DRY, NON–CONDUCTIVE POLLUTION OCCURS WHICH BECOMES CONDUCTIVE DUE TO CONDENSATION.

4. THE ALTITUDE OF THE SITE OF INSTALLATION SHALL NOT EXCEED 2000M.

5. THE ANTICIPATED NOISE OUTPUT SHALL BE EQUAL OR LESS THAN 55 DECIBELS.

2P	12.05.21	CUSTOMER COMMENTS; NOW DOL & FLOWMETER REMOVED	IS	HM
1P	11.12.20	ORIGINAL	MK	HM
REV	DATE	DESCRIPTION	BY	CHK

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CUSTOMER
PARADIGM SYSTEMS

PROJECT TITLE
SFA7 DUAL PUMP (FORM 4)
CONTROL PANEL

NAME OF SITE
SITE TBC

ASSEMBLY REFERENCE
SFA7 DUAL PUMP (FORM 4)
DOL STARTERS

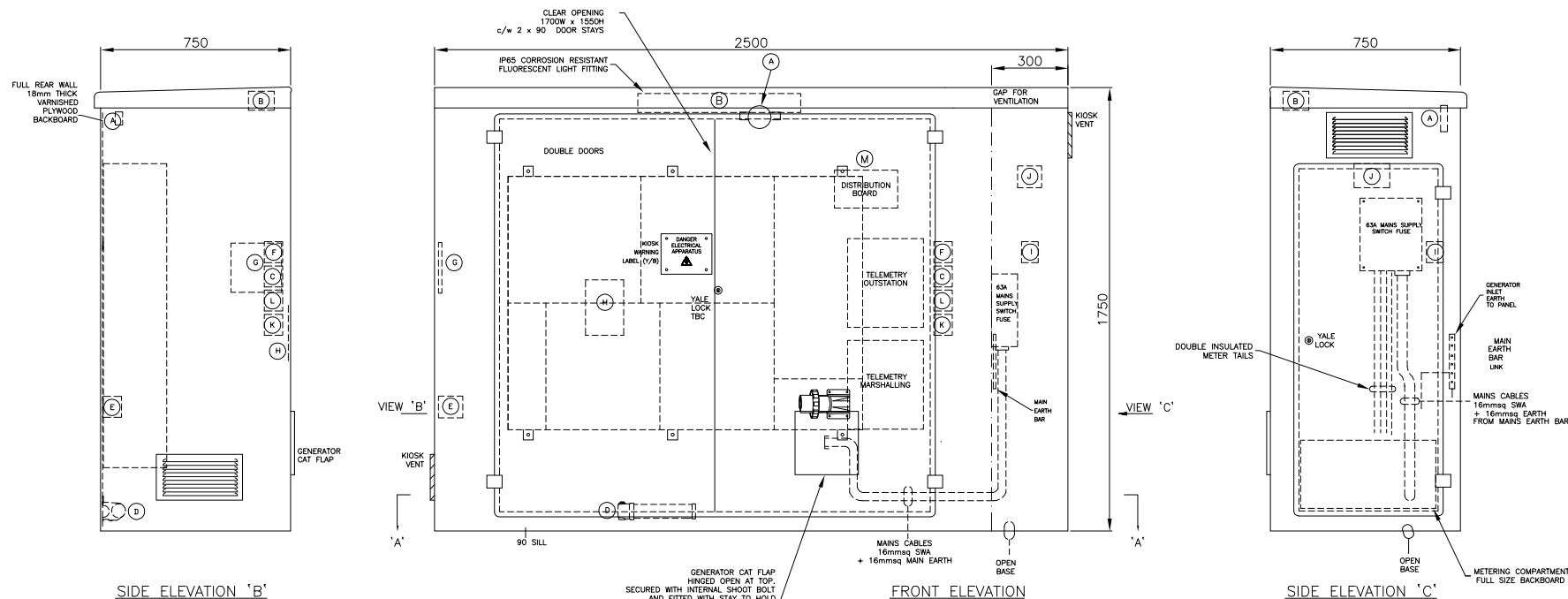
DRAWING TITLE
GENERAL ARRANGEMENT OF
SFA7 DUAL PUMP PUMPING STATION
CONTROL PANEL

COMPARTMENT REFERENCE .	REV 2P
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CEMA DRAWING No.
QT117789/GA

2 OF 3

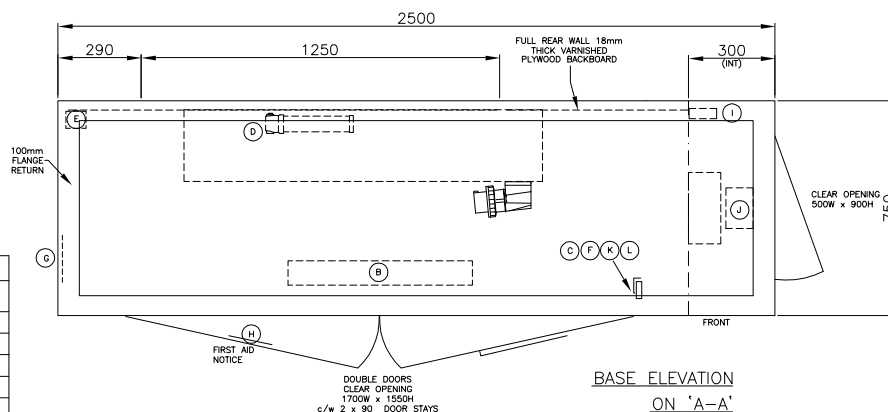
ANGLIAN WATER DRAWING No.



CONSTRUCTION NOTES

1. KIOSK TO BE GRP CONSTRUCTION
2. KIOSK COLOUR TO BE -EXTERNAL DARK GREEN BS4800 SHADE 14-C-39 INTERNAL-WHITE
3. ALL CABLING WITHIN KIOSK TO BE 100% MECHANICALLY PROTECTED
4. KIOSK LOCK TYPE TO BE YALE LOCKS

COMPONENTS	DESCRIPTION
A	DIST BOARD FEED VIA 90° ANGLE CONDUIT THROUGH BOX
B	KIOSK LIGHT
C	LIGHT SWITCH
D	KIOSK HEATER
E	KIOSK HEATER FUSE SPUR
F	FROST STAT
G	KIOSK DOCUMENT POCKET
H	FIRST AID NOTICE
I	METERING BULKHEAD LIGHT SWITCH
J	METERING BULKHEAD LIGHT
K	240V RCD SOCKET
L	TELEM FUSE SPUR
M	230VAC DISTRIBUTION BOARD



REV	DATE	DESCRIPTION	BY	CHK
2P	12.05.21	CUSTOMER COMMENTS; NOW DOL & FLOWMETER REMOVED	IS	HM
1P	11.12.20	ORIGINAL	MK	HM

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PROJECT TITLE
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CONTROL PANEL

