## **CAPRICORN MUNICIPAL DEVELOPMENT GUIDELINES**

## **2022 MEETING 02 MINUTES**

Venue: GRC Offices at Calliope

## Date and Time: 3 March 2022 10:00 am

Attendance: Chris Hegarty (MCE), Richard Bywater (MCE), Jamie McCaul (RRC), Grant Vaughan (RRC), Scott McDonald (GRC), Brendan Fuller (GRC), Graham Sweetlove (MRC), Karen McMillan (MRC), Kym Downey (CHRC), Anthony Lipsys (BSC), Daniel Price (BSC), Chandrasiri Jayalath (BSC)

Apologies: Robin Thekkekara (IRC), Joel Kuczynski (IRC), Dev Krishnasamy (LSC), Greg Abbotts (LSC), Allan Heit (BSC)

ltem		Action By					
22.02.00A	ger nur TEAG form 1. Welcon 2. Apolog 3. True ar email c 4. Terms	C Have suggested a new meeting format. For the current merally look like the following – The aim is to discuss the dran nbering system and agree on a format for all future meeting at used as an example ne	ft format / s ly adopted via				
	Item number Item Proponent						
	M22.01.01 Website Update - Committee Requirements						
	IPWEAQ Standard Drawing Review (maybe better as a general business item?)						
	M22.01.03	Standard Drawing Styles					
	M22.01.04	D1 – IRC and CHRC Rural Roads Tables					
	M22.01.05 Standard Drawings to be amended (CMDG-G-011, CMDG-R-051, CMDG-R-055, CMDG-R-055A, CMDG-R-058, CMDG-W-040, CMDG- W-041)						
	M22.01.06	Table D05.04.01 Design AEP's					
	M15.5	D1 Geometric Road Design – finalise new tables					
	M15.18 D1 Geometric Road Design – solar lighting rural and urban						
	D2 Pavement Design – amend APRG Report 21 as outdated reference and LSC         M15.7       to review design procedure and references						
	M15.15	D9 Cycleway and Pathway Design revision					

Item		Action By			
	M15.16	Draft underbore detail			
	M16.5	D5 Stormwater Design – Provide template for SWMP	GRC		
	M16.9	PS5 PVC Pressure Pipe (Poly services to be PN16 not PN 12)			
	M16.10	C273 Landscaping – amend hydromulch spec			
	M15.20				
	M15.21 PS28 Gaskets				
	M15.22	C242 Pavements – Amend references as advised by GRC			
	?	D10 Landscape Design			
	?	Parks standard drawings			
	?	D6 Site regrading – consider retaining wall issue			
	M22.01.08	CMDG-S-030 Type C Vertical H.C.			
	M22.01.09	CMDG-S-026 Lamphole Details			
	6. New Ager	ida Items			
	Item number	Item	Proponent		
	M22.02.01	Use of RPEQ Signed Change Request forms	All		
	M22.02.02	CMDG Action Register	MCE		
	M22.02.03	D1 Geometric Road Design – Rural Heavy Industry Access Road	IRC		
	M22.02.04	CMDG-R-050 Drawing review	LSC		
	M22.02.05	Use of Corrugated polypropylene drainage pipes	LSC		
	M22.02.06	CMDG-D-033 Use of Precast Square roof water pits	LSC		
	7. General				
	8. Next me	-			
	9. Meeting	closed at			
	Resolution			MCE	
		ise this format to make tracking of agenda items easier.			
	Action By -				
	MCE				
22.02.00B	Matters Ar	ising from previous meeting minutes			
	• Pre	evious minutes are at Attachment H.			
	Resolution				
	Nil Astisus Du				
	<u>Action By</u> -				
22.02.01	Website				
		gress report on website update.			
	carry out th regarding w	ded summary update on progress. RRC I.T. don't have the e website update internally. GRC legal team has expresse vebsite ownership if externally designed and procured thro further with GRC legal team as other Councils including R	ed concerns ough MCE. Scott		

