

CAPRICORN MUNICIPAL DEVELOPMENT GUIDELINES

2022 MEETING 09 MINUTES

Venue: Teams

Date and Time: 7 October 2022 11:00 am

Item	Item																																													
1	Welcome Attendance: Chris Hegarty (MCE), Richard Bywater (MCE), Scott McDonald (GRC), Graham Sweetlove (MRC), Grant Vaughan (RRC), Tilak Mudalige (RRC), Sarah Banda (CHRC), Michael Stanton (IRC), Gary Carlyle (IRC)																																													
2	Apologies: Jamie McCaul (RRC) Mohit Paudyal (RRC), Brendan Fuller (GRC), Joel Kuczynski (IRC), Anthony Lipsys (BSC), Greg Abbotts (LSC), Daniel Price (BSC), Jon Ashman (LSC)																																													
3	True and correct record of minutes from previous meeting Refer Attachment A <u>Resolution:</u> That the minutes of the meeting held on Teams on 2 nd September 2022 be formally adopted.																																													
4	Terms of reference and Budget None																																													
5	Outstanding items from the previous meeting This includes items which were not fully resolved at the previous meeting or items not considered due to time constraints. <table><tr><th>Item number</th><th>Item</th><th>Proponent</th></tr><tr><td>M22.01.01</td><td>Website Update</td><td>All</td></tr><tr><td>M15.5</td><td>D1 Geometric Road Design – finalise new tables</td><td>All</td></tr><tr><td>M15.15</td><td>D9 Cycleway and Pathway Design revision</td><td></td></tr><tr><td>M15.16</td><td>Draft underbore detail</td><td></td></tr><tr><td>M16.11</td><td>C273 Landscaping – amend hydromulch spec</td><td>GRC</td></tr><tr><td>M15.20</td><td>PS26 Marker Posts</td><td>GRC</td></tr><tr><td>M22.02.05</td><td>Use of Corrugated polypropylene drainage pipes</td><td>LSC</td></tr><tr><td>M10.5.1</td><td>D6 Site regrading – consider retaining wall issue</td><td>LSC</td></tr><tr><td>M22.03.01</td><td>Lockrail park access</td><td></td></tr><tr><td>M22.03.05</td><td>CP1.28 Bonding of uncompleted works. Amendments to document.</td><td>GRC</td></tr><tr><td>M22.04.01</td><td>Review of Reference documents in all Specifications</td><td>BSC</td></tr><tr><td>M22.04.04</td><td>D5 – Polypropylene maintenance structures for gravity sewers</td><td>LSC</td></tr><tr><td>M22.07.03</td><td>Corrugated plastic subsoil pipe</td><td>MCE</td></tr><tr><td>M22.07.04</td><td>RRC grated crossover drawings</td><td>RRC</td></tr></table>	Item number	Item	Proponent	M22.01.01	Website Update	All	M15.5	D1 Geometric Road Design – finalise new tables	All	M15.15	D9 Cycleway and Pathway Design revision		M15.16	Draft underbore detail		M16.11	C273 Landscaping – amend hydromulch spec	GRC	M15.20	PS26 Marker Posts	GRC	M22.02.05	Use of Corrugated polypropylene drainage pipes	LSC	M10.5.1	D6 Site regrading – consider retaining wall issue	LSC	M22.03.01	Lockrail park access		M22.03.05	CP1.28 Bonding of uncompleted works. Amendments to document.	GRC	M22.04.01	Review of Reference documents in all Specifications	BSC	M22.04.04	D5 – Polypropylene maintenance structures for gravity sewers	LSC	M22.07.03	Corrugated plastic subsoil pipe	MCE	M22.07.04	RRC grated crossover drawings	RRC
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	M22.07.05	W-061 and W-061A – Hydrant and Valve Boxes	GRC
	M22.08.01	Approaches from Industry regarding new products	MCE
	M22.08.02	D14 Floodways	MCE/RRC
6	New Agenda Items		
	<i>Item number</i>	<i>Item</i>	<i>Proponent</i>
	M22.09.01	D11 Water Supply Design – Colour and marking of Infrastructure	MCE
	M22.09.02	G-018 Standard Council Grid drawing – width markers	CHRC
	M22.09.03	D5 – Roof and Allotment Drainage	RRC
7	General Business		
	•		
8	Next Meeting		
	Next meeting to be in Calliope on 17 th November at 10am		
9	CMDG Action Register		
	The latest register is Attachment B		
	CMDG Trial Register		
	The latest register is Attachment C		
10	Meeting Closed at 12.10		