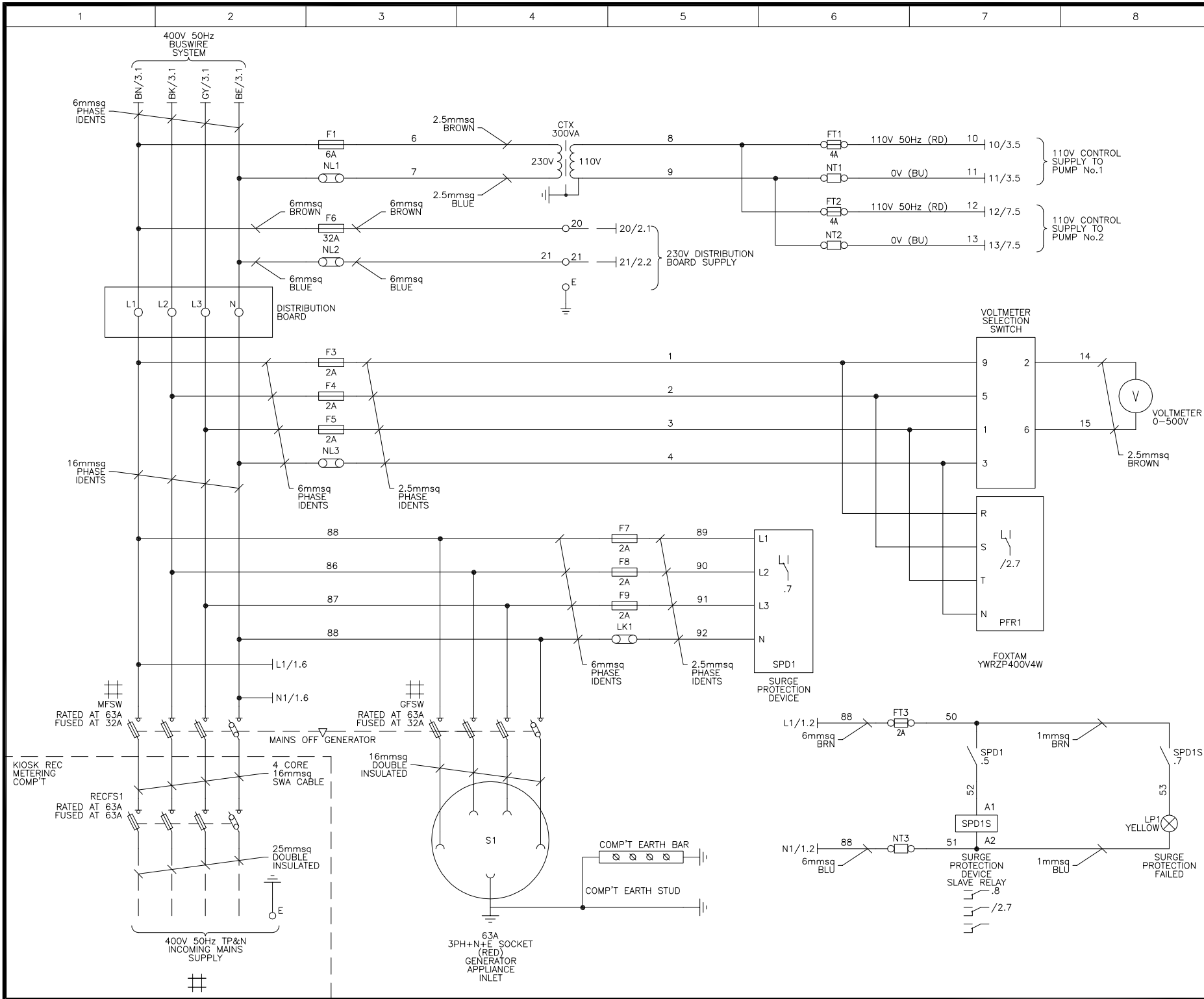
NAME OF SITE
SITE TBC

ASSEMBLY REFERENCE
SFA7 DUAL PUMP (FORM 4)
DOL STARTERS

DRAWING TITLE
GENERAL ARRANGEMENT OF
SFA7 DUAL PUMP PUMPING STATION
CONTROL PANEL

COMPARTMENT REFERENCE	REV
.	2P

CEMA DRAWING No.
QT117789/GA 3 OF 3



☒ DOOR INTERLOCKED ☐ DOOR MOUNTED

UNLESS SPECIFIED ALL CONTROL CABLES TO BE:

110V 50Hz - 1mm²sq RED
0V - 1mm²sq BLUE
24VDC +VE - 1mm²sq YELLOW
24VDC -VE - 1mm²sq BLUE
TELEMETRY - 1mm²sq PINK
4-20mA - 2 CORE SCREEN

2P	12.05.21	CUSTOMER COMMENTS; NOW DOL & FLOWMETER REMOVED	IS	HM
1P	11.12.20	ORIGINAL	MK	HM
REV	DATE	DESCRIPTION	BY	CHK

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PROJECT TITLE
SFA7 DUAL PUMP (FORM 4)
CONTROL PANEL

NAME OF SITE
SITE TBC

ASSEMBLY REFERENCE
SFA7 DUAL PUMP (FORM 4)
DOL STARTERS

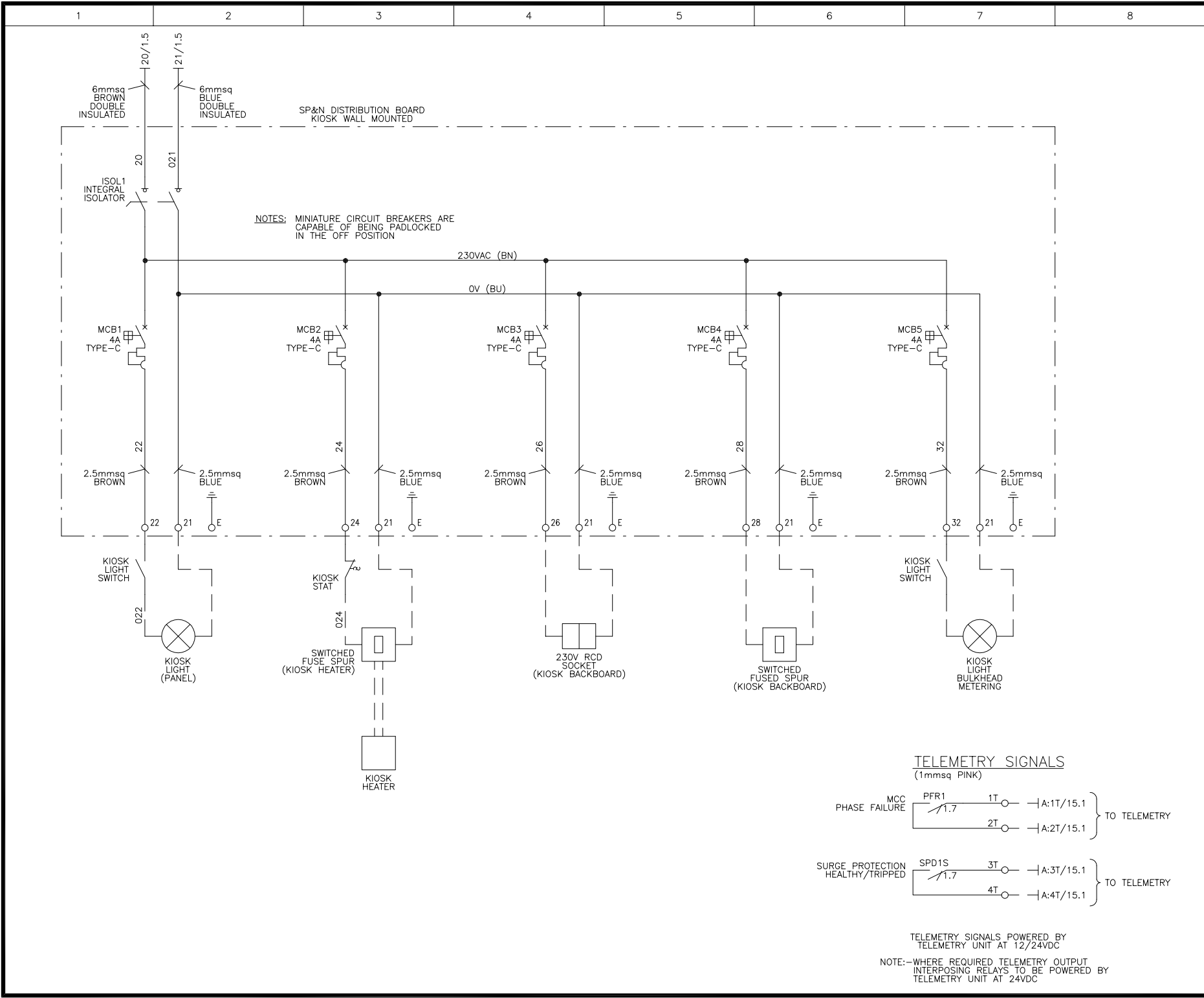
DRAWING TITLE
CIRCUIT DIAGRAM OF
MAINS/GENERATOR INCOMER

COMPARTMENT REFERENCE
A

REV
2P

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1 OF 15



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UNLESS SPECIFIED ALL CONTROL CABLES TO BE:

110V 50Hz - 1mmsq RED
0V - 1mmsq BLUE
24VDC +VE - 1mmsq YELLOW
24VDC -VE - 1mmsq BLUE
TELEMETRY - 1mmsq PINK
4-20mA - 2 CORE SCREEN

REV	DATE	DESCRIPTION	BY	CHK
2P	12.05.21	CUSTOMER COMMENTS; NOW DOL & FLOWMETER REMOVED	IS	HM
1P	11.12.20	ORIGINAL	MK	HM

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PROJECT TITLE
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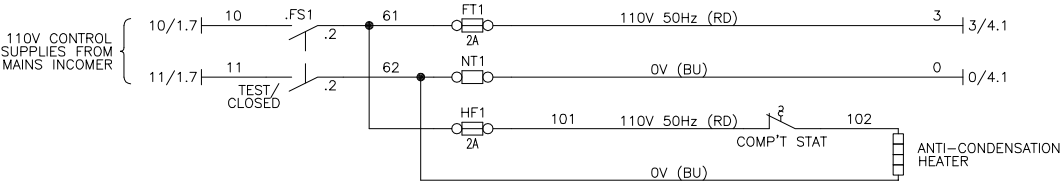
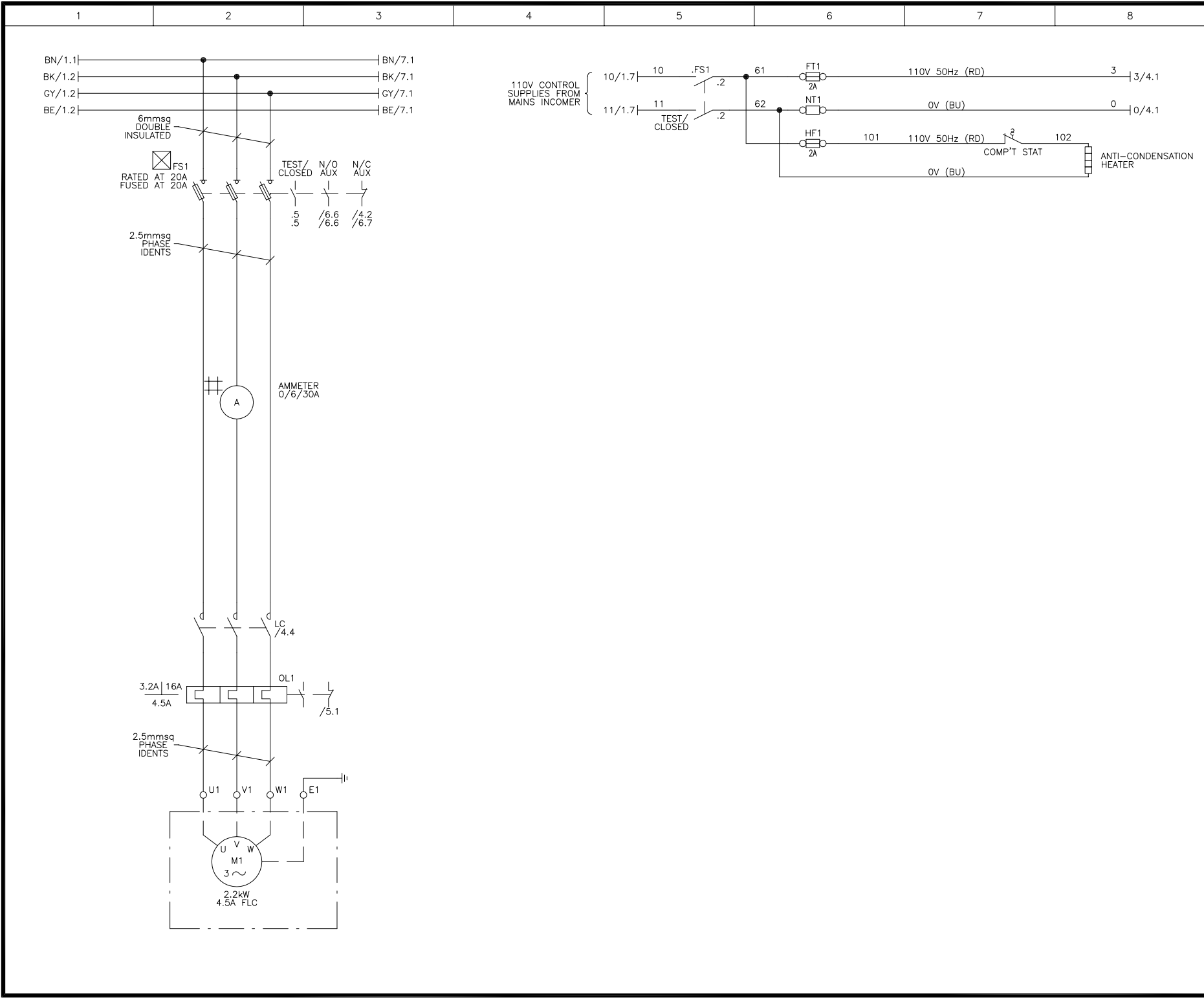
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SFA7 DUAL PUMP (FORM 4)
DOL STARTERS

DRAWING TITLE
CIRCUIT DIAGRAM OF
230VAC DISTRIBUTION BOARD

COMPARTMENT REFERENCE	REV
A	2P

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☒ DOOR INTERLOCKED ☐ DOOR MOUNTED

UNLESS SPECIFIED ALL CONTROL CABLES TO BE:

110V 50Hz	1mm ² sq	RED
0V	1mm ² sq	BLUE
24VDC +VE	1mm ² sq	YELLOW
24VDC -VE	1mm ² sq	BLUE
TELEMETRY	1mm ² sq	PINK
4-20mA	2	CORE SCREEN

2P	12.05.21	CUSTOMER COMMENTS; NOW DOL & FLOWMETER REMOVED	IS	HM
1P	11.12.20	ORIGINAL	MK	HM
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PROJECT TITLE
SFA7 DUAL PUMP (FORM 4)
CONTROL PANEL

