

PRINCE OF WHALES HOSPITAL
MENTAL HEALTH INTENSIVE CARE UNIT
SCHEMATIC DESIGN

HYDRAULIC SERVICES LEGEND

PIPEWORK SYMBOLOLOGY & ABBREVIATIONS

AGM	AGM	AMENDMENT
ASM	ASM	AUTHORITY GAS MAIN
ASWM	ASWM	AUTHORITY SEWER MAIN
AWM	AWM	AUTHORITY STORMWATER MAIN
AWH	AWH	AUTHORITY WATER MAIN
CASTN		CASTIN
CHVP	CHVP	CHAMBER VENT
CW	CW	COLD WATER
cCW	cCW	COLD WATER - EXISTING
CWF	CWF	COLD WATER FILTERED
CD	CD	CONDENSATE DRAIN
cCD	cCD	CONDENSATE DRAIN - EXISTING
DE	DE	DIESEL EXHAUST
DISCONNECTED SERVICE		DISCONNECTED SERVICE
ELEC	ELEC	ELECTRICAL SERVICE
FHR	FHR	FIRE HOSE REEL
eFHR	eFHR	FIRE HOSE REEL - EXISTING
FH	FH	FIRE HYDRANT
eFH	eFH	FIRE HYDRANT - EXISTING
FS	FS	FIRE SERVICE
eFS	eFS	FIRE SERVICE - EXISTING
FSM	FSM	FIRE SPRINKLER MAIN
eFSM	eFSM	FIRE SPRINKLER MAIN - EXISTING
FSM	FSM	FIRE SPRINKLER RANGE PIPE
eFSM	eFSM	FIRE SPRINKLER RANGE PIPE - EXISTING
GF	GF	GAS FLUE
GAS	GAS	GAS SERVICE
eGAS	eGAS	GAS SERVICE - EXISTING
GTVP	GTVP	GREASE TRAP VENT PIPE
eGTVP	eGTVP	GREASE TRAP VENT PIPE - EXISTING
GWD	GWD	GREASE WASTE DRAINAGE
eGWD	eGWD	GREASE WASTE DRAINAGE - EXISTING
GWP	GWP	GREASE WASTE VENT PIPE
eGWP	eGWP	GREASE WASTE VENT PIPE - EXISTING
HWF	HWF	HOT WATER FLOW
eHWF	eHWF	HOT WATER FLOW - EXISTING
HWF-H	HWF-H	HOT WATER FLOW - HEAT TRACED
HWR	HWR	HOT WATER RETURN
eHWR	eHWR	HOT WATER RETURN - EXISTING
IR	IR	IRRIGATION LINE
eIR	eIR	IRRIGATION LINE - EXISTING
LTW	LTW	LABORATORY TRADE WASTE
eLTW	eLTW	LABORATORY TRADE WASTE - EXISTING
NCW	NCW	NON-POTABLE COLD WATER
eNCW	eNCW	NON-POTABLE COLD WATER - EXISTING
NHW	NHW	NON-POTABLE HOT WATER
eNHW	eNHW	NON-POTABLE HOT WATER - EXISTING
NHW-R	NHW-R	NON-POTABLE HOT WATER RETURN
RS	RS	RAINWATER RE-USE
eRS	eRS	RAINWATER RE-USE - EXISTING
RW	RW	RECLAIMED WATER
eRW	eRW	RECLAIMED WATER - EXISTING
RO	RO	REVERSE OSMOSIS
eRO	eRO	REVERSE OSMOSIS - EXISTING
SD	SD	SANITARY DRAINAGE
eSD	eSD	SANITARY DRAINAGE - EXISTING
SP	SP	SANITARY PLUMBING
eSP	eSP	SANITARY PLUMBING - EXISTING
SRM	SRM	SANITARY RISING MAIN
eSRM	eSRM	SANITARY RISING MAIN - EXISTING
SW	SW	SANITARY WASTE
SW-A	SW-A	SANITARY WASTE - ACOUSTIC
eSW	eSW	SANITARY WASTE - EXISTING
STORMWATER CATCHMENT		STORMWATER CATCHMENT
SWD	SWD	STORMWATER DRAINAGE
eSWD	eSWD	STORMWATER DRAINAGE - EXISTING
SWRM	SWRM	STORMWATER RISING MAIN
eSWRM	eSWRM	STORMWATER RISING MAIN - EXISTING
SSD	SSD	SUBSOIL DRAINAGE
eSSD	eSSD	SUBSOIL DRAINAGE - EXISTING
SOF	SOF	SYPHONIC OVERFLOW
eSOF	eSOF	SYPHONIC OVERFLOW - EXISTING
SSW	SSW	SYPHONIC STORMWATER
eSSW	eSSW	SYPHONIC STORMWATER - EXISTING
TWD	TWD	TRADE WASTE DRAINAGE
eTWD	eTWD	TRADE WASTE DRAINAGE - EXISTING
TWPO	TWPO	TRADE WASTE PUMP OUT
eTWPO	eTWPO	TRADE WASTE PUMP OUT - EXISTING
TWRM	TWRM	TRADE WASTE RISING MAIN
TWVP	TWVP	TRADE WASTE VENT PIPE
eTWVP	eTWVP	TRADE WASTE VENT PIPE - EXISTING
VP	VP	VENT PIPE
eVP	eVP	VENT PIPE - EXISTING
WWF	WWF	WARM WATER FLOW
eWWF	eWWF	WARM WATER FLOW - EXISTING
WWR	WWR	WARM WATER RETURN
eWWR	eWWR	WARM WATER RETURN - EXISTING