Item No.	Item Details
M22.01.01	<p>Website Update</p> <p><u>Previous Resolution</u></p> <p>Agreed to proceed with LGAQ via GRC if GRC can engage LGAQ directly and then invoice MCE for distribution to the rest of the committee. Scott to confirm with procurement section internally at GRC if this is possible.</p> <p><u>Current Status</u></p> <p>Scott provided an update on progress. Scott has been in contact with Christine from LGAQ and is waiting for a price/ quotation back. Proposal will include website rebuild, annual maintenance/ licensing fees and training.</p> <p><u>Resolution</u></p> <p>On receiving the price the committee will review the compare/ assess value in relation to the original fee from Made Known in Rockhampton and determine how to proceed.</p> <p><u>Action By</u></p> <p>GRC/ MCE</p>
M15.5	<p>D1 Geometric Road Design – finalise new tables</p> <p>Proposed D1 Document ver 10C is at Attachment G</p> <p><u>Previous Resolution</u></p> <ul style="list-style-type: none"> Chris to send around final D1 documents for a 2 week review period by the committee. On acceptance by the committee the document will then be sent out to industry for a 3 week review period. Graham to chase up a response from MRC. <p><u>Current Status of D1 Urban and Rural Tables</u></p> <ul style="list-style-type: none"> RRC – Completed CHRC – Completed. GRC – Completed. MRC – Completed. LSC – Completed. IRC – Completed BSC – Completed but some inconsistencies have been identified and BSC is considering changes <p>The draft document was sent for review on 28/09/2022. Responses to be provided by 12th October.</p> <p>Points noted so far:</p> <ul style="list-style-type: none"> Some of the Australian standards (AS 1158 and AS2890) need NZS adding The changes between terminology in the road hierarchy section D01.07 are a bit confusing as it changes between Austroads, CMDG and Street design manual Table D01.08.01 is missing IRC and this then continues throughout the document as the references are D01A to D01F (rather than D01G) TMR have now adopted the new Austroads Part 6 with the changes to “clear zones” as such it may not be appropriate to reference fixed widths based on the old version i.e. the 3m that is stated in a few instances. <p><u>Resolution</u></p> <p>Agreed that updating AS/NZS references and adding IRC to table D01.08.01 is required.</p>

	<p>Some discussion around terminology in section D01.07 and Chris to review prior to finalising document</p> <p>Discussion about updates to Austroads Part 6A in relation to the clear zone and how there is still no consensus in the industry about risk values. Grant will be attending a TMR workshop on this topic and may be able to provide further guidance following this. Item to be parked for now until more information and advice is available. Scott mentioned making sure that there are no inconsistencies, Chris to consider this and check references prior to finalising the D1 document.</p> <p><u>Action By</u> - All</p>
M15.15	<p>D9 Cycleway and Pathway Design revision – Awaiting Action</p> <ul style="list-style-type: none"> • Previous resolution was <p><i>Cardno to check D9 and check where we are at with the changes</i></p> <ul style="list-style-type: none"> • MCE have completed a review of the document and are in the process of updating the document for review by the committee <p><u>Previous resolution</u></p> <p>Discussed and agreed to minimise level of detail and refer to Austroads. MCE to complete draft and forward to committee for review.</p> <p><u>Current Status</u></p> <p>In progress. Send to committee for review when complete.</p> <p><u>Action By</u> MCE</p>
M15.16	<p>Draft Underbore Detail</p> <ul style="list-style-type: none"> • The previous resolution was <p><i>Cardno to provide draft underbore detail for consideration.</i></p> <ul style="list-style-type: none"> • MCE intend to progress this item with a draft drawing based on SEQ – any examples or advice on content from members would be appreciated. <p><u>Previous Resolution 24 June 2022</u></p> <p>MCE to commence investigation into underbore detail.</p> <p>Proposed new underbore drawing is currently in progress Attachment F.</p> <p><u>Previous Resolution</u></p> <p>MCE to cross check new drawing with other Councils and TMR standard drawings then send to committee for review with commentary/ background information.</p> <p><u>Current Status</u></p> <p>Draft version of the drawing is Attachment F. SEQ drawings have been used as a basis, Mackay City Council is using a similar drawing, also included in Attachment F.</p> <p><u>Resolution</u></p> <p>The following changes are to be made:</p> <ul style="list-style-type: none"> • Add a note to refer to TMR docs "For underboring in state controlled roads refer to TMR specifications MRTS140, 141 and 142 as well as Technical Note TN163." • Remove reference to SEQ from Note 17. • Delete note 11 • Change note 9 to say "PE acceptable if not boring or jacking" • Add strap to anchor block on vertical bend on bored and jacked detail • Change note 3: PE (See notes 15 & 16)