NAME OF SITE
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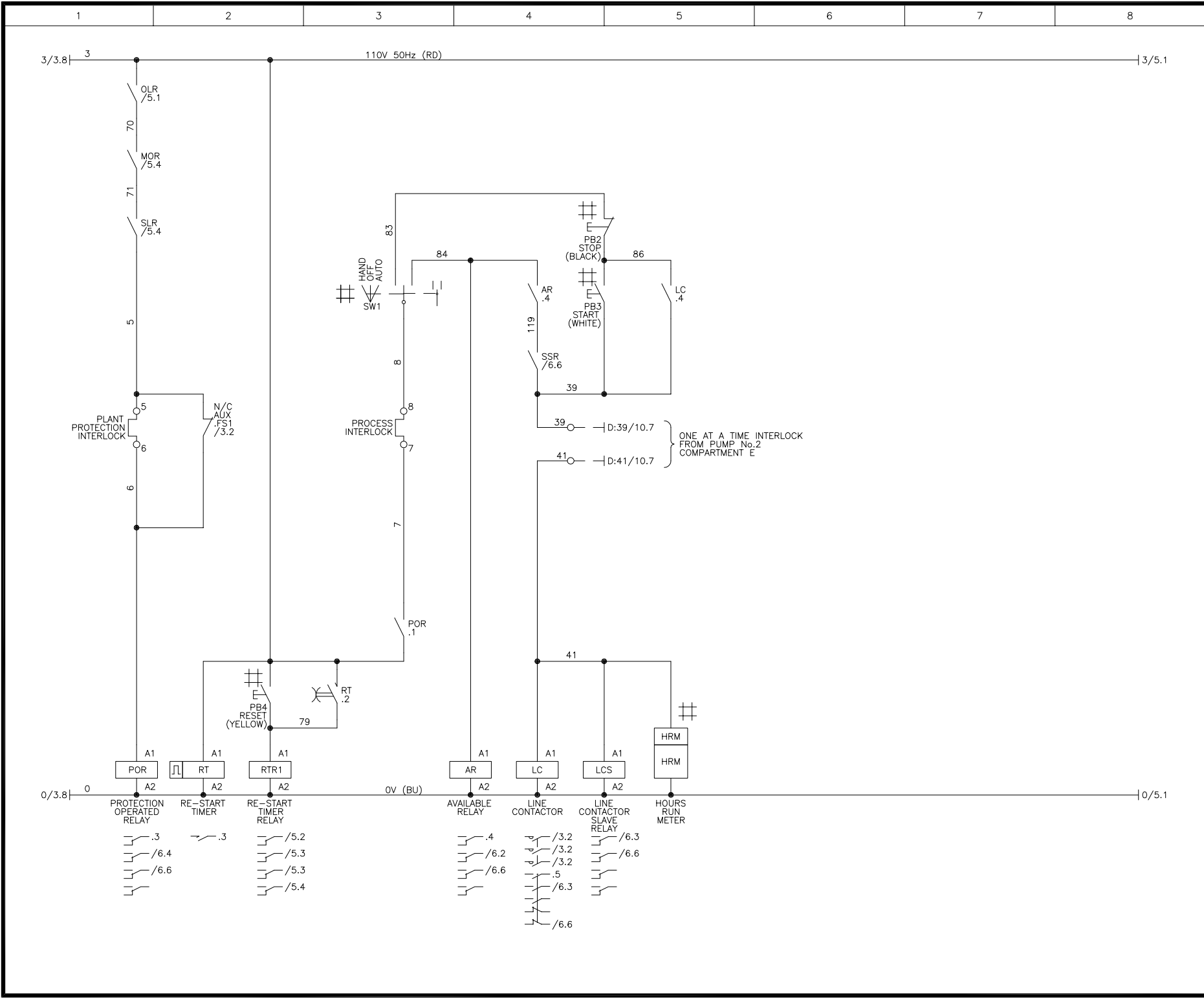
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SFA7 DUAL PUMP (FORM 4)
DOL STARTERS

DRAWING TITLE
CIRCUIT DIAGRAM OF
ANGLIAN WATER SFA7
DUAL DOL PUMP CONTROL PANEL

COMPARTMENT REFERENCE D	REV 2P
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ANGLIAN WATER DRAWING No.

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☐ DOOR MOUNTED

UNLESS SPECIFIED ALL CONTROL CABLES TO BE:
110V 50Hz - 1mmsq RED
0V - 1mmsq BLUE
24VDC +VE - 1mmsq YELLOW
24VDC -VE - 1mmsq BLUE
TELEMETRY - 1mmsq PINK
4-20mA - 2 CORE SCREEN

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1P	11.12.20	ORIGINAL	MK	HM	
REV	DATE	DESCRIPTION	BY	CHK	

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CUSTOMER
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PROJECT TITLE
SFA7 DUAL PUMP (FORM 4)
CONTROL PANEL

NAME OF SITE
SITE TBC

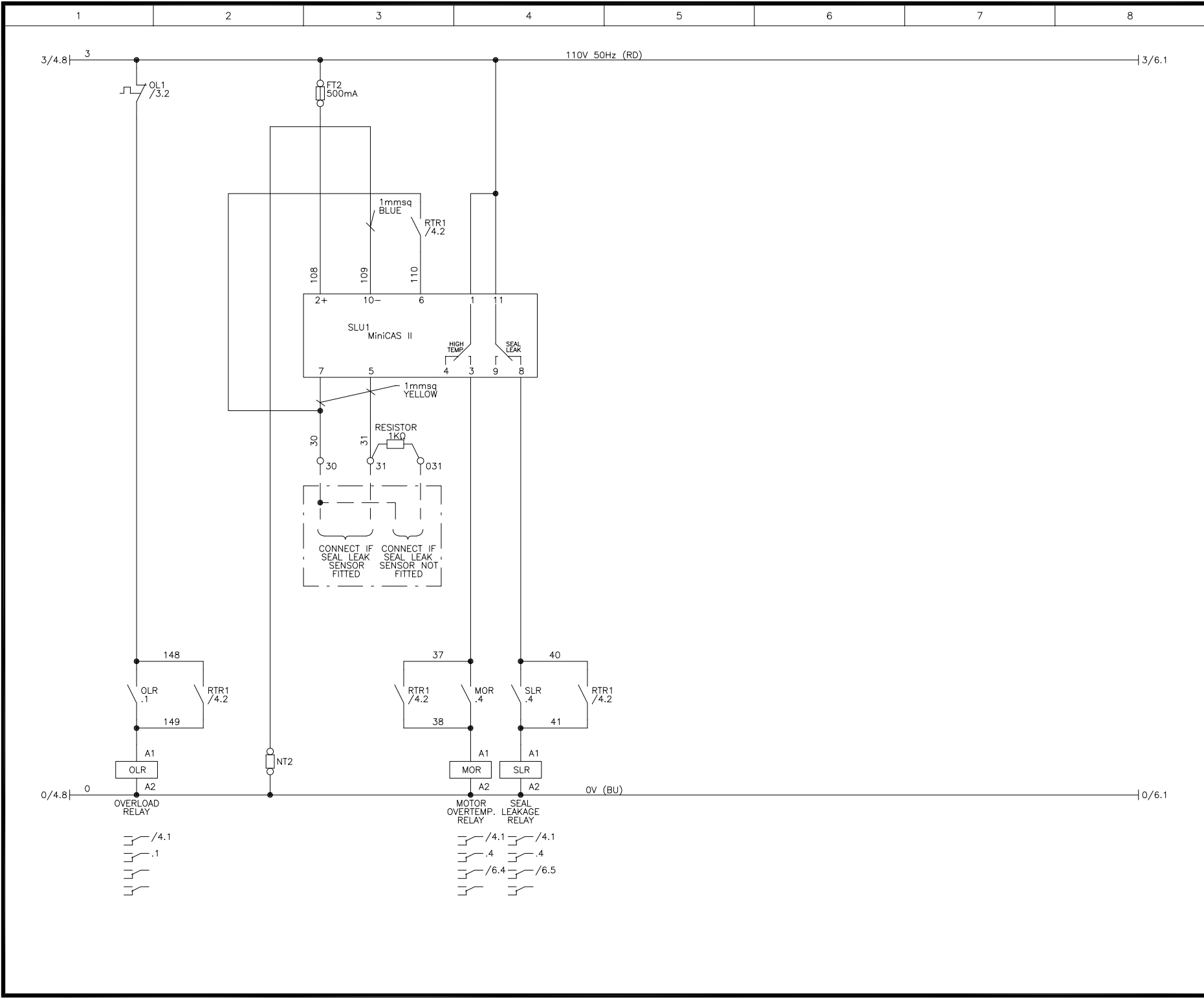
ASSEMBLY REFERENCE
SFA7 DUAL PUMP (FORM 4)
DOL STARTERS

DRAWING TITLE
CIRCUIT DIAGRAM OF
ANGLIAN WATER SFA7
DUAL DOL PUMP CONTROL PANEL

COMPARTMENT REFERENCE D	REV 2P
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CEMA DRAWING No.
QT117789/SW

4 OF 15



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ANGLIAN WATER DRAWING No.

