

No.	DESCRIPTION	DIA.	No. OFF
P1*	FI Eccentric Taper	ND(P) ND(RM)	2
P2*	FI/PI pipe x length to suit	ND(RM)	3
P3*	Uniflange	ND(RM)	3
P4*	FI 90° bend	ND(RM)	4
P5*	FI/PL pipe x length to suit with "puddle" flange and 1/4" BSP Pressure tapping	ND(RM)	2
P6*	Gibault joint	ND(RM)	3
P7*	FI/PI connector	ND(RM)	2
P8*	FI Tee	ND(RM) x ND(RM)	2
P9*	FI/PL pipe x length to suit with "puddle" flange	ND(RM)	1
P10*	80mm Camlock Coupling	80	1
V1	FI reflux valve (AS2658) with Magnetic Limit Switch)	ND(RM)	2
V2	FI vertical gate valve (AS3578) (Clockwise Close)	ND(RM)	4

No.	DESCRIPTION	DIA.	No. OFF
P6*	Gibault Joint	ND(INLET)	2
P11	SP-SP S/Steel Pipe	ND(INLET)	1
P12	FL-SP S/Steel Tailpipe with Puddle Flange	ND(INLET)	1
V3	Lugged S/Steel Bi-Directional Knife Gate Valve Complete with Support Bracket to wall of Pump Station	ND(INLET)	1
P13	MDPE SP-FLXL Fabricated Tee Complete with Gibault joint	ND(INLET)	1

Note: For Cover Slab refer to CMDG-S-062

50mm Proud Refer to CDMG-S-063 or CMDG-S-064

Retractable handrail as per Australian Standard

Workplace Health & Safety Guidelines

Pressure tapping (Binder Twinlok Hot Plug 1/4" BSP Stainless Steel)

Conduit

50mm Proud Refer to CDMG-S-063 or CMDG-S-064

N16 tie bars at 300 centres, 450 x 450 leg

1 in 20 to FSL

RL Top of Wall

DN50 conduit

Electrical conduits

Ø80mm outlet vent

316SS lifting chain (D's @ 1000 crs)

RL.

OVERFLOW LEVEL RL.

HIGH HIGH ALARM

Auto well washer Refer Note 11

Provide frog flap to opening

Multitrode, Cleaning Bracket and Cables.

Stainless Steel Ladder

Provide S/Steel blank flange to suit. Store blank flange in valve chamber.

Ø50 air hole in side of tee

Square breakout for pipe penetration

P6 P11

INLET IL.

P6 P12

V3

P13

HIGH LEVEL ALARM RL.

STANDBY START RL.

DUTY PUMP START RL.

PUMP STOP RL.

FLOOR LEVEL RL.

300

1

400

200

Mass Concrete Benching

N16-200 EW, Central

Ø2400mm pump well units (refer note 18)

Pump guide rails 316SS to suit pump

Fabricate brackets Ex 70x10 316SS

Benching in base of pump well. Shape to minimise volume of retained effluent at pump stop level and to suit pump pedestal. Benchng to incorporate 150x150x150 toe holes at 300 crs.

Float Switches

Ø100mm PVC trap complete with removable grate

N12-300, Central

Concrete blocks under sluice and reflux valves.

N12 Dowels at 300mm centres, 300mm lay with Floor Slab Mesh, 65mm depth, Chemical Anchor.

N16 tie bars at 300 centres, 450 x 450 leg

25mm fall

450

300

300

410

P5

P6

P7

V1

V2

P8

P9

P6

CJ

Rising Main Nom Dia. ND (RM)

IL.

170

400

860

289

150

P2

P1

Pedestal Nom. Dia. ND (P).

Mass concrete topping slab

316SS Pedestal Anchor Studs & Nuts.