	<ul style="list-style-type: none"> On the directional drilling detail add a leader to the pipe saying "Typically PE pipe for directional drilling" <p>Drawing to be uploaded once changes are made.</p> <p><u>Action By</u> MCE</p>																
M16.11	<p>C273 Landscaping – amend hydromulch spec- Awaiting Action</p> <ul style="list-style-type: none"> The current hydro mulch specification uses seed varieties that are more suited to colder climates. See Attachment J for example seed mix used by Dennis Contracting Services <p><u>Previous Resolution 24 June 2022</u></p> <p>GRC, MRC, LSC are happy with the revised specification. RRC, IRC, CHRC, BSC to review and provide feedback/ acceptance.</p> <p>Proposed spec acceptable - responses received so far:</p> <table border="1"> <thead> <tr> <th>Local Government</th><th>Acceptance</th></tr> </thead> <tbody> <tr> <td>Banana Shire</td><td>? Daniel to check</td></tr> <tr> <td>Central Highlands Regional</td><td>Yes</td></tr> <tr> <td>Gladstone Regional</td><td>Yes</td></tr> <tr> <td>Isaac Regional</td><td>Yes</td></tr> <tr> <td>Maranoa Regional</td><td>Yes</td></tr> <tr> <td>Livingstone Regional</td><td>Yes</td></tr> <tr> <td>Rockhampton Regional</td><td>Yes</td></tr> </tbody> </table> <p><u>Previous Resolution</u></p> <p>Make changes to specification based on the feedback provided by Dennis Contracting Services and send to committee for final review.</p> <p><u>Current Status</u> – Changes still underway</p> <p><u>Action By</u> MCE</p>	Local Government	Acceptance	Banana Shire	? Daniel to check	Central Highlands Regional	Yes	Gladstone Regional	Yes	Isaac Regional	Yes	Maranoa Regional	Yes	Livingstone Regional	Yes	Rockhampton Regional	Yes
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M15.20	<p>PS26 Marker Posts</p> <ul style="list-style-type: none"> • Attachment K is draft PS26 provided by GRC • The previous resolution was: <p><i>Amended Purchase Spec PS26 provided by GRC.</i></p> <ul style="list-style-type: none"> • <i>All Councils to confirm if they use timber marker posts or not</i> • <i>If no Councils use timber posts this will be replaced on CMDG-W-060 with Flat posts</i> • <i>Councils to confirm which colours for which applications</i> <ul style="list-style-type: none"> • Need guidance on the above dot points so that PS26 can be finalised. <p>Timber posts responses received:</p> <table border="1"> <thead> <tr> <th>Local Government</th><th>Timber posts permitted</th></tr> </thead> <tbody> <tr> <td>Banana Shire</td><td>No</td></tr> <tr> <td>Central Highlands Regional</td><td>Yes</td></tr> <tr> <td>Gladstone Regional</td><td>No</td></tr> <tr> <td>Isaac Regional</td><td>Yes</td></tr> <tr> <td>Maranoa Regional</td><td>Yes</td></tr> <tr> <td>Livingstone Regional</td><td>No</td></tr> <tr> <td>Rockhampton Regional</td><td>No</td></tr> </tbody> </table> <p><u>Previous Resolution</u></p> <p>MCE to research and check IPWEAQ and SEQ specifications, then update PS26 based on the findings. Drawing required updating to have post 900/1200 above ground (not total length) in urban areas, 1800 in rural areas.</p> <p><u>Current Status</u></p> <p>Changes made by MCE and new version (rev C) of PS26 is included as Attachment K. We need a resolution of the colour to be used for Dialysis Valves outside of GRC.</p> <p>Some discussion on background</p> <p>Chris summarised benefits in covering the above ground infrastructure in the document, namely that it is not covered elsewhere in CMDG, and it was agreed that it is worthwhile. Some discussion regarding the colours and most LGAs confirmed that the colour provided in the draft PS26 document are applicable.</p> <p><u>Resolution</u></p> <p>No consensus reached on Dialysis valve colour (other than GRC). LGAs to discuss with their water sections to get feedback on proposed colours and to determine suitable colour to dialysis valves.</p> <p>Hold PS26 until the above issue is sorted out.</p> <p><u>Action By</u></p> <p>All</p>	Local Government	Timber posts permitted	Banana Shire	No	Central Highlands Regional	Yes	Gladstone Regional	No	Isaac Regional	Yes	Maranoa Regional	Yes	Livingstone Regional	No	Rockhampton Regional	No
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M22.02.05	<p>D5 – Use of corrugated polypropylene drainage pipes- Awaiting Action</p> <ul style="list-style-type: none"> • LSC is suggesting use of corrugated polypropylene drainage pipes. 																

6-2021	CMDG-D, CMDG-D5, C221.		Addition of corrugated polypropylene drainage pipes.	<p>Twin wall corrugated polypropylene drainage pipes offer many benefits compared to reinforced concrete pipes. Benefits include:</p> <ul style="list-style-type: none"> • Excellent corrosion and chemical resistance • Can be cut to length with no detriment to corrosion resistance • Excellent rubber ring joint sealing system • Smooth bore providing optimum hydraulic performance • Available in 6 metre lengths • Lighter to handle with a lower risk rating for those handling the pipes • Smaller diameter pipes can be manually handled • Lower transport costs • Large and diverse range of fitting available <p>1.1 CMDG-D, CMDG-D5, C221. Addition of corrugated polypropylene drainage pipes.</p>
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- C221 Section C221.04 mentions FRC and RCP pipes but not Plastic.
- Current Section D05.18 reads as follows.