☒ DOOR INTERLOCKED

☐ DOOR MOUNTED

UNLESS SPECIFIED ALL CONTROL CABLES TO BE:
110V 50Hz - 1mmsq RED
0V - 1mmsq BLUE
24VDC +VE - 1mmsq YELLOW
24VDC -VE - 1mmsq BLUE
TELEMETRY - 1mmsq PINK
4-20mA - 2 CORE SCREEN

2P	12.05.21	CUSTOMER COMMENTS; NOW DOL & FLOWMETER REMOVED	IS	HM
1P	11.12.20	ORIGINAL	MK	HM
REV	DATE	DESCRIPTION	BY	CHK

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PROJECT TITLE
SFA7 DUAL PUMP (FORM 4)
CONTROL PANEL

NAME OF SITE
SITE TBC

ASSEMBLY REFERENCE
SFA7 DUAL PUMP (FORM 4)
DOL STARTERS

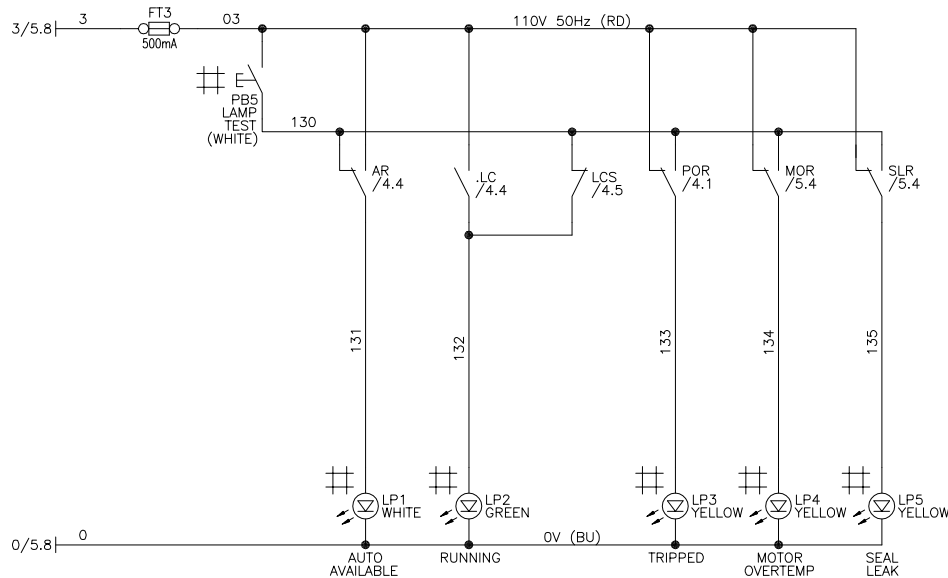
DRAWING TITLE
CIRCUIT DIAGRAM OF
ANGLIAN WATER SFA7
DUAL DOL PUMP CONTROL PANEL

COMPARTMENT REFERENCE
D

REV
2P

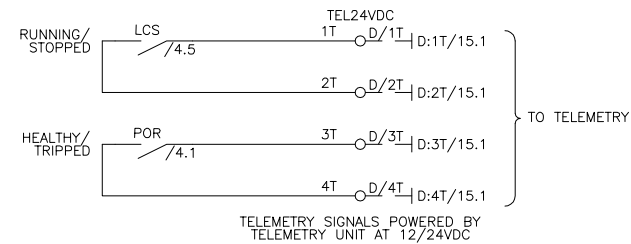
CEMA DRAWING No.
QT117789/SW

5 OF 15



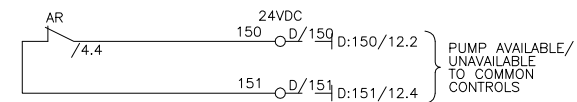
TELEMETRY SIGNALS

(1mmsq PINK)



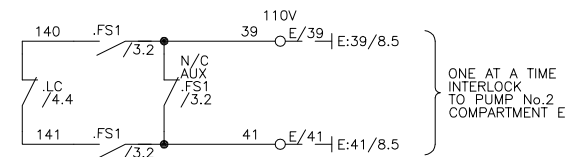
CONTROL SIGNALS

(1mmsq YELLOW)



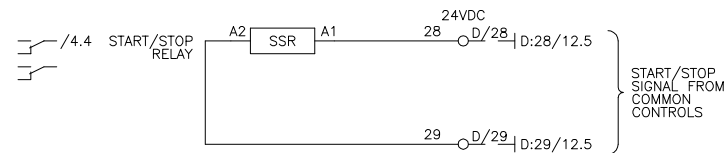
CONTROL SIGNALS

(1mmsq RED)



CONTROL SIGNALS

(1mmsq YELLOW, BLUE)



NOTE - WHERE REQUIRED TELEMETRY OUTPUT INTERPOSING RELAYS TO BE POWERED BY TELEMETRY UNIT AT 24VDC.

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ANGLIAN WATER DRAWING No.

☒ DOOR INTERLOCKED ☐ DOOR MOUNTED

UNLESS SPECIFIED ALL CONTROL CABLES TO BE:
110V 50Hz - 1mmsq RED
0V - 1mmsq BLUE
24VDC +VE - 1mmsq YELLOW
24VDC -VE - 1mmsq BLUE
TELEMETRY - 1mmsq PINK
4-20mA - 2 CORE SCREEN