Item	Item	Action By
	the same concerns. Consideration to be given to setup/ functionality and maintenance.	MCE/RRC/ GRC
	ResolutionMCE to put together scope in coordination with Grant/RRC (Grant to provide initial scope document for MCE to expand on). RRC I.T. department will provide some technical input/review regarding the scope. Aim for draft scope to be completed by next meeting. Scott to liaise with GRC legal team regarding procurement.Action By 	
22.02.02	IPWEAQ Standard Drawing Review	
	<ul> <li>Update on whether anyone has received approval to participate in the review including any updates on IPWEAQ Progress. No further progress of the drawing review. Scott informed the committee that IPWEAQ are still working on changing and updating the drawings. The suite is not finalised ready for review yet.</li> <li>Some discussion around adopting any of the IPWEAQ standard drawings/ referencing them in CMDG. Availability/ cost of these drawings is a potential issue. Grant and Scott to discuss with IPWEAQ about potential drawing sharing options/ availability including the possibility of posting any adopted IPWEAQ drawings on the CMDG website.</li> </ul>	RRC/GRC
	Resolution	
	Grant/ Scott to discuss drawing availability with IPWEAQ	
	Action By	
	RRC/GRC	
22.02.03	<ul> <li>Use of RPEQ Signed Change Request forms</li> <li>This item is to further discussion regarding the circumstances requiring the use of these forms.</li> <li>A new resolution is proposed below to provide further clarity</li> </ul>	
	<ol> <li>Resolution</li> <li>RPEQ signed form will be requested for changes that require engineering judgement outside of prescriptive standards.</li> <li>The RPEQ signed form will not be required to action administrative or clarification changes or where a resolution is made at a Steering Committee meeting.</li> <li>The RPEQ Change forms (word copies) be made available on the website.</li> <li>Form 1 will be modified to allow submission of change requests via email</li> <li>Form 2 will be updated to suit the specific requirements defined in point 1.</li> </ol>	MCE
	Action By MCE	
22.02.04	<ul> <li>CMDG Action Register</li> <li>The purpose of this agenda item is to outline the status of all actions requested.</li> <li>Note this register commences at Nov 2021 when MCE became involved and may not capture any requests or actions prior to that date. If there are any missing requests then please advise.</li> <li>The current register is at Attachment A</li> </ul>	
	Resolution	
	Column to be included to cross reference agenda item number with action.	MCE

Item	Item			Action By		
	Action By MCE					
22.02.05	<ul> <li>CMDG-G-011 Proposed changes</li> <li>LSC have withdrawn the request to update the drawing. They have advised that changes were made to suit supply from the local contractor at the time for the sewer treatment plant</li> <li>Despite this request it is considered worth discussing in view of the comparison below with other drawings</li> <li>The proposed new drawing prepared by LSC is at Attachment B including IPWEAQ Drawing GS-041and TMR Drawing 1206 for comparison purposes</li> <li>The following table compares member sizes for an 1800mm high fence</li> </ul>					
		Current CMDG	Proposed CMDG	GS-041 (IPWEAQ)	SD 1602 (TMR)	
	Gate Post sizes	DN 80 (light)(3.2mm)	Proposed 100NB (medium)(4.5 mm) for opening >6m otherwise 80NB (medium)(4.0 mm)	80NB (light)(3.2mm)	88.9 x 5.0 CHS	
	End or Corner Post sizes	DN 80 (light)(3.2mm)	50NB (medium)(3.6 mm)	50NB (light)(2.9mm)	60.3 x 4.5 CHS	
	Intermediate Post sizes	DN 50 (light)(2.9mm)	40NB (medium)(3.2 mm)	32NB (light)(2.6mm)	48.3 x 4.0 CHS	
	<u>Resolution</u> Nil <u>Action By</u> N/A					
22.02.06	<ul> <li>CMDG-R-055 Bollards</li> <li>The proposed version G drawing is at Attachment C including the drawing to be discontinued.</li> <li>Changes from M15.11 have been incorporated. Plan to produce a single drawing for this. It appears some Councils do not like Plastic bollards. We have clarified that matter in the applicability box. All other details appear the same. Footing depth for steel bollard has been increased from 500 to 600 (need to get down to the stable zone free from wetting / drying. 750mm deep footing provided for 1300mm bollard - is there a particular use intended for the 1300mm bollard? Is a removable bollard or lockrail drawing required for park access (example on additional sheet)?</li> <li>Discussion about uppercase vs lower case for text/notes. Agreed that Uppercase of titles and lower case for leaders and notes.</li> <li>Some interest from committee regarding removable bollards/lockrails. Existing lockrail drawing (not part of standard drawings set) to be discussed</li> </ul>					
	-	lockrail drawing meeting.	(not part of stand	ard drawings set)	to be discussed	MCE