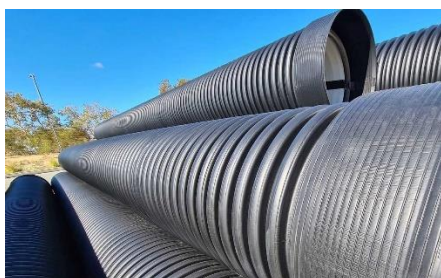
D05.18. PIPE MATERIAL

D05.18.01. The following pipe materials are approved subject to minimum cover and installation requirements stated by the manufacturer:

- Steel reinforced concrete pipe and culverts to AS4058; and
- Fibre Reinforced pipes to AS4139.; and
- Other pipes will be considered subject to individual Council approval.

D05.18.02. All joints between pipes shall be Rubber Ring Joints (RRJ).

- It is noted that Hydra Storm supplies pipe as follows:
 - Manufactured in accordance to AS – NZS 5065
 - Available from Diameter Nominal (DN) 225mm to 600mm
 - Manufactured from recycled HDPE



- C221 will need to be updated at the same time as D5.
- Richard mentioned that he is meeting with a representative from Iplex next week where he will get additional information and specifications.

Previous Resolution

Richard to collate information and specifications and send to committee for further discussion at next meeting with proposed changes to D5 and C221 to permit use of corrugated polypropylene drainage pipes.

Action By MCE

- Richard has met with the sales Rep but proposed changes to D5 and C221 are still being considered. It is recommended that Polypropylene pipes with classification SN8 are approved up to a diameter of 600mm.
- The technical guide for Blackmax (Iplex) is included as ~~Attachment N~~.

Use of polypropylene drainage pipes up to 600mm diameter in urban areas only - responses received:

	Local Government	Acceptance
	Banana Shire	Yes
	Central Highlands Regional	Yes
	Gladstone Regional	Yes
	Isaac Regional	Yes
	Maranoa Regional	Yes
	Livingstone Regional	Yes
	Rockhampton Regional	Yes
	<p>Commentary around impact on plastic pipes due to grass fires etc in rural areas.</p> <p><u>Previous Resolution</u></p> <p>Update D5 and C221 to permit polypropylene pipes (SN8) in urban areas only up to 600mm diameter. Add notes around to be installed as per manufacturers specifications. Revised documents to be sent to committee for review.</p> <p><u>Current Status</u></p> <p>In progress. Version 9 of D5 is included as Attachment D. Updated C221 to be sent to committee for review when completed.</p> <p><u>Action By</u></p> <p>MCE</p>	
M10.5.1	<p>D6 Site Regrading – consider retaining wall issue Awaiting Action</p> <ul style="list-style-type: none"> The previous resolution was Meeting 10 – Sub Committee of Amal Meegahwattage (LSC), Jamie McCaul (RRC), and Chris Hegarty to review the document and advise. Phil McKone to check LGAQ legal site for any retaining wall related advice Meeting 13. This item was not discussed. Chris, Jamie and Dev to meet to progress further. No progress on this issue yet – need to discuss its priority and resources to progress the matter <p><u>Previous Resolution</u></p> <p>Jamie and Chris to discuss further and determine a potential resolution.</p> <p><u>Discussion</u></p> <p>Jamie mentioned seeing lots of this type of boundary retaining wall being used in the region. Mention of previously court case regarding retaining wall failure, Jamie to investigate the outcome of the case to provide potential guidance on how to proceed.</p> <p><u>Resolution</u></p> <p>Jamie and Chris to discuss further and determine a potential resolution.</p> <p><u>M2022.09 Update:</u></p> <p>Jamie is waiting on the outcome from some current RRC cases of retaining wall failure. The outcomes from these may influence or provide direction to the D6 changes.</p> <p><u>Action By</u></p> <p>MCE/RRC</p>	
M22.03.01	<p>CMDG-G-013 Locking Rail</p> <ul style="list-style-type: none"> The previous resolution was <i>Some interest from committee regarding removable bollards/lockrails. Existing lockrail drawing (not part of standard drawings set) to be discussed at next meeting.</i> 	

- Discussions at the previous meeting centred on a new Lockrail drawing presented by LSC some time ago (along with a suite of Parks drawings). However, there already is a lockrail drawing included in CMDG.
- RRC Parks have advised that they are heading away from the lockable pole insert type given the manual handling associated with it. They are actually replacing these types across the region with the swing gates as shown in the attached picture.



Scott has provided the IPWEAQ drawings which have slightly different details to the CMDG drawings as well as some swinging gate details.