2P	12.05.21	CUSTOMER COMMENTS; NOW DOL & FLOWMETER REMOVED	IS	HM
1P	11.12.20	ORIGINAL	MK	HM
REV	DATE	DESCRIPTION	BY	CHK

CEMA PROJECT ENGINEER
H.MANNERING



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CUSTOMER
PARADIGM SYSTEMS

PROJECT TITLE
SFA7 DUAL PUMP (FORM 4)
CONTROL PANEL

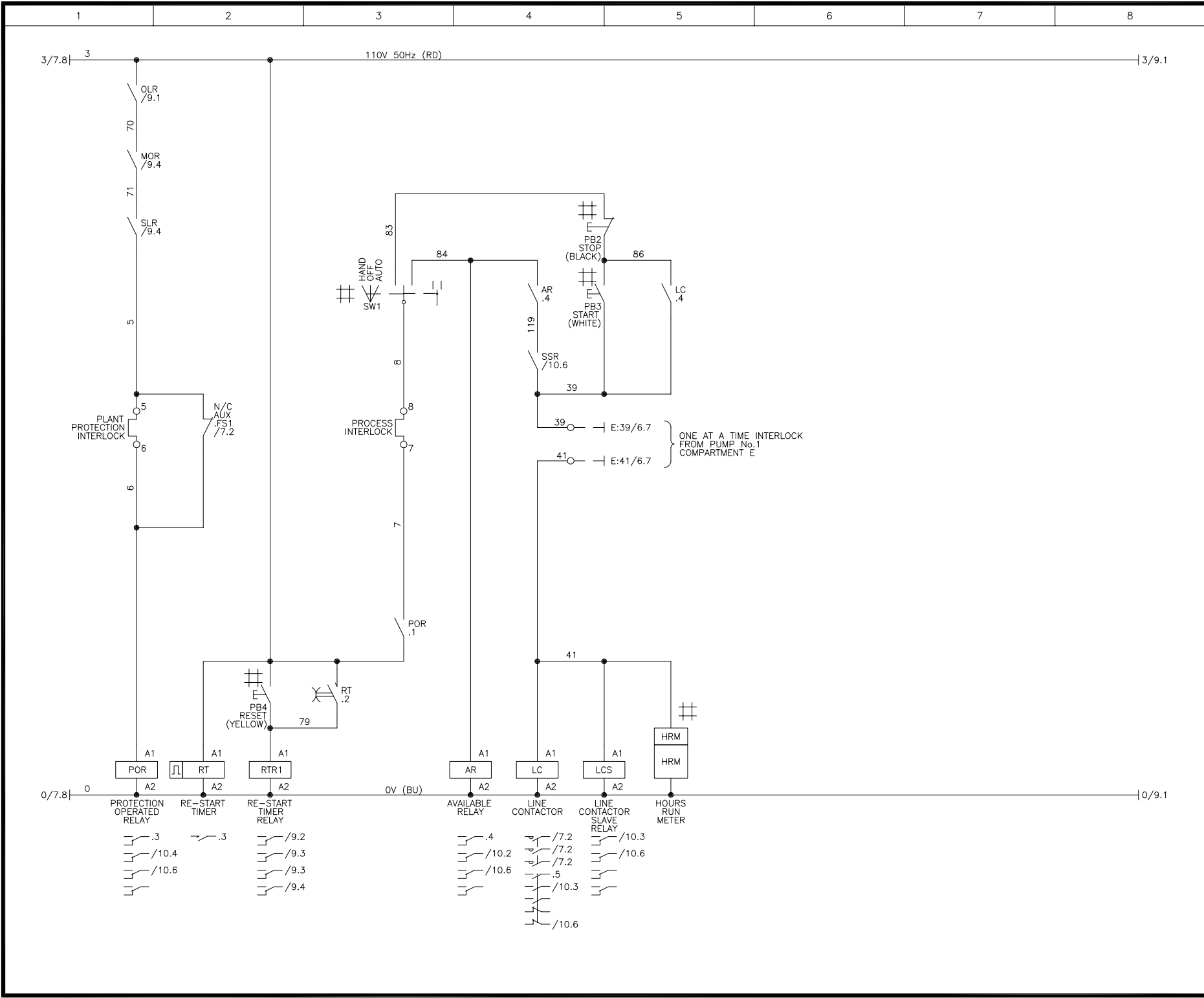
NAME OF SITE
SITE TBC

ASSEMBLY REFERENCE
SFA7 DUAL PUMP (FORM 4)
DOL STARTERS

DRAWING TITLE
CIRCUIT DIAGRAM OF
ANGLIAN WATER SFA7
DUAL DOL PUMP CONTROL PANEL

COMPARTMENT REFERENCE D	REV 2P
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CEMA DRAWING No.
QT117789/SW 6 OF 15



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ANGLIAN WATER DRAWING No.

☒ DOOR INTERLOCKED

☐ DOOR MOUNTED

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110V 50Hz - 1mmsq RED
0V - 1mmsq BLUE
24VDC +VE - 1mmsq YELLOW
24VDC -VE - 1mmsq BLUE
TELEMETRY - 1mmsq PINK
4-20mA - 2 CORE SCREEN

2P	12.05.21	CUSTOMER COMMENTS; NOW DOL & FLOWMETER REMOVED	IS	HM
1P	11.12.20	ORIGINAL	MK	HM
REV	DATE	DESCRIPTION	BY	CHK

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CUSTOMER
PARADIGM SYSTEMS

PROJECT TITLE
SFA7 DUAL PUMP (FORM 4)
CONTROL PANEL

NAME OF SITE
SITE TBC

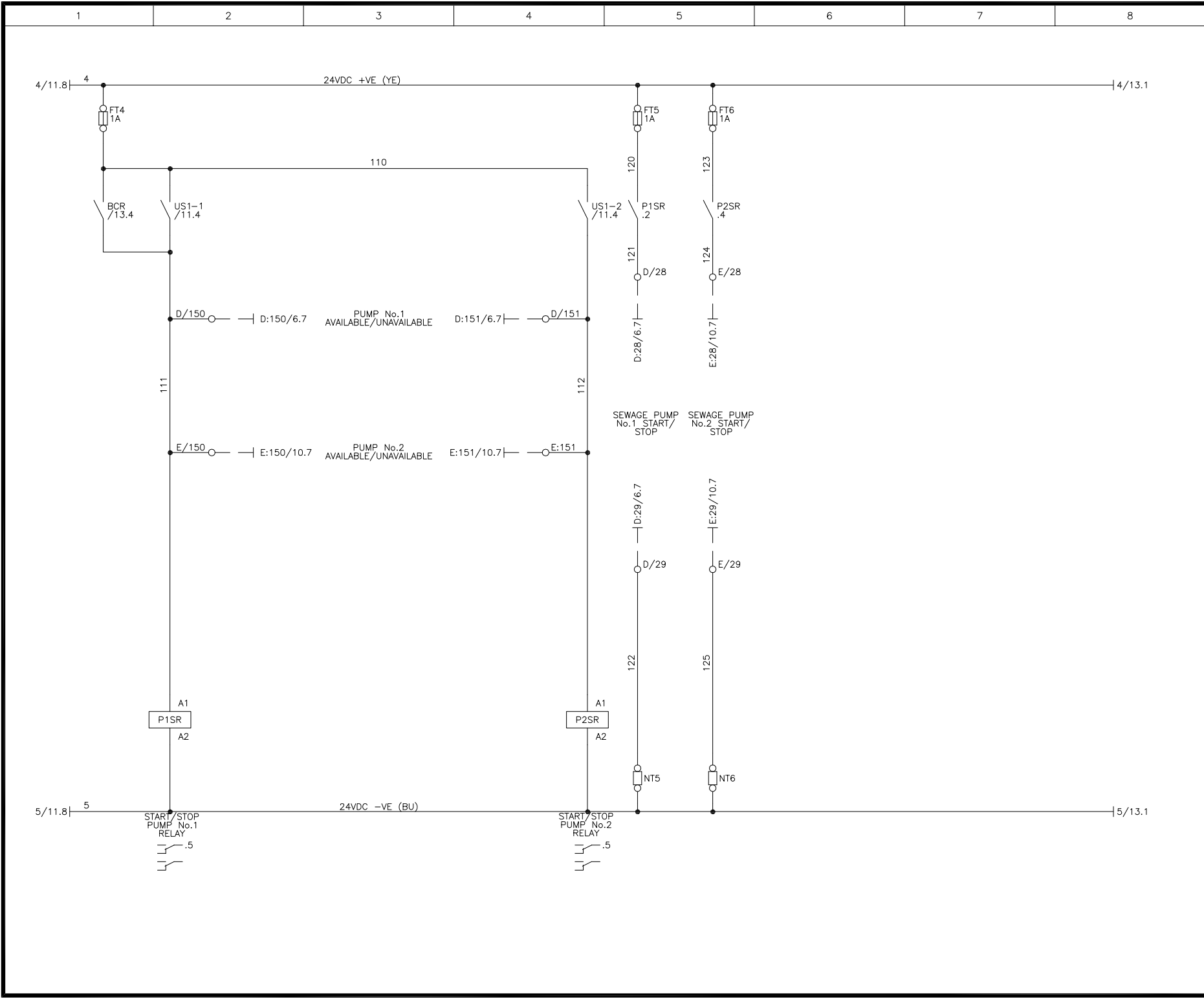
ASSEMBLY REFERENCE
SFA7 DUAL PUMP (FORM 4)
DOL STARTERS

DRAWING TITLE
CIRCUIT DIAGRAM OF
ANGLIAN WATER SFA7
DUAL DOL PUMP CONTROL PANEL

COMPARTMENT REFERENCE E	REV 2P
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CEMA DRAWING No.
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8 OF 15



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ANGLIAN WATER DRAWING No.

