

CHANGES TO D11 – WATER DESIGN

This document highlights significant changes to D11 Rev I July 2018 (it does not outline all changes)

Clause numbers listed are as per the most recent document unless specified otherwise.

Clause	Change																																
D11.04	<p>MATERIALS - a new section collating materials information from throughout the document</p> <p>New wording for pipe bedding material D12.04.04: <i>Pipe bedding material shall be coarse bedding sand or other Local Government approved source. In the absence of any specific approval the following specifications shall apply.....</i></p>																																
D11.06	<p>Table D11.06.01 Water Supply Network Analysis Software updated for Isaac, Livingstone and Maranoa</p> <p>Table D11.06.01 Water Supply Network Analysis Software</p> <table border="1"> <thead> <tr> <th>Council</th> <th>Software Used</th> </tr> </thead> <tbody> <tr> <td>Banana Shire</td> <td></td> </tr> <tr> <td>Central Highlands Regional</td> <td></td> </tr> <tr> <td>Gladstone Regional</td> <td>InfoWater</td> </tr> <tr> <td>Isaac Regional</td> <td>H2OMAP</td> </tr> <tr> <td>Livingstone Shire</td> <td>EPANET or H2OMAP</td> </tr> <tr> <td>Maranoa Regional</td> <td>WATER GEMS</td> </tr> <tr> <td>Rockhampton Regional</td> <td>WATER GEMS</td> </tr> </tbody> </table>	Council	Software Used	Banana Shire		Central Highlands Regional		Gladstone Regional	InfoWater	Isaac Regional	H2OMAP	Livingstone Shire	EPANET or H2OMAP	Maranoa Regional	WATER GEMS	Rockhampton Regional	WATER GEMS																
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D11.07.03	<p>New Table added for FIRE FIGHTING REQUIREMENTS to clarify design requirements for fire fighting for each Local Government</p> <p>Table D11.07.03 Fire Fighting Requirements</p> <table border="1"> <thead> <tr> <th></th> <th>Residual pressure at most disadvantaged hydrant (m)</th> <th>Flow</th> <th>When fire flow is applied</th> </tr> </thead> <tbody> <tr> <td>Banana Shire</td> <td>TBA</td> <td>TBA</td> <td>TBA</td> </tr> <tr> <td>Central Highlands Regional</td> <td>TBA</td> <td>TBA</td> <td>TBA</td> </tr> <tr> <td>Gladstone Regional</td> <td colspan="3">Refer to Planning Guidelines for Water Supply and Sewerage</td> </tr> <tr> <td>Isaac Regional</td> <td>TBA</td> <td>TBA</td> <td>TBA</td> </tr> <tr> <td>Livingstone Shire</td> <td>12m</td> <td>15L/s for 2h for low and medium density residential 30L/s for 4 hours for high density residential and commercial / industrial.</td> <td>MHMD</td> </tr> <tr> <td>Maranoa Regional</td> <td>12m</td> <td>15L/s for 2h for low and medium density residential 30L/s for 4 hours for high density residential and commercial / industrial.</td> <td>MHMD</td> </tr> <tr> <td>Rockhampton Regional</td> <td>12m</td> <td>15L/s for 2h for low and medium density residential 30L/s for 4 hours for high density residential and commercial / industrial.</td> <td>MHMD</td> </tr> </tbody> </table>		Residual pressure at most disadvantaged hydrant (m)	Flow	When fire flow is applied	Banana Shire	TBA	TBA	TBA	Central Highlands Regional	TBA	TBA	TBA	Gladstone Regional	Refer to Planning Guidelines for Water Supply and Sewerage			Isaac Regional	TBA	TBA	TBA	Livingstone Shire	12m	15L/s for 2h for low and medium density residential 30L/s for 4 hours for high density residential and commercial / industrial.	MHMD	Maranoa Regional	12m	15L/s for 2h for low and medium density residential 30L/s for 4 hours for high density residential and commercial / industrial.	MHMD	Rockhampton Regional	12m	15L/s for 2h for low and medium density residential 30L/s for 4 hours for high density residential and commercial / industrial.	MHMD
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D11.09.01	Minimum water main pipe classes table modified by deleting uPVC pipe option.																																
D11.10.01	<p>Cover requirements for water now consistent with sewer.</p> <p>Table D11.10.01: Varied Depth Of Cover To Water Mains And Water Service Conduits</p> <table border="1" data-bbox="357 309 1445 577"> <thead> <tr> <th>Location of Pipe</th> <th>PVC*</th> <th>DI</th> </tr> </thead> <tbody> <tr> <td>1. Areas not subject to vehicular loading:</td> <td>600mm</td> <td>300mm</td> </tr> <tr> <td>2. Areas subject to vehicular loading:</td> <td></td> <td></td> </tr> <tr> <td> a) not in roadway</td> <td>600mm</td> <td>450mm</td> </tr> <tr> <td> b) in sealed roadway</td> <td>900mm[#]</td> <td>600mm[#]</td> </tr> <tr> <td> c) in unsealed roadway</td> <td>900mm[#]</td> <td>750mm[#]</td> </tr> </tbody> </table> <p># Or 100mm below subgrade whichever is greater</p>	Location of Pipe	PVC*	DI	1. Areas not subject to vehicular loading:	600mm	300mm	2. Areas subject to vehicular loading:			a) not in roadway	600mm	450mm	b) in sealed roadway	900mm [#]	600mm [#]	c) in unsealed roadway	900mm [#]	750mm [#]														
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D11.10.02 (Table)	<p>Modified to clarify number of valves required per tee</p> <p>Table D11.10.02 Valves and Tees Instalment Arrangement</p> <table border="1" data-bbox="357 745 1417 1059"> <thead> <tr> <th>Local Council</th> <th>Flanged Valves and Tees</th> <th>Valves per Tee</th> </tr> </thead> <tbody> <tr> <td>Banana Shire</td> <td>Yes</td> <td></td> </tr> <tr> <td>Central Highlands Regional</td> <td>Yes</td> <td></td> </tr> <tr> <td>Gladstone Regional</td> <td>Yes</td> <td>3</td> </tr> <tr> <td>Isaac Regional</td> <td>Yes</td> <td>3</td> </tr> <tr> <td>Livingstone Shire</td> <td>No</td> <td>2 (both downstream legs)</td> </tr> <tr> <td>Maranoa Regional</td> <td>Yes</td> <td>3</td> </tr> <tr> <td>Rockhampton Regional</td> <td>No preference</td> <td>2 (both downstream legs)</td> </tr> </tbody> </table>	Local Council	Flanged Valves and Tees	Valves per Tee	Banana Shire	Yes		Central Highlands Regional	Yes		Gladstone Regional	Yes	3	Isaac Regional	Yes	3	Livingstone Shire	No	2 (both downstream legs)	Maranoa Regional	Yes	3	Rockhampton Regional	No preference	2 (both downstream legs)								
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