MCE have created a CMDG swing gate drawing using a combination of the IPWEAQ drawing example and the existing RRC gate shown in the photo above.

Drawing applicability

Local Government	Rail drawing – G-013	Gate drawing – G-021
Banana Shire	Yes	Yes
Central Highlands Regional	Yes	Yes
Gladstone Regional	Yes	Yes
Isaac Regional	Yes	Yes
Maranoa Regional	Yes	Yes
Livingstone Regional	Yes	Yes
Rockhampton Regional	No	Yes

Previous Resolution

RRC to consider and confirm whether a single gate option is required. GRC to confirm applicability for new gate drawing G-021. Drawing to be uploaded to website once feedback is received.

Current Status

Drawing to be uploaded to website once feedback is received.

Single gate option has been requested by RRC parks department.

Drawing G-013 has been updated. Both drawings are in **Attachment O**.

Resolution

MCE to update drawing (or create new drawing) to include a single gate option as requested. Jamie to provide MCE with the drawing that RRC parks are currently using to construct gates.

Action By

MCE/RRC

CP1.28 Bonding of uncompleted works. Amendments to document

- The meeting 15 resolution on this was “Take out of agenda for now. GRC will provide additional information and commentary for clarity”.
- GRC have provided a marked up version of CP1 with proposed changes mainly around the use of bonding deeds but also other issues – refer to comments in Right hand column..
- **Attachment R1** is the CP1 Ver 4 Draft document and **Attachment R2** is an example bonding deed used by RRC.
- **Attachment R3** is the existing CP1B Security Lodgement Form. It is suggested that this form be retained as it has value in calculating the bond amount based on information provided by the RPEQ Engineer. The bonding deed is then the agreement between the Council and the developer which quotes the calculated bond amount.

Previous Resolution

The CP1 Version 4 draft be adopted with changes below and loaded up to the website.

- The bonding deed be provided in MS Word format on the website
- General acceptance of CP1 version 4:
- Remove drainage from uncompleted works bond
- Insertion of “approval prior to submission” clause
- 4. a) Security lodgement form or bonding deed to be completed....
- Remove bond value factor table from Security Lodgement Form.
- E) Timeframes to be put on all uncompleted works bonds – to be approved by Council
- F) A bonding deed must be signed for all bonding deeds.
- Add “The developer must comply with any other requirements imposed by Ergon Energy”
- Add to Table CP1.28.1:

	Incomplete Works Bond Multiplier	Security Lodgement Form	Bonding Deed
Banana Shire	1.5		
Central Highlands Regional	1.5	Yes	No
Gladstone Regional Council	1.5	No	Yes
Isaac Regional Council	1.5	No	Yes
Livingstone Shire Council	2.0	Yes	Yes
Maranoa Regional Council	1.5	Yes	No
Rockhampton Regional Council	2.0	No	Yes

Councils to confirm whether security lodgement form or bonding deed is required.

Current Status

Changes made but awaiting confirmation from BSC, CHRC, IRC and LSC on security lodgement form or bonding deed is used. Issue 5 of CP1 and CP1.B are included in **Attachment L1 and L2**.

Is the intent to put the bonding deeds on the CMDG website? Does this require separate forms for each Council?

RRC considering revising incomplete works bond multiplier to 1.5 in line with majority of other LGAs.

Resolution

Brief discussion on the use of bonding deeds vs security lodgement forms. Agreed to upload both to website.

Scott to check if GRC are happy to adopt the RRC bonding deed. Other LGAs to check internally as well.

Action By : All

Review of Reference documents in all Specifications

- BSC (Daniel) suggests the group consider a Design Specification review and revising the referencing to current standards/guidelines. These references should provide the same or better information that was originally referred to by the CMDG Design Specs.
- IRC (Michael) has also pointed out that construction specifications have not been reviewed for some time.
- Whilst GRC conducted a review of many of the specs when joining the group there has been only ad hoc review of standards and references since. For discussion at this stage – the question is when should reviews take place and what resources should be assigned to it?

Previous Resolution

Discussion around potential review of documents as some have not been revised since 2007. Chris to review documents and highlight the ones in need of a review. In addition, it was agreed to complete a detailed review the documents on an ad hoc basis as changes are required/ requested to specific documents.

Resolution

The following is a summary of the agreed documents to be reviewed and those responsible for carrying out the review.