☒ DOOR INTERLOCKED

☐ DOOR MOUNTED

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110V 50Hz - 1mmsq RED
0V - 1mmsq BLUE
24VDC +VE - 1mmsq YELLOW
24VDC -VE - 1mmsq BLUE
TELEMETRY - 1mmsq PINK
4-20mA - 2 CORE SCREEN

2P	12.05.21	CUSTOMER COMMENTS; NOW DOL & FLOWMETER REMOVED	IS	HM
1P	11.12.20	ORIGINAL	MK	HM
REV	DATE	DESCRIPTION	BY	CHK

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CUSTOMER
PARADIGM SYSTEMS

PROJECT TITLE
SFA7 DUAL PUMP (FORM 4)
CONTROL PANEL

NAME OF SITE
SITE TBC

ASSEMBLY REFERENCE
SFA7 DUAL PUMP (FORM 4)
DOL STARTERS

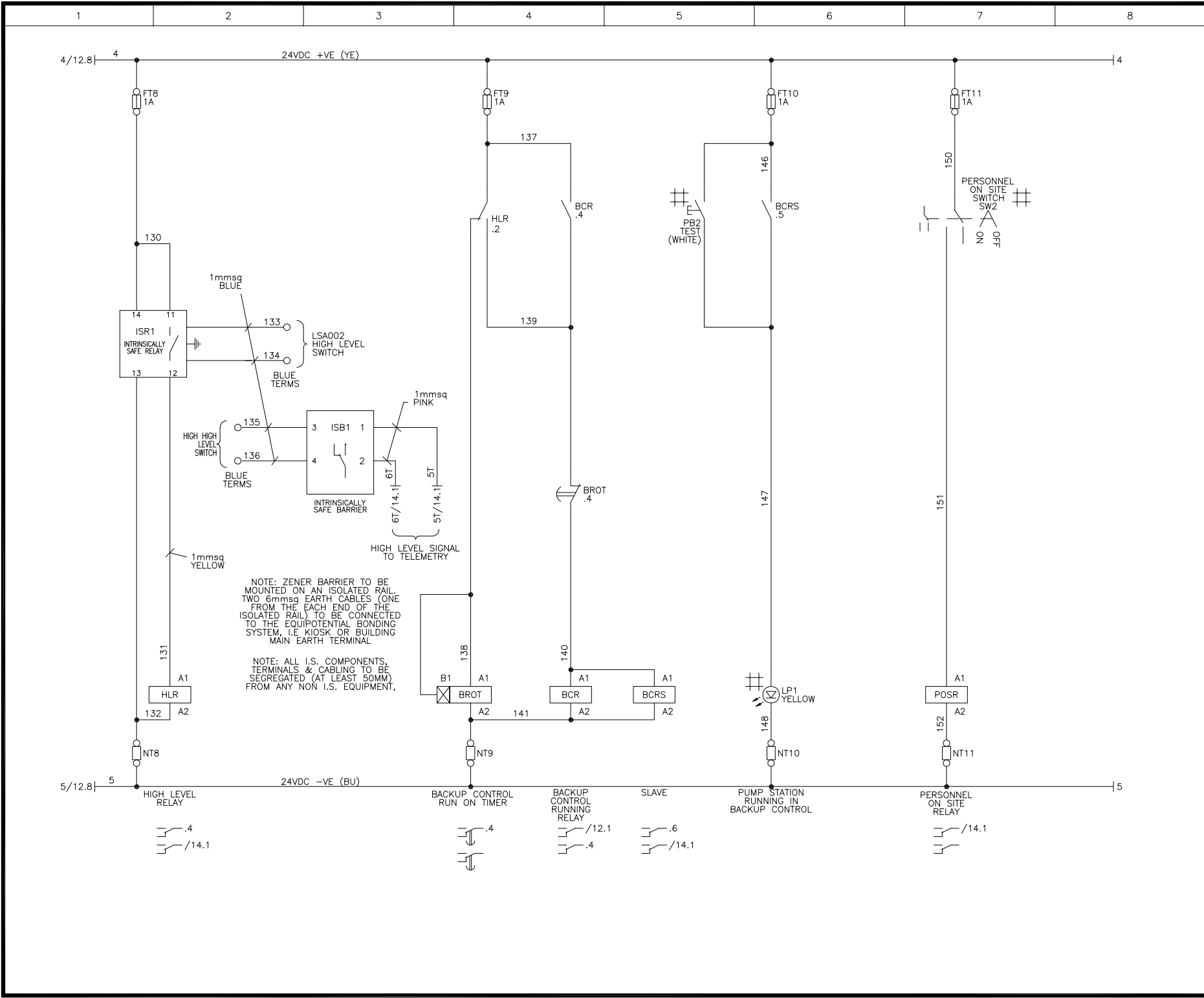
DRAWING TITLE
CIRCUIT DIAGRAM OF
COMMON CONTROLS

COMPARTMENT REFERENCE
C

REV
2P

CEMA DRAWING No.
QT117789/SW

12 OF 15



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ANGLIAN WATER DRAWING No.

☒ DOOR INTERLOCKED ☐ DOOR MOUNTED

UNLESS SPECIFIED ALL CONTROL CABLES TO BE:

110V 50Hz	1mmsq RED
0V	1mmsq BLUE
24VDC +VE	1mmsq YELLOW
24VDC -VE	1mmsq BLUE
TELEMETRY	1mmsq PINK
4-20mA	2 CORE SCREEN

2P	12.05.21	CUSTOMER COMMENTS; NOW DOL & FLOWMETER REMOVED	IS	HM	
1P	11.12.20	ORIGINAL	MK	HM	
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PROJECT TITLE
SFA7 DUAL PUMP (FORM 4)
CONTROL PANEL

NAME OF SITE
SITE TBC

ASSEMBLY REFERENCE
SFA7 DUAL PUMP (FORM 4)
DOL STARTERS

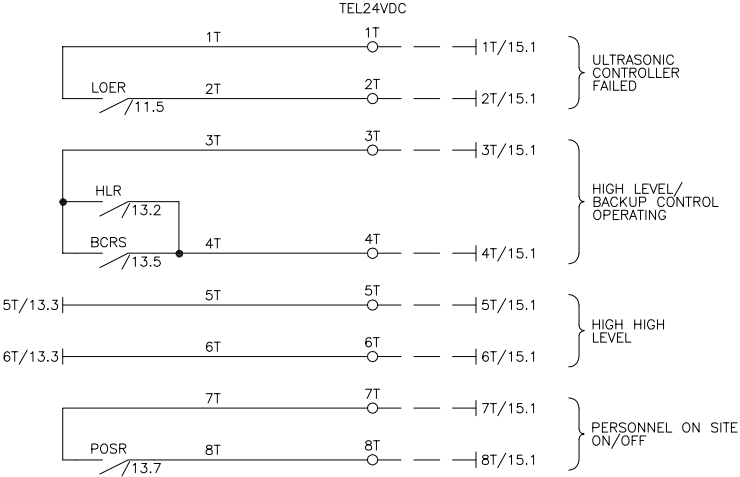
DRAWING TITLE
CIRCUIT DIAGRAM OF
COMMON CONTROLS

COMPARTMENT REFERENCE C	REV 2P
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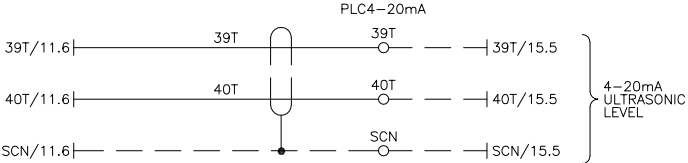
CEMA DRAWING No.
QT117789/SW

13 OF 15

TELEMETRY SIGNALS
(1mmsq PINK)



CONTROL SIGNALS
(4-20mA 2 CORE SCREEN)



ANGLIAN WATER DRAWING No.