SYMBOLS

Direction of Flow	Service Description
Service Size	Direction of Flow
Stop Valve	Check Valve
Balancing Valve	3-Way Valve
Ball Valve	Reduced Pressure Zone Device
Pressure Relief Valve	Pressure Limiting Valve
Solenoid Valve	Solenoid Valve
Double Check Valve	Infra Red Sensor
Monitored Valve	Thermostatic Mixing Valve
Tempering Valve	Water Filter
Reflux Valve	Reflux Valve in Pit
Pathbox	Water Meter
Gas Meter	Expansion Joint
Inlet Bore	Strainer
Pressure Gauge	Flow Switch
Pressure Switch	Water Point
Tap Set	Hose Tap
Bayonet Point	Regulator
Pump	Control Panel
Fire Hose Reel	Fire Hose Reel
Hot Water Unit	Fire Hydrant
Fire Hydrant	Street Hydrant
Dual Suction Point	Quad Suction Point
Dual Booster Point	Quad Booster Point
Floor Waste	Tundish
Bucket Trap Floor Waste	Clearout to Surface
Sewer Manhole	Boundary Trap
Surcharge Gully	Inspection Shaft
Induct Pipe Mica Flap	Kamlock Connection
Air Admittance Valve	Syphonic Outlet
Rainwater Outlet	Spreader
Overland Flow Arrow	Stormwater Flow Arrow
Penetration / Core Hole in Slab	Beam Penetration
Reducer	Grease Arrestor
Stormwater Grate	Stormwater Cover
Trench Grate	Revision
Kerb Entry Pit	Thrust Block
P.A.P.A Valve	Rainwater Head