40mm grout

Submersible pumps (Note 16)

SECTION 1

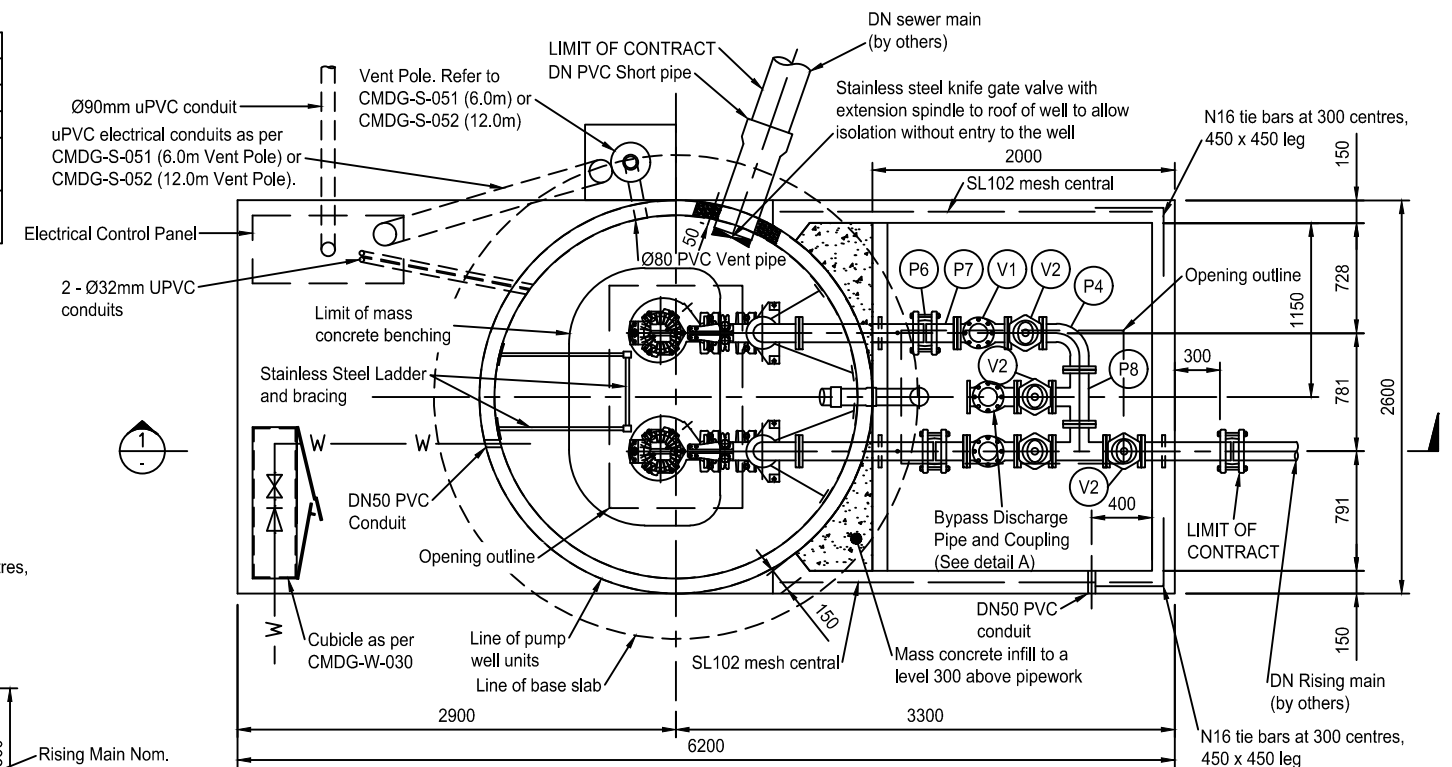
SCALE 1:50

Refer CMDG- for details.

BYPASS DISCH.