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UNLESS SPECIFIED ALL CONTROL CABLES TO BE:
110V 50Hz - 1mmsq RED
0V - 1mmsq BLUE
24VDC +VE - 1mmsq YELLOW
24VDC -VE - 1mmsq BLUE
TELEMETRY - 1mmsq PINK
4-20mA - 2 CORE SCREEN

2P	12.05.21	CUSTOMER COMMENTS; NOW DOL & FLOWMETER REMOVED	IS	HM
1P	11.12.20	ORIGINAL	MK	HM
REV	DATE	DESCRIPTION	BY	CHK

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CUSTOMER
PARADIGM SYSTEMS

PROJECT TITLE
SFA7 DUAL PUMP (FORM 4)
CONTROL PANEL

NAME OF SITE
SITE TBC

ASSEMBLY REFERENCE
SFA7 DUAL PUMP (FORM 4)
DOL STARTERS

DRAWING TITLE
CIRCUIT DIAGRAM OF
COMMON CONTROLS

COMPARTMENT REFERENCE C	REV 2P
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CEMA DRAWING No.
QT117789/SW 14 OF 15

1

2

3

4

5

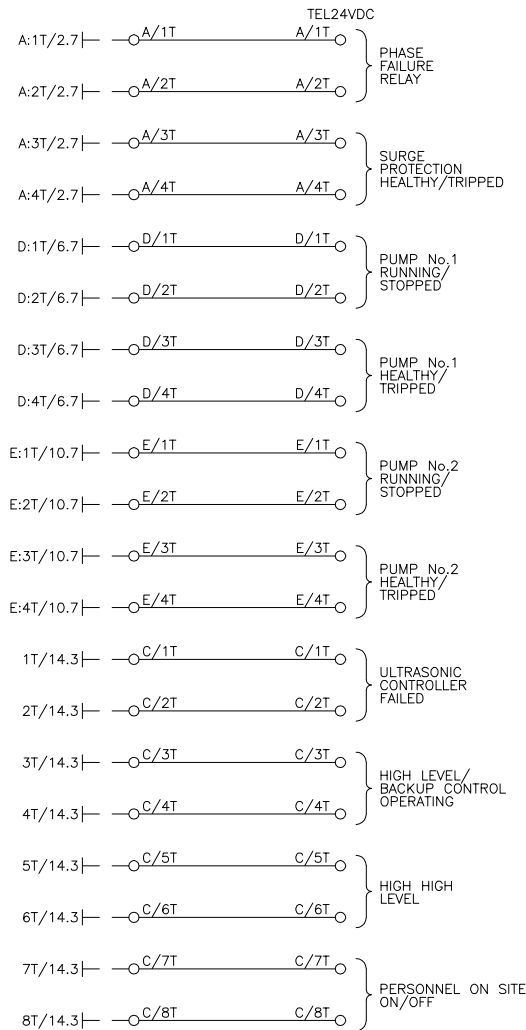
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7

8

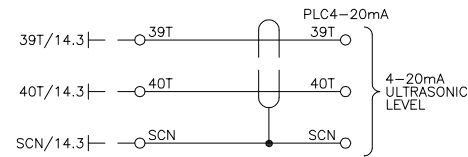
TELEMETRY SIGNALS

(1mmsq PINK)



CONTROL SIGNALS

(4–20mA 2 CORE SCREEN)



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4–20mA – 2 CORE SCREEN

2P	12.05.21	CUSTOMER COMMENTS; NOW DOL & FLOWMETER REMOVED	IS	HM	
1P	11.12.20	ORIGINAL	MK	HM	
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PROJECT TITLE
SFA7 DUAL PUMP (FORM 4)
CONTROL PANEL

NAME OF SITE
SITE TBC

ASSEMBLY REFERENCE
SFA7 DUAL PUMP (FORM 4)
DOL STARTERS

DRAWING TITLE
CIRCUIT DIAGRAM OF
TELEMETRY SIGNALLING

COMPARTMENT REFERENCE B	REV 2P
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CEMA DRAWING No.
QT117789/SW

15 OF 15

Appendix F – Anglian Waters' Telemetry Process

Ten Steps to Telemetry

Step 1 - Initial Assessment

The developer submits an application (S104/S185/S30/S102) which includes a pumping station to be technically assessed. Once the application is assessed and technical approval is granted, the Drainage Engineer will then request that a Radio Survey (TF81) is undertaken. TF81 is sent to the Legal & Telemetry Coordinator to arrange. This takes approximately 12 weeks and is £300 (A one off survey takes 4-6 weeks and is £525)

Step 2 - Radio Survey

A radio survey is undertaken and results are received by the Legal & Telemetry Coordinator.

This then determines the type of hardware required (aerial/public switched telephone network (pstn)). The hardware proposal is prepared and sent to the developer along with the radio survey results. The hardware cost varies depending on type. A price is given on the hardware proposal.

Step 3 - Order Hardware

The developer completes the proposal and returns to the Legal & Telemetry Coordinator.

We order hardware on the developer's behalf and at a reduced price to them. The hardware is ordered from an external company and built to order which takes approximately 6 weeks. It is then delivered to the developer's preferred address (usually to site due to the weight).

Step 4 - Hardware Installation

The developer receives the hardware and has their contractor install it on site. Anglian Water do not install the telemetry hardware.

Step 5 - Commissioning

Once installed (including aerial/phone line), the developer should contact the Legal & Telemetry Coordinator to arrange a commissioning date. There is a fee of £605.04 for this service. This involves an Anglian Water Telemetry Engineer attending site as well as the developer's appointed contractor/electrician to ensure the site is correctly configured to allow data to be fed to our telemetry monitoring system (IRIS). If the commissioning meeting is successful, Anglian Water will be able to see the pump station 'live' on our monitoring system, IRIS. A commissioning appointment should take approximately 3-4 hours.

Step 6 – Monitoring Contract

Now that the site is commissioned it can benefit from an optional monitoring contract with Anglian Water. For £784.48 per annum (excl. VAT) Anglian Water will notify your appointed contact of any alarms that may be triggered 24 hours a day, 7 days a week. The responsibility of investigating the alarm and rectifying faults remains with the developer.

Step 7 – Final Inspection

Once the pumping station has served its maintenance period a final inspection will take place with a Drainage Technician, EAWR Engineer and a representative from Maintenance.

If the station is confirmed as suitable for adoption the Drainage Technician will issue an inspection sheet to the Drainage Support Technician to confirm this and advise the date that handover is due to take place. Documentation such as operating manuals, electricity bills, meter readings and the davit lifting certificate should also be provided at this point, if available.

Step 8 – Pre-adoption

At least 10 days prior to the handover the Drainage Support Technician will check that the land transfer of the pumping station compound has been completed. If so, they will complete and send the TF070 to the Legal & Telemetry Coordinator to check the telemetry for any faults. If faults are identified details will be sent to the Drainage Team to notify the developer as these must be rectified before adoption can take place.

Step 9 – Final Approval

The developer will need to advise the Drainage Technician once remedial works have taken place as we will need to re-do the telemetry survey to confirm. Once the survey comes back as successful we will then arrange a handover meeting.

Step 10 – Handover and Adoption

At the handover meeting the Drainage Technician will confirm with the Legal & Telemetry Coordinator, that the pumps are still working as expected, by phone, whilst on site, before we change the locks. The Drainage Team will then formally vest the site. At the same time our Telemetry Automation Team will update our monitoring system, IRIS to show this as an Anglian Water Adopted Asset.

Gedney, Oliver

From: no-reply-InFlow@anglianwater.co.uk
Sent: 17 June 2021 08:52
To: _planningadvice
Subject: Discharge of Condition

This message originated from outside your organization



Dear Polly Harris-Gorf

Millfield Nursery Spalding Common Spalding, H16-0225-21, PLN-0124492

Thank you for your enquiry to discharge condition relating to the above development site. Please find our comments below.

Foul Water Comments: The drawing provided (12175-WMS-ZZ-XX-DR-C-39201-S8-P7) does not provide a pumped discharge rate, We are therefore not able to confirm suitability nor recommend discharge of condition 17 at this time.

Surface Water Comments:

Should you have any queries or comments regarding this please contact us at planningliaison@anglianwater.co.uk or 07929 786 955 quoting reference PLN-0124492.

Kind Regards

Development Services Pre-Development Team

Not you or need help?

Call us on **0345 60 66 087**



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