Specification	Last review and notes	In need of review?	To be reviewed by?
D1 Geometric Road Design	Currently under major review	No	
D2 Pavement Design	Dec 2021	Yes	RRC (Grant)
D3 Structures and Bridges	Apr 2019 – References updated	No	
D4 Surface Drainage	Aug 2019	Yes	IRC (Michael)
D5 Stormwater Design	Mar 2022	No	
D6 Site Regrading	Mar 2012	Yes	RRC (Jamie) and MCE
D7 Erosion Control and Stormwater Management	Sep 2020 – but review not comprehensive	Yes	RRC (Jamie/Tilak)
D9 Cycleway and Pathway Design	Mar 2012	Yes	MCE
D10 Landscaping (DRAFT)		Yes	RRC (Grant)
D11 Water Reticulation	Jan 2022	No	CHRC (Sarah)
D12 Sewerage Reticulation	Jan 2022	No	CHRC (Sarah) Noted AS4999 is withdrawn
D13 Small Earth Dams (GRC only)	Apr 2019	Yes	GRC (Scott/Brendan)
D14 Floodways (DRAFT)		Yes	RRC (Grant)
D15 Driveways	Jun 2018	Yes	BSC (Daniel)

M22.04.04

D5 – Polypropylene maintenance structures for gravity sewers – No resolution this meeting

- Iplex has requested that CMDG D5 be updated to allow for the use of 1000mm dia polypropylene maintenance shafts.
- The Iplex Ezipit technical guide is included as **Attachment S**
- EZI pit, in all the sizes (MS (DN425), MC(DN600) and MH(DN1000)) are approved by the majority of the water Authorities in Melbourne, approved by Unity Water, Gold Coast Council, Logan Council, and Redlands Council in the SEQ water grid.
- The EZI pit has been around for a number of years - with about 15 years of use in Australia and 35 years use in Europe.



Use of polypropylene maintenance structures - responses received so far:

Local Government	Acceptance
Banana Shire	?
Central Highlands Regional	?
Gladstone Regional	No
Isaac Regional	?
Maranoa Regional	Yes
Livingstone Regional	?
Rockhampton Regional	?

Suggested Resolution

For discussion

Action By

M22.07.03

Corrugated plastic subsoil pipe – No resolution this meeting

Following a query from a contractor regarding subsoil pipe alternatives, the question around the acceptability of 100mm corrugated plastic subsoil pipes has arisen. Currently CMDG C230 specifically excludes the use of corrugated plastic subsoil drainage pipes.

MATERIALS**C230.12 APPROVED PLASTIC MATERIALS**

C230.12.01 Strip filter drains are approved. Strip Filter Drains are a proprietary product, deep-fin plastic core, 120kPa minimum crush strength, 40mm minimum thickness, fully enclosed by a non-woven geotextile and shall be in accordance with MRTS03 - Drainage, Retaining Structure and Protective Treatments.

Specification

C230.12.02 Corrugated plastic subsoil drainage pipe is not approved for use.

	<p>100mm corrugated plastic subsoil pipes are still the standard in the industry and are currently getting installed all over the region by multiple different contractors. Corrugated plastic subsoil pipe is on the design drawings submitted by different consultants and approved by councils. It is also not getting flagged on council inspections. It is shown on the standard drawings D-040 and D-041 (subsoil drainage details). Even though the specs override the drawings, drawings are the main thing that people seem to refer to.</p> <p>For discussion</p> <p><u>Suggested resolution</u></p> <p>TBC</p> <p><u>Action By</u></p>
M22.07.04	<p>RRC grated crossover drawings – No resolution this meeting</p> <p>Rockhampton Regional Council (RRC) have developed two standard drawings for grated overhead crossings at driveway crossovers, with RRC-R05 applicable for pedestrian and residential applications, and RRC-R06 applicable for commercial and laneway applications. Refer to Attachment T for details. These drawings have been in use in the RRC LGA since 2017 and are routinely referred to for the issue of works in road reserve permits as well as Council projects.</p> <p>RRC have requested, via Grant, that these two drawings be included in CMDG.</p> <p>Comments have been received regarding potential sharp transitions at the edges, a minor update to the drawing may be required to show a small wedge of asphalt either side of the grates. GRC and RRC have also noted that these should only be used when there is no other alternative and would not generally apply to greenfield sites.</p> <p><u>Suggested resolution</u></p> <p>Create two new CMDG drawings that replicate/ replace the RRC standard drawings (with minor amendments) but ensure that it is noted on the drawings that these are only for use in exceptional circumstances as directed or approved by local government.</p> <p><u>Action By</u></p> <p>MCE</p>
M22.07.05	<p>W-061 and W-061A – Hydrant and Valve Boxes – No resolution this meeting</p> <p>Scott noted that there was a drafting error on drawing W-061. As part of the review process it was noted that the drawings contain significant levels of information for products that are off the shelf. There is widespread use of the polypropylene boxes within the roadway in many locations around Rockhampton, this may be due to the interpretation around the note on drawing W-061A:</p> <p><u>POLYETHYLENE SURFACE BOX – HYDRANT/VALVE</u> NOTE: BOX NOT RECOMENDED FOR HEAVY, FAST MOVING TRAFFICABLE AREAS</p> <p>For discussion</p> <p>The proposed drawings removes many of the redundant dimensions but still retains key information and combines both drawings W-061 and W-061A Attachment U.</p> <p><u>Suggested resolution</u></p>