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SECTION
SCALE 1:50



1:50

1. All concrete shall have a minimum characteristic strength (F_c) of N40 to AS3600 at 28 days.
2. Cored holes left in the well for pipe work shall be tapered being 25 larger in diameter than the flange at the inside face and 50 larger at the outside face.
3. Steel wire fabric to be in accordance with A.S.1304, latest revision.
4. Steel reinforcing bars shall be high-tensile hot-rolled deformed bar in accordance with AS.1302, latest revision.
5. Laps in reinforcing shall be 300 minimum for rebar and 1 (one) mesh spacing for fabric.
6. Concrete cover to reinforcement shall be a minimum of 65 in all cases except where noted otherwise.
7. Stainless steel pipe brackets at 1000 maximum centres fixed to wall with 2-M10 SS. approved Masonry Fasteners.
8. Location of conduits to be confirmed by Council Engineer prior to construction of plinth.
9. All pipe work penetration to be grouted up using non shrink grout.
10. Corrosion Protection of discharge chamber or pump well alternatives:
 - a) All internal surfaces shall be smooth and free of holes and lightly sandblasted or acid-etched before painting with Peerless Epiglen 1311 or Parchem Nitocote EP410 in two coats with a total dry film thickness of 600 microns. The concrete surface shall have cured for at least 28 days; or
 - b) A fabricated chamber liner of polyethylene shall be placed before the wall and top slab is poured or use a complete polyethylene manhole system such as Iplex EZI pit or Wavin Tegra; or
 - c) An alternative method of corrosion protection approved by the Service Authority.
11. Auto well washer to be secured to the pump well wall via a pivoting wall mount bracket supplied by the Manufacturer. Provide 4 - grade 316 SS Dynabolts or equivalent for wall mount. 24V AC solenoid valve for well washer to be connected to a relay in the main switch board. Provide 50mm 'RMC Model 909' or equivalent Reduced Pressure Zone back flow prevention device installed in accordance with AS 3500. Solenoid valve must be installed between RPZ and washer head. Water inlet for washer head is 3/4" BSP (NPT) male. Exact position of washer to be confirmed by Superintendent.
12. All pipes and fittings within pump well and valve pit to be FBE (Fusion Bonded Epoxy) coated.
13. All conduits from pump well to be filled with an approved void filler following installation of cables.
14. All UPVC conduits and pipe work location to be subject to Council Engineers prior approval .
15. Confirm pump stop level with Manufacturer for minimum submergence requirements.
16. Pump Duty and Pump selection to be confirmed by Council Engineer.
17. Switchboard to have 1m clearance to any obstructions.
18. Precast units must be RPEQ approved. Humes precast sewage pumping station dimensions shown.
19. Refer to AS 1657 - 2013 Fixed platforms, walkways, stairways and ladders - design, construction and installation for ladder requirements.
20. Refer also to standard drawings CMDG-S-051, CMDG-S-052, CMDG-S-062, CMDG-S-063, CMDG-S-064 & CMDG-W-030.

APPLICABILITY TABLE							
Council	BSC	CHRC	GRC	IRC	LSC	MRC	RRC
Applicable	Yes	Yes	No	Yes	Yes	Yes	Yes
Chamber Ladder Requirement	No	No	No	No	Yes	No	Yes
Applicability DWG	GRC details on SPS drawing set						

REVISIONS		DATE
I	DROP PIPE ADDED / GRAVITY INLET DELETED	03/2018
H	SCALES, CUBICLE LOCATION & LAYOUT AMENDED	10/2017
G	IRC ADDED	11/2016
F	DIMENSIONS CORRECTED	08/2015
E	GRC AND LSC ADDED	09/2014
D	CORRECTION OF ALL DIMENSIONS	06/2013
C	RETRACTABLE LADDER ADDED	05/2011

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Banana Shire Council (BSC)	Livingstone Shire Council (LSC)
Central Highlands Regional Council (CHRC)	Maranoa Regional Council (MRC)
Gladstone Regional Council (GRC)	Rockhampton Regional Council (RRC)
Isaac Regional Council (IRC)	

SUBMERSIBLE SEWAGE
PUMPING STATION
GENERAL ARRANGEMENT
2400MM DIA.

SEWERAGE
STANDARD
DRAWING
MDG-S-06

REV.	D	E	F	G	H	I
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