

CAPRICORN MUNICIPAL DEVELOPMENT GUIDELINES

2022 MEETING 