	<p>Adopt the updated drawing W-061 which combines the polypropylene detail from W-061A and remove W-061A.</p> <p><u>Action by</u> MCE</p>						
M22.08.01	<p>Approaches from Industry regarding new products – No resolution this meeting</p> <p>MCE are regularly approached by companies presenting new products or trying to get existing products approved for use in the region covered by CMDG. Currently we review these requests and forward relevant information to the committee for information or present for discussion at a meeting when changes to CMDG documentation may be required or beneficial.</p> <p>MCE are seeking direction on the committee's preference for dealing with these requests.</p> <p><u>Suggested resolution</u> For discussion</p> <p><u>Action By</u></p>						
M22.08.02	<p>D14 Floodways</p> <p>The previous resolutions on this document are below. The current document is at Attachment E.</p> <table border="1"> <tr> <td>Meeting 11 13 Mar 2018</td><td> <p>D14 Floodways</p> <p>a. Cardno to revise D14 using the new layout and document structure provided by RRC</p> <p>b. Table D14.09.01 needs revision and clarity eg d50 c. SPA and IDAS references need to be amended</p> </td></tr> <tr> <td>Meeting 12 25 Oct 2018</td><td> <p>D14 Floodways</p> <p>'Sustainable Planning Act' needs to be updated/changed to 'Planning Act 2016'. Table D14.03.01 – note the source of the information in this table – It's a government source and policy could change.</p> </td></tr> <tr> <td>Meeting 13 14 Mar 2019</td><td> <p>Dev (LSC) is currently working on a new draft for D14 Floodways</p> </td></tr> </table> <p>A draft of D14 was prepared in 2018 but does not appear to have progressed since.</p> <p><u>Suggested resolution</u> For discussion only to get direction at this point</p> <p><u>Action By</u></p>	Meeting 11 13 Mar 2018	<p>D14 Floodways</p> <p>a. Cardno to revise D14 using the new layout and document structure provided by RRC</p> <p>b. Table D14.09.01 needs revision and clarity eg d50 c. SPA and IDAS references need to be amended</p>	Meeting 12 25 Oct 2018	<p>D14 Floodways</p> <p>'Sustainable Planning Act' needs to be updated/changed to 'Planning Act 2016'. Table D14.03.01 – note the source of the information in this table – It's a government source and policy could change.</p>	Meeting 13 14 Mar 2019	<p>Dev (LSC) is currently working on a new draft for D14 Floodways</p>
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D11 Water Supply Design – Colour and marking of Infrastructure **Considered as part of PS 26 (Item M15.20)**

In preparing a draft of PS 26 Marker posts it became apparent that a decision should be made regarding naming conventions and colour of surface infrastructure.

The WSAA Water Supply Code says “Above ground infrastructure to be coloured to Water Authority Requirements”. But it does have the following advice for spindle caps.

TABLE 8.1

COLOUR CODING OF SPINDLE CAP PLASTICS COVERS

Valve description	Colour
Closed valve	Red
Open valve	White
Dialysis patient	Blue
Non-drinking water	Purple

In terms of what is in CMDG now we have the following

Table D11.13.01 Kerb Painting Valves and Hydrants

Local Government	Kerb Painting (for valve and hydrants)
Banana Shire	Not Required
Central Highlands Regional	Not Required
Gladstone Regional	The kerb is to be painted (white – valves, yellow – hydrants) in the location perpendicular to the asset. Painted area is to be 300mm wide.
Isaac Regional	The kerb is to be painted (blue – valves, yellow – hydrants) in the location perpendicular to the asset. Painted area is to be 300mm wide.
Livingstone Shire	Not Required
Maranoa Regional	The kerb is to be painted (blue – valves, yellow – hydrants) in the location perpendicular to the asset. Painted area is to be 300mm wide.
Rockhampton Regional	Not Required

All paint colouring to comply with AS 2700 - Colour Standards for General Purposes.

And from CMDG-W-062

- Pavement markers to be blue in colour for hydrants and yellow in colour for valves and constructed to AS 1906.3 (1992)

Note that the only notable difference between members at the moment that I am aware of is that GRC marks valves white – however this appears to be the norm in the Southeast corner.

