# Water Symbols

For NetMaps, LiteSpatial (desktop), LiteSpatial Android and myWorld

## NetMaps LiteSpatial Android

## <u>LiteSpatial (desktop)</u> <u>myWorld</u>

-	ere applicable. All a e colour coded to re Non-potable wate From the Bore to Backbone of the r Reservoir. Network of pipes Service Connection	symbols below for components with conservations ssets listed may not be available in all effect their network use. For obtained from water source, such as the Treatment Plant. The t	l applications. s a bore. he Service
LiteSpatial Android	Location.	<u>Water</u> – composite layer symbols below for components. listed may not be available in all	All assets
LiteSpatial (desktop)		Water – composite layer see Net below for components. All assets not be available in all application	s listed may
NetMaps		<b></b> Note	4
Bore	3	Meter	4
Cathodic Protection	3	Pipe Lifecycle Status	<u> </u>
$\triangle$		Supply Type	5
Chemical Dosing P		Management Function	5
Dam	3	Some other Pipeline Details	6
Dosing Point	3	Pump Station	6
Fittings	3	Sample Point	6
Gauging Station	4	Casing	6
		X Service Connection	7
	4	Prelaid	7
KM Marker	4	Ducts .	7
Access Chamber o	r Pit 4	not defined.	Bookmark
watercorporation.com.au		FRESH (WATER) THINKING WA	ATER

myWorld connections	7
Service Point Location	8
Stand Pipe	8
Tanks-Reservoirs	<u>8</u>
Treatment Plant	8
Water Supply Point	8
	8
Fully operational valves	9
Close directions	9
Zone Isolation Valves	9
Non Control Valves	10
Operation Codes	10
Asset Boundaries	10
Warning Symbol	10
Water Hotspot	10





#### Bore

Bores are displayed with identifying name or number

Bore Type

P Production Observation Bore Types
M Monitoring O Observation
L Licensed Private I Investigation

A surrounding Wellhead Protection Buffer can be placed in the metropolitan area and may vary from 100m to 500m radius.



#### **Cathodic Protection**

Cathodic Protection is for corrosion protection, using electrical charge, of steel pipes. Area of influence is shown for metropolitan area only. <u>Fittings</u> are:

Cathodic Anode (Fitting)

Cathodic Interference Test Point (Fitting)

Cathodic Polarisation Probe (Fitting)

Cathodic Test Point (Fitting)

Cathodic Transformer Rectifier (Fitting)

Cathodic Cable



### **Chemical Dosing Plant**

Usually found in smaller country towns for treating water, often groundwater



#### **Dam**

Details if available: Dam name, Top Water Level (TWL) and Capacity (CAP).



#### **Dosing Point**

UVS Ultra violet sterilisation UVS

DOSE Chemical dosing point DOSE



#### **Fittings**

DEAD Dead Plate

PIGS Pig Station — PIGS

RRP Riparian Release Point

AIP Air Injection Point — 40AIP



Field book and page numbers are shown if different from the pipe field book.



## **Gauging Station**

Has flow control types:

Natural

Other

Open Chanel Control

Pipe Control

Weir

## Hydrant

H Hydrant

P Pillar Hydrant

T Hydrant Tee



Field book and page numbers are shown if different from the pipe field book number.

#### ■ ■ ■ I KM Marker

Are placed on long country Main Pipes at right angles to the pipe with the distance noted.

## Access Chamber or Pit

Allows access to underground pipe controls.

Field book and page numbers are shown if different from pipe field book.

Type is noted:

MH Manhole

SAP Service Access Point

#### --- Note

Along with the text of a note, there may have a boundary indicating a relevant area.



#### Meter

Displayed with relevant text and size if applicable.

METER	Meter	
MFM	Magnetic Flow Meter	
MM	Master Meter	
MICRO	Micro Meter	
PITO	Pito Meter	-
PP	Pressure Point	_ <u>ŏ</u>
LDMS	Leak Detection Meter Site	E

Field book and page numbers are shown if different from the pipe field book number.



### • Pipe

Pipes have a size and material.

They may have a Field Book and page number or a Planset number.