ABBREVIATIONS

A/C	Air Conditioning
AAV	Air Admittance Valve
AHD	Australian Height Datum
AS	Australian Standards
B	Basin
BBQ	Barbecue
BBV	Brigade Booster Valve
BCA	Building Code Of Australia
BDO	Balcony Drain Outlet
BID	Bidet
BM	Bain Marie
BP	Bayonet Point
BR	Brass
BSK	Bar Sink
BT	Boundary trap
BTFWG	Bucket Trap Floorwaste Gully
BTH	Bath
BV	Ball Valve
BWL	Bottom Water Level
BWU	Boiling Water Unit
CHV	Check Valve
CHWU	Chilled Water Unit
CI	Cast Iron
CIC	Cast In Column
CICL	Cast Iron Cement Lined
CIS	Cast In Slab
CL	Ceiling Level
COS	Clear Out To Surface
CP	Chrome Plated
CSK	Cleaners Sink
CST	Condensate Stack
CT	Cook Top
CU	Copper
CV	Control Valve
CWM	Cold Water Meter
D	Disabled
DB	Disabled Basin
DCV	Double Check Valve
DCV-A	Double Check Valve Assembly
DF	Drinking Fountain
DG	Disconnector Gully
DIA	Diameter
DICL	Ductile Iron Cement Lined
DP	Downpipe
DR	Drainage Riser
DTU	Drainage Turn Up
DU	Dental Unit
DW	Disabled Water Closet
DWG	Drawing
DWM	Dish Washing Machine
ECV	Expansion Control Valve
EJ	Expansion Joint
EJ	Electrical Service
EW	Eye Wash
EXT	Extinguisher
FC	Fume Cupboard
FCL	For Continuation Refer
FD	Floor Drain
FFL	Finished Floor Level
FH	Fire Hydrant
FHBV	Fire Hydrant Booster Valve
FHR	Fire Hose Reel
FHV	Fire Hydrant Valve
FIP	Fire Indicator Panel
FR	Fridge
FRC	Fibre Reinforced Concrete
FBS	Flushing Rim Sink
FSL	Finished Surface Level
FSR	Fire Sprinkler Range
FU	Fixture Units
FV	Flush Valve

ABBREVIATIONS cont.

FW	Floorwaste (Untrapped)
FWG	Floorwaste Gully (Trapped)
GA	Grease Arrestor
GAL	Galvanised
GD	Grated Drain
GDO	Grated Drain Outlet
GOTU	Grease Drainage Turn Up
GFP	Gas Fire Place
GT	Grease Interceptor Trap
GL	Ground Level
GM	Gas Meter
GMS	Galvanised Mild Steel
GO	Gutter Outlet
GR	Gas Regulator
GST	Grease Stack
GTU	Grease Turn Up
GV	Gate Valve
GWM	Glass Washing Machine
GWST	Grease Waste Stack
H/L	High Level
HD	Heavy Duty
HDPE	High Density Polyethylene
HP	High Point
HT	Hose Tap
HV	High Voltage
HWM	Hot Water Meter
HWU	Hot Water Unit
ID	Inside Diameter
IL	Invert Level
IM	Ice Machine
IO	Inspection Opening
IPMF	Induct Pipe Mica Flap
IS	Inspection Shaft
IV	Isolation Valve
JU	Jump Up
KIP	Kerb Inlet Pit
KPA	Kilopascal
KW	Kilowatt
L	Litres
L/L	Low Level
L/S	Litres Per Second
LD	Light Duty
LPG	Liquid Petroleum Gas
LT	Laundry Tub
LU	Loading Units
LV	Low Voltage
M	Metre
M-HEAD	Metres Head
M/S	Metres per Second
M3/HR	Cubic Metres per Hour
MDPE	Medium Density Polyethylene
MM	Minimum
MJ	Megajoules
MJD	Movement Joint Drain
MM	Millimetres
MS	Mild Steel
NRV	Non-Return Valve
NTS	Not To Scale
NY	Nylon
O/F	Overflow
OD	Outside Diameter
OJ	Oblique Junction
ORG	Overflow Relief Gully
PAPA	Positive Air Pressure Attenuator
PDO	Planter Drain Outlet
PEX	Cross Linked Polyethylene
PFWG	Plantroom Floorwaste Gully
PG	Pressure Gauge
PLV	Pressure Limiting Valve
PM	Post Mix

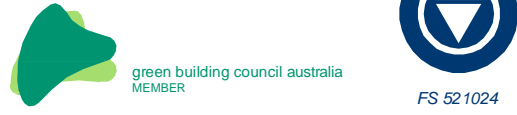
ABBREVIATIONS cont.