Suggested resolution

For discussion only to search for common ground at this point

Marker Plate Disc Codes			
H	Hydrant	SV	Scour Valve
F	Flushing Point	V	Valve
AV	Air Valve	SH	Swabbing Hydrant
VB	Valve Box / Pit	SC	Swabbing Chamber

	<table><tr><th colspan="2">Coloured Reflector and Reflective Tape Codes GRC</th></tr><tr><td>White</td><td>Air Valves, Swabbing Chamber Potable Water Scour Valves, Valves</td></tr><tr><td>Yellow</td><td>Hydrant</td></tr><tr><td>Red</td><td>Closed Zone / Boundary Valve</td></tr><tr><td>Blue</td><td>Dialysis Valves</td></tr><tr><td>Lilac / Purple</td><td>Recycled Water Scour Valves, Valves</td></tr><tr><td>Cream or Grey</td><td>Raw Sewage</td></tr></table> <table><tr><th colspan="2">Coloured Reflector and Reflective Tape Codes – LGA's other than GRC</th></tr><tr><td>White</td><td>Air Valves, Swabbing Chamber</td></tr><tr><td>Yellow</td><td>Hydrant</td></tr><tr><td>Red</td><td>Closed Zone / Boundary Valve</td></tr><tr><td>Blue</td><td>Potable Water Scour Valves, Valves</td></tr><tr><td>Lilac / Purple</td><td>Recycled Water Scour Valves, Valves</td></tr><tr><td>Cream or Grey</td><td>Raw Sewage</td></tr><tr><td>????</td><td>Dialysis Valves</td></tr></table> <u>Action By</u>	Coloured Reflector and Reflective Tape Codes GRC		White	Air Valves, Swabbing Chamber Potable Water Scour Valves, Valves	Yellow	Hydrant	Red	Closed Zone / Boundary Valve	Blue	Dialysis Valves	Lilac / Purple	Recycled Water Scour Valves, Valves	Cream or Grey	Raw Sewage	Coloured Reflector and Reflective Tape Codes – LGA's other than GRC		White	Air Valves, Swabbing Chamber	Yellow	Hydrant	Red	Closed Zone / Boundary Valve	Blue	Potable Water Scour Valves, Valves	Lilac / Purple	Recycled Water Scour Valves, Valves	Cream or Grey	Raw Sewage	????	Dialysis Valves
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M22.09.02	<p>G-018 Standard Council Grid drawing – width markers Not Considered</p> <p>Sarah raised the question of whether hazard markers/ grid width markers should be replaced with guideposts on existing grids as they are not shown on drawing G-018.</p> <p>Response from MCE:</p> <p>The width markers are still acceptable and potentially a requirement. Typically, width markers are required when the grid is narrower than the road i.e. grid width is less than road formation width, this is also TMR's approach. The exact guidepost requirements are possibly a little more up for debate depending on how you interpret MUTCD, but some guideposts would definitely be needed as well. The other CMDG drawing G-020 requires the hazard markers at the grid and guideposts at 10m from each corner. I have discussed this with one of our Senior Road Safety Auditors and we agree that the approach shown on drawing G-020 is the best option to cover all bases.</p> <p>I think that the best approach would be to review G-018, potentially with the view to combine it with G-020.</p> <p><u>Suggested resolution</u></p> <p>TBC</p> <p><u>Action By</u> MCE</p>																														

D5 – Roof and Allotment Drainage – Not Considered

As per QUDM, there are five levels of roof and allotment drainage design and depends upon the development category. Further QUDM directs that required level for each development category is at the discretion of the local government. May be in CMDG (D5) we need to have some information about this?

Below is the Brisbane City Council requirements:

7.2.2.3 Drainage

1. Council's design standards for stormwater infrastructure vary for different types of land uses. The design standards for roof water, drainage in private roads/driveways and for drainage in roads fronting those types of development are set out in Table 7.2.2.3.B.
2. Pipe drainage of on-site roof water and surface water from paved and unpaved areas must comply with AS/NZS 3500.3:2003 Plumbing and drainage - Stormwater drainage, QUDM for Level III, IV and V drainage standards.
3. The design of the major system must ensure flows can be conveyed safely. Where the major system is part of a road, this may require increasing the capacity of the minor system above that shown in this table to ensure flow depths and hazard are acceptable (refer to QUDM).

Table 7.2.2.3.B—Design standards for drainage systems

Development category	Design parameter	Minimum design standard	
		AEP	ARI (years)
Rural areas (typically 2–5 dwellings per hectare)	Minor drainage system	38%	2
	Major drainage system	2%	50
Residential developments (Low density residential)	Minor drainage system	38%	2
	Major drainage system	2%	50
	Roof water drainage	Level II QUDM	
Residential developments (Low–medium density to High density)	Minor drainage system	10%	10
	Major drainage system	2%	50
	Roof water drainage	Level III and Level IV QUDM	
Industrial uses	Minor drainage system	38%	2
	Major drainage system	2%	50
	Roof water and lot drainage	Level IV QUDM	
Commercial land uses (centre zones)	Minor drainage system	10%	10
	Major drainage system	2%	50
	Roof water and lot drainage	Level IV and V QUDM	

Notes—

The design standard of major drainage system is to safely manage the difference between the minor and major flows where a minor system is provided in accordance with QUDM.

A severe storm impact assessment is to be provided where development may interfere with the passage of stormwater during the major flow event. Refer to QUDM for applicability and design considerations.