The Networks and their associated assets are colour coded to reflect their use:

Service
Distribution
Transmission

Production (Raw/Saline/Non Potable)

#### Lifecycle Status of:

NetMaps & LiteSpatial		<u>myWorld</u>	
Actual		Existing	
Dead		Abandoned	
Not in Use		Inactive	
Proposed		Proposed	
Quote			
		Removed	
		Under Construction	

Supply Type of:

Drinking Water Grey Water Process Water Raw Water

#### Management Function of:

NetMaps and LiteSpatial			<u>myWorld</u>	
Pipe Type	Supply Type			
Bore Main	Non potable	BORE MAIN	Bore	
Bypass	Potable	BYPASS MAIN	Bypass	
			Connection	
			Discharge	
Distribution Main	Potable	DISTRIBUTION MAIN	Distribution	
			Fire Service	
			Hydrant Main	
			Manifold	
Non Potable Other	Non potable	NON POTABLE OTHER	Non Potable	
Offtake	Potable	OFFTAKE MAIN	Offtake	
Overflow	Non potable	OVERFLOW	Overflow	
			Prelaid	
Pressure Equaliser	Potable	PRESSURE EQUALIZER	Pressure Equalizer	
			Raw Water	
Reticulation	Potable	RETICULATION MAIN	Reticulation	
Saline	Non potable	SALINE MAIN	Saline	
Scour	Non potable	SCOUR	Scour	
Scour and Overflow	Non potable	SCOUR & OVERFLOW	Scour and Overflow	
			Siphon Main	
			Sprinkler Fire Service	



Trunk Main Potable TRUNK MAIN Trunk

Private Pipes will show as:

#### Some other Pipeline Details

<u>42265-145</u> Field book and page number if known

Proposal; indicated by the P following the FB and page number DM27-P

or planset number

MWA 12345 MWA planset number

PWD 12345 PWD planset number

CK43 Water Corporation planset number

Alignment is shown only when pipe laid on non-standard alignment. That is other than 2.1 for retic mains and 4.5 for

distribution mains

Change point; indicates where pipe details change

Pipe Bypass

**Pump Station** 

Pipe Overpass

The name and number of PS are displayed if available.

Types:

PS **Pump Station** BS **Booster Station** 

**Sample Point** 

Water Sample Point Type: Water Type:

> Dip Distribution Other Raw

Standard Treated

Casing

CONC. ENC.

Pipe Protection. This shows parallel to the pipe. These may show a size and material.

Material: Type: AC **Asbestos Cement ENC** Encasement CI Cast Iron SL Sleeve DI Ductile iron

> GWI Galvanised Wrought Iron RC Reinforced Concrete

> > S Steel

(3.6)

100AC ↓100P-12

## Service Connection

Prelaid A Pre-laid service shows the location of a service connection provided at the time of subdivision but is not guaranteed to be the actual location of the live service or meter. A prelaid service must use one of the direction types.

Direction types; indicates side of lot selected for meter position.

D	Deferred
FL	Fully Prelaid Left
FM	Fully Prelaid Front Middle
FR	Fully Prelaid Right
L	Left
R	Right

#### **Ducts**

A pipe laid to enable future installation of a service to a multiple residential/commercial lot. Direction types, indicates side of lot the duct is laid followed by its size.

) 100
30 R 80
30 R 80

NB are now recorded in myWorld as a casing

**Non Standard Services** may be either a short service or long service.

They may have no valves, one valve or two valves. They are labelled with a pipe size and material type followed by a purpose.

Field book and page numbers are shown if different from the pipe field book number.

	1 - 3		
Purposes:	DOMS	Domestic Service	→ 100P DOMS
	FHS	Fire Hydrant Service	<del>-XX</del> 100S FHS
	FS	Fire Service	<del>-</del> ★★100S FS
	MANI	Manifold Service	100CU MANI
	NRS	Non Rated Service	50S NRS
	SFS	Sprinkler Fire Service	→××100CU SFS

#### myWorld connections

Introduces the new network type called Service. This new network is made up of two objects, the service connection pipe and a Service point Location. This allows you to see the recorded location of the water pipe and Service Point Location on a normal private lot.

The <u>colour</u> for service connections will change in instances that the assumed location of the connection is not available in our records. These pipes are displayed as a lighter blue and are always located in the middle of the lot by default.



The pipe types available in this network for connections are:

Connection
Fire Service
Manifold
Prelaid
Sprinkler Fire Service



#### **Service Point Location**

The Service Point Location represents the assumed location of the property water meter on the lot. The Service Point is derived from the location description in Grange and will be displayed in the centre of the lot when the actual location is unknown.

The status is:



Active - Orange - Meter exists



Inactive - Grey - Meter removed



#### **Stand Pipe**

A Stand Pipe is typically an above the ground fitting used to fill water bearing trucks for various purposes, such as firefighting, watering, etc.