ltem	Item	Action By
	Resolution CMDG-R-055 Ver G be approved for website upload. Some minor drafting changes	
	required	
	CMDG-R-055A be superseded.	
	Action By MCE	
22.02.07	<ul> <li>CMDG-W-040</li> <li>The proposed drawing is at Attachment D along with the existing CMDG-S- 090 drawing which GRC has suggested needs to be discussed as well so that a coherent strategy is presented for trenching in water and sewer applications.</li> </ul>	
	Resolution CMDG-W-040 Ver G - MCE to check specifications for depths etc to be consistent	
	(especially Type C)	GRC/ MCE
	Standard drawing S-090 to also be updated by MCE following feedback from GRC after staff consultation.	
	Action By MCE	
22.02.08	<ul> <li>CMDG-W-041</li> <li>The proposed drawing is at Attachment E</li> <li>This drawing provides added hold down detail for vertically acting thrust blocks drawn from the SEQ drawing. The intention is for the drawing to cover</li> </ul>	
	<ul> <li>all design aspects up to 200mm dia. Equal to or over 200mm dia will require specialist reinforcement design for the concrete hold down block.</li> <li>Anthony suggested that protection between strap and pipe maybe required. SEQ standard drawings shows 3mm thick insertion rubber between straps and bend. Agreed that this should be added to drawing W-041.</li> </ul>	
	Resolution CMDG-W-041 Ver F approved for upload to the website once rubber insert note is added	MCE
	Action By MCE	
22.02.09	Table D05.04.01 Design AEP's	
	<ul> <li>This item has been presented again due to differing opinions that emerged post meeting regarding whether the table should be deleted from CMDG.</li> <li>The way this table is presented in CMDG at the moment it implies that ARI 20 for minor roads is acceptable for the major system ( the required standard is AEP 1% or ARI 100). I think this has come about because the QUDM Table covers minor system flows only and the CMDG table attempted to cover major and minor systems.</li> <li>The relevant QUDM Table 7.3.1 Follows.</li> </ul>	

m	Item					
	Table 7.3.1 – Recommended design average recurrence intervals (ARI) and annual exceedence probabilities (AEP) for the minor system					
Γ	Developme	nt category [1]	ARI (yrs)	AEP		
	Central business and commercial		10	10%		
	Industrial Urban residential high density – greater than 20 dwelling units/ha Urban residential low density – 6 to 20 dwelling units/ha Rural residential – 2 to 5 dwelling units/ha Open space – parks, etc.			39%		
				10%		
				39%		
				39%		
				63%		
		Kerb and channel flow	10 <sup>[2]</sup>	10%		
	Major road	Cross drainage (culverts)	50 <sup>[3]</sup>	2%		
	Minor rood	Kerb and channel flow	[4]	[4]		
	Minor road	Cross drainage (culverts)	10 <sup>[3]</sup>	10%		

[2] The design AEP for the minor drainage system in a major road must be that indicated for the major road, not that for the development category of the adjacent area.

[3] Refer to discussion in Section 7.3.7.

[4] Refer to relevant development category (above).

The relevant table in CMDG looks like this at the moment

able D05.04.1 - Design Annual Exceedance Probabilities
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Dovelonment Catago	Major System		Minor System		
Development Categor	elopment Category			ARI (yrs)	AEP (%)
Central Business & Cor	nmercial	100	1	10	10
Industrial		100	1	2	39
Urban Residential (High 20 dwelling units/ha)	100	1	10	10	
Urban Residential (Low Density – 6 & up to 20 dwelling units/ha)		100	1	2	39
Rural Residential - 2 to	5 dwelling units/ha	100	1	2	39
Open Space – Parks, e	tc.	100	1	1	63
Major Collector /	Kerb and channel flow	100	1	10	10
Distributor and higher	Cross drainage (culverts)	100	1	50	2
Minor road	Kerb and channel flow	20	5		
	Cross drainage (culverts)	20	5	10	10