PRV	Pressure Relief Valve
PS	Pan Sanitiser
PSK	Pot Sink
PVC	Polyvinyl Chloride
RCP	Reinforced Concrete Pipe
RDF	Refrigerated Drinking Fountain
REF	Refrigerator
RHS	Rectangular Hollow Section
RL	Reduced Level
RP2D	Reduced Pressure Zone Device
RV	Relief Valve
SB	Surgeon's Basin
SBD	Spoon Drain Outlet
SH	Slop Hopper
SHR	Shower
SP	Sewer Inspection Pit
SK	Sink
SL	Surface Level
SMH	Sewer Manhole
SO	Syphonic Outlet
SOF	Syphonic Overflow
SPD	Spreader
SPN	Sprinkler
SQ	Square
SSHR	Safety Shower
SSL	Structural Slab Level
SS	Soil Stack
ST	Stack
STD	Sprinkler Test Drain
STER	Steriliser
SV	Stop Valve
SWP	Stormwater Inspection Pit
SWMH	Stormwater Manhole
SWP	Stormwater Pit
SWS	Stormwater Sump
SYP	Syphonic
TB	Thrust Block
TBR	To Be Removed
TD	Tundish
TEL	Telecommunication Service
TG	Trench Grate
TLV	Temperature Limiting Valve
TMRV	Thermodynamic Mixing Valve
TPRV	Temperature & Pressure Relief Valve
TTD	Trapped Tundish
TWIP	Trade waste Inspection Pit
TWL	Top Water Level
TWST	Trade waste Stack
TWTU	Tradewaste Turn Up
Typ	Typical
U/S	Underside
UNO	Unless Noted Otherwise
UPVC	Unplasticised Polyvinyl Chloride
UR	Urinal
UV	Ultra Violet
UW	Utensil Washer
VB	Vacuum Breaker
VCP	Vitrified Clay Pipe
WC	Water Closet
WL	Water Level
WM	Washing Machine (Clothes)
WST	Waste Stack
WT	Wash Trough

DRAWING SCHEDULE

DRAWING NUMBER	DRAWING SCALE	DRAWING TITLE
D-000	N.T.S	HYDRAULIC SERVICES COVER SHEET AND LEGEND
D-100	1:100	HYDRAULIC SERVICES INGROUND LOWER GROUND PLAN SANITARY AND STORMWATER SERVICES
D-101	1:100	HYDRAULIC SERVICES LOWER GROUND PLAN SANITARY AND STORMWATER SERVICES
D-102	1:100	HYDRAULIC SERVICES LEVEL 00 PLAN SANITARY AND STORMWATER SERVICES
D-103	1:100	HYDRAULIC SERVICES ROOF PLAN
D-200	1:100	HYDRAULIC SERVICES LOWER GROUND PLAN WATER, GAS AND FIRE SERVICES
D-201	1:100	HYDRAULIC SERVICES LEVEL 00 PLAN WATER, GAS AND FIRE SERVICES
D-300	N.T.S	HYDRAULIC SERVICES DETAIL SHEET 1

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NOTE: SYMBOLS ARE DRAWN IN THE CORRECT POSITION BUT ARE NOT SHOWN TO SCALE.

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ISSUE	DATE	FOR
01	03.12.10	SCHEMATIC DESIGN



KEY PLAN

CLIENT
**HEALTH INFRASTRUCTURE
NSW HEALTH**

Health Infrastructure

BUILDING
POW MHICU

PROJECT
PRINCE OF WHALES HOSPITAL

PROJECT NUMBER
SY100049

TRUE NORTH PROJECT NORTH

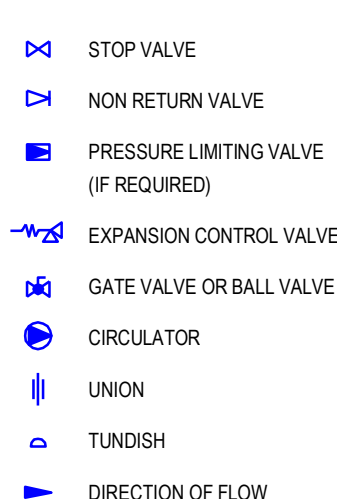
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SCALE
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STATUS
DO NOT SCALE

SCHEMATIC DESIGN
DRAWING
**HYDRAULIC SERVICES
COVER SHEET AND LEGEND**

DRAWING NUMBER	ISSUE
HY-MHICU- SD-D000	01

NOTE:
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