<u>Text</u>	<u>Types</u>	Backflow device
NO	Non Overhead	Yes
0	Overhead	No



#### **Tanks-Reservoirs**

Tank name, Top Water Level (TWL), Capacity (CAP), Floor level (FL) are displayed where supplied. Types of Tanks-Reservoirs include

A	Air Break Tank
С	Air Cushion Tower
E	Elevated Tank
0	One Way Surge Tank
R	Reservoir
S	Storage Tank
Τ	High level Tank



#### **Treatment Plant**

Water/Groundwater Treatment Plant



#### **Water Supply Point**

Private commercial water supply point. Usually associated with a master meter. Field book and page numbers are shown if different from the pipe field book.



#### Valve

Valve sizes are shown only if different to pipe size and followed by the type text Field book and page numbers are shown if different from the pipe field book.

ALT Altitude

BALL Ball



BRONZE	Bronze gate	X
BV	Butterfly Valve	$\sim$
FP	Flushing Point	
FW	Fullway, shown only on pipes < than 100mm diameter	X
MBV	Motorised butterfly valve	$\sim$
PRV	Pressure reducing valve	$\hat{\Box}$
PSV	Pressure sustaining valve	
R	Resilient seat	X
REG	Regulating valve	$\hat{\mathbf{x}}$
RV	Reflux valve	
SV	Sluice valve	X

Fully operational valves will show as:

If **Type** is - ALT, BRONZE, BV, FW, MBV,

R or SV

If **Type** is – PRV, PSV REG or RV

If **Type** is – FP

If **State** is – Broken Open/Closed

If State is - Temporarily Open/Closed

If **State** is – Leaking Coupling

If State is - Leaking Gland

If **State** is - Cannot Locate

If **State** is – Spindle Problem

If **State** is – Tag Missing

If State is - Valve Buried

<u>Text</u>

<u>Displayed</u>

Closed

FP

BO/BC

TO/TC

LC

LG

CL

X X X X X X

SP

 $\mathsf{TM}$ 

VΒ

Close directions: A Anti-clockwise, closing normal

C Clockwise, closing

**Zone Isolation Valves:** 

**Type** must be - BRONZE, BV, FW, MBV or SV

Condition must be - "Closed", symbol is













If <b>State</b> is –	"Fully Operational" symbol is	$\otimes$	
If <b>State</b> is –	"Broken Open" symbol is	×	ВО
If <b>State</b> is –	"Broken Closed" symbol is	$\bigotimes$	ВС
If <b>State</b> is –	"Temporarily Open" symbol is	×	ТО

Non Control Valves (Fittings):	DAV	Double Air Valve	
These are shown as valve size, if known, followed by the valve type.	MAV	Manual Air Valve	
Field book and page numbers are shown if different from the pipe field book.	SAV	Single Air Valve	
	SC	Scour	$\rightarrow$



**Operation Codes:** B Prevents bfp/valve bypass

D Headworks, Notify Headworks foreman before operating

E Prevent environmental damage

O Prevents OS&H hazard

P Pressure main, DO NOT OPERATE

S Separates water types

T Prevents treatment bypass

Z Maintains zone isolation

# (x3263) for further information.

Contact Service Delivery Branch

Seen as a dotted background to a site or asset. This is an internal reference link for more detailed asset information. It holds a Functional Location Number which is linked to SAP.

- W Storage Complex
- W Pipe Section Pipe Sections are currently created only on Main Pipes not Retic Pipes
- W Control Valve Site
- W Bore Site



#### **Warning Symbol**

**Asset Boundaries** 

Alert - Investigate further!

This symbol will have text below the symbol to indicate the asset or issue.

Currently in the system are:

MANHOLE Hazardous manhole

ELECTRICAL Location of electrical interference on sections of steel pipe

<u>Valve-A</u> Critical valve with operation code



Take care!! Coverage shows where the Water Corporation Assets are within 0.5m of Electrical or Gas underground assets. Currently only available in NetMaps and LiteSpatial



Revisions	
10 Mar 2009	Reviewed
18 Mar 2009	Pipe details updated. Gauging Station added.
11 Nov 2009	Reformatted
07 Jan 2011	Reviewed, updated, LiteSpatial plates added.
07 Oct 2011	Corrected valve wording
18 Feb 2013	Reviewed
19 Sep 2013	Added Water Ball Valve Type
26/11/2013	Reformatted and reviewed.
20/08/2015	Reviewed, reformatted and notes on myWorld added