Notes:

- 1. The design AEP for the minor drainage system in a major road shall be that indicated for the major road, not that for the Development Category of the adjacent area.
- 2. Cross drainages should be designed to accept the flow for the minor system AEP shown. In addition, the designer must ensure that the major system backwater does not enter properties upstream. If upstream properties are at a relatively low elevation, it may be necessary to install culverts of capacity greater than that for the minor system AEP design storm to ensure flooding of upstream properties does not occur. In addition, the downstream face of the causeway embankment may need protection where overtopping is likely to occur.
- The terms used in this table are described in the QUDM Glossary and/or Table 7.3.3 of QUDM 2013.
- 4. Council specific or refer to development category.
- 5. VDg, flow depth and width limitations are applicable in accordance with QUDM.

Recent changes to Minor AEP's agreed by the Councils have in fact resulted in complete agreement with QUDM. It is therefore considered the Design AEP table is superfluous and should be deleted.

Item	Item	Action By
	Alternatively the table may be retained with the Major System column deleted (and note references will also need to be amended / clarified)	
	It is also noted that in preparing the D1 Urban road tables Councils should be ensuring consistency with the QUDM Table for designated flood immunities for each road hierarchy. If there are any differences these may need to be highlighted in Table D05.04.01.	
	Resolution	
	Clause D05.04.02 and Table D05.04.1 be amended as follows:	
	<ul> <li>Include QUDM Table 7.3.1 as Table D05.04.1</li> <li>Include QUDM Table 7.3.2 as Table D05.04.2</li> </ul>	MCE
	Include text/ note: Refer to D1 for road hierarchy.	
	(Also correct <i>Ërror! Reference source not found</i> throughout the document) Action By MCE	
22.02.10	Not discussed	
	D5 Stormwater Design – Template for SWMP	
	<ul> <li>Previously an agenda item 16.5 (Meeting did not proceed)</li> <li>GRC have provided a template Attachment F for consideration and discussion.</li> </ul>	
	Clause D05.21 currently reads as follows.	
	D05.21. SITE BASED STORMWATER MANAGEMENT PLAN (SWMP) D05.21.01. Where required by Council, the developer is obliged to submit Site Based Stormwater Management Plan addressing Quantity and Quality aspects of stormwater management.	
	Suggested Desclution	
	Suggested Resolution That the Stormwater template be included as Annexure D05A and Clause D05.21 be amended to reference the new Annexure.	
	Action By MCE	
22.02.11	CMDG-S-030 Type C Vertical H.C.	
	• <u>RRC Comments from Mohit</u> - CMDG-S-030 Type C Vertical H.C Heavy duty fibreglass coated junctions are made from a 45'junction and a 45'bend. This places the property connection directly above the sewer main. A standard (less than 2 metres deep junction is made up from a 45' junction and a 60' bend this offsets the property connection to one side (as it's drawn in CMDG-S-030). Is there any reason the standard connection cannot be directly above the main like a heavy duty junction.	





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	however, terminology/hierarchy is not consistent with the new roads tables for each Council. It has been discussed previously to remove the cross sections and restore them as Standard Drawings – for discussion.		
	<ul> <li>It is recommended that the document priority order be amended as follows to capture recent relevant publications: <ul> <li>IPWEAQ Street Design Manual</li> <li>Model Code for Neighbourhood Design;</li> <li>Queensland Streets</li> <li>Austroads Publications</li> <li>TMR Publications</li> <li>Australian Standards</li> </ul> </li> <li>A draft D1 (and much abbreviated) D1 document is to be produced to amend references to IPWEAQ Street Design Manual in lieu of Queensland Streets. Content will be removed where it is now covered by the additional information in the New D1 Urban Roads tables. A draft D1 Ver 10 is at Attachment J. This attachment has changes highlighted and quite a comments on items where decisions need to be made. It is suggested that everyone review this document and be familiar with the IPWEAQ Street design manual so that decisions can be made on the new document layout and content.</li> <li>Is the intention to seek feedback from industry before adoption? If so the format and timing of this consultation needs to be discussed to ensure a uniform approach from the group.</li> </ul>		
	<u>Resolution</u> Agreement to use Council watermarks on individual tables		
	<ul> <li>Scott to send notes regarding lighting specification changes to D1 (M15.18)</li> <li>Definitions of road hierarchies to be consistent with Street Design Manual and across councils.</li> </ul>		
	Agreement to remove standard cross sections and recreate as standard drawings		
	<ul> <li>Agreement that document order of priority set out above is ok.</li> <li>Councils to update D1 tables to new format (ideally prior to next meeting). <i>Priority 1.</i></li> </ul>		
	<ul> <li>Rural and Urban tables in appendix. All councils to complete revised rural tables as per urban tables. <i>Priority 2.</i></li> <li><i>RRC to proceed separately with industry consultation regarding proposed</i></li> </ul>		
	• RRC to proceed separately with industry consultation regarding proposed significant changes to D1. This will initially involve an email to industry (2 weeks to respond) with a copy of the new RRC Urban Roads Table and explanation of the reasoning behind the proposed changes.		
	Action By MCE and all Councils		
22.02.14	Not discussed		
	D1 Geometric Road Design – Rural Heavy Industry Access Road		
	• Previous agenda item - Meeting 15.7. The following resolution was made.		

Item	Item		
	Question raised by IRC for the consideration of the inclusion of a "Rural Heavy Industry Access Road" (Mine Access) or similar wording with appropriate associated elements within the Road hierarchy.		
	- GRC to provide the TMR drawing for Industrial Collector that was presented in the meeting. This will be distributed to the other council's. See attachment 18		
	- Street Type to be added to table D2.08.1 "Resource Access Road"		
	- IRC to provide proposal for inclusion into CMDG.		
	- SD1807 provided for information		
	- GRC Standard Drawings attached for information Refer Att 19, 20, 21 & 22		
	<ul> <li>Need to discuss the status of this item and any proposed changes to D1 and D2.</li> </ul>		
	Suggested Resolution		
	Nil		
	Action By MCE		
22.02.15	Not discussed		
	D1 Geometric Road Design – Solar Lighting		
	Meeting 15.18. The previous resolution was:		
	Recommended actions are:		
	Amend D01.19 Lighting (Urban) to include GRC Policy items noted as		
	relevant to urban		
	<ul> <li>Amend D01.25 Lighting (Rural) to include GRC Policy items noted as relevant to rural</li> </ul>		
	<ul> <li>Development of a Purchase Specification for Solar Lights.</li> </ul>		
	Cardno to send out the policy split into "Rural" & "Urban" for review and wordsmithing by all councils. Ideally this will be able to be added to D01.19 & D01.25. It is understood a point of difference may be required for incorporation into the document.		
	• Need to discuss the status of this item and any proposed changes to D1.		
	Suggested Resolution Nil		
	Action By MCE		
22.02.16	Not discussed		
	CMDG-R-050		
	<ul> <li><u>Comments from Dev at LSC</u>. We have received recent feedback from TMR emphasising the need for "tooled joints" in the location highlighted. According to TMR, the sharp transitions at these joints serve as wayfinding features for the visually impaired. Although these joints appear as lines on the CMDG standard drawing R-50, there is no specific reference to their inclusion</li> </ul>		

Item		Action By			
	spe 'tool tran Acc tran as y	the ramp drawings do not city the provision of a led joint at the ramp wing soliton. Cording to TMR, the sharp isitions at these joints serve way-finding features for the ually impaired.	Without this detail, some ramps have be constructed with rounded transitions an have come under scrutiny during TMR funded projects. Comments from Manager ES: Looks good to me. Comments from C&M: We agree with the amendment request implement a uniform kerb ramp standar Comments from Waste: No comment Comments from Water/Sewer: No comments or objections. Comments from Infra Design: I have reviewed this amendment with Michael. Happy to update drawing to su and proceed.		
	• Refer Attachment G	for marked up changes to CMDG-R-(	050		
	Suggested Resolution Marked up changes to CMDG approved. New version F to be Action By MCE	G-R-050 relating to tool joints on kerb e e uploaded to website.	ramps be		
22.02.17	Not discussed D5 – Use of corrugated poly LSC Is suggesting use	<b>/propylene drainage pipes</b> e of corrugated polypropylene draina	qe pipes.		
	6-2021 CMDG-D, CMDG-D5, C221.	Addition of corrugated polypropylene drainage pipes.	Twin wall corrugated polypropylene drainage pipes offer many benefits compared to reinforced concrete pipes. Benefits include: • Excellent corrosion and chemical resistance • Can be cut to length with no detriment corrosion resistance • Excellent rubber ring joint sealing syst • Smooth bore providing optimum hydre performance • Available in 6 mgtg lengths • Lighter to handle with a lower risk ratir those handling the pipes • Smaller diameter pipes can be man handled • Lower transport costs • Large and diverse range of fitting avai 1.1 CMDG-D, CMDG-D5, C221. Addition of corrugated polypropylene drainage pipes.		
	<ul> <li>C221 Section C221.0</li> <li>Current Section D05.7</li> </ul>	4 mentions FRC and RCP pipes but i 18 reads as follows.	not Plastic.		
	D05.18. PIPE MATERIAI	L			
	installation requir • Steel reinf • Fibre Rein	be materials are approved subject to mi rements stated by the manufacturer: forced concrete pipe and culverts to AS aforced pipes to AS4139.; and es will be considered subject to ind	4058; and		
	D05.18.02. All joints between pipes shall be Rubber Ring Joints (RRJ).				
	<ul> <li>It is noted that Hydra</li> <li>Manufactured</li> <li>Available from</li> </ul>	Storm supplies pipe as follows: d in accordance to AS – NZS 5065 n Diameter Nominal (DN) 225mm to 6 d from recycled HDPE			

Item	Item			Action By	
	Suggested Resolution         For discussion         Action By MCE         2.02.18       Not discussed         CMDG-D-033 Use of Precast Square roofwater pits         • LSC propose use of proprietary precast square roofwater pits.         • Note 5 to CMDG-D-033 permits use of precast chambers but Note 6 says covers and frames must be circular				
22.02.18					
	2-2021 CMDG Request for amendment - Roofwater inspection chambers chamt	water inspection	change drawing to include drawing of 600x600 precast pit with galvanised lid.	Comments from Waste: Nil input is required.	
		G-D-0(D)		Comments from Water: Nil comments as drawing is related to stormwater drainage access chamber sewerage access chamber.	
				Comments from Infra Design: Rootwater inspection chamber drawing show a square pit detail (600x600 Field type) as this is the most commonly use site.	
				Comments from Infra Planning: No comment provided	
				Comments from Infra DET: No comm provided	
				Comments from Facilities – Assets / No comment provided	
				Comments from Construction / Maintenance Hi Ellen, I support the proposal as it will be easi procure these products. If you have any queries regarding the a please contact me. Thanks. Darren Hines	
	For discussion				
	Action By MCE				

ltem	Item	Action By
22.02.19	Not discussed	
	Ongoing work / future agenda items	
	• The following is a list of possible agenda items drawn from what is partially completed or actioned work over the last few years. The intention of this item is to discuss prioritisation of these items with a view to preparing the next agenda as well as updates on any work completed where individual Councils were progressing.	
	<ol> <li>D2 Pavement Design – amend APRG Report 21 as outdated reference and LSC to review design procedure and references. (M15.6, 15.8 and 16.12) (Note M15.6 regarding 150vpd threshold for 2 coat seal has been actioned)</li> <li>D9 Cycleway and Pathway Design revision (M15.15)</li> <li>Draft underbore detail (item M15.16)</li> <li>PS5 PVC Pressure Pipe (Poly services to be PN16 not PN 12) (M16.9)</li> <li>C273 Landscaping – amend hydromulch spec (M16.11)</li> <li>PS26 Marker Posts – (M15.20)</li> <li>PS28 Gaskets – (M15.21) – (Resolved will action at next website load up)</li> <li>C242 Pavements – Amend references as advised by GRC (M15.22) – (Resolved will action at next website load up)</li> <li>D10 Landscape Design</li> <li>Parks standard drawings</li> <li>D6 Site regrading – consider retaining wall issue</li> </ol>	
	Suggested Resolution	
	Prioritisation of the above potential agenda items	
	Action By MCE	
22.02.20	Next meeting	
	Next meeting to be via Teams on 1 <sup>st</sup> April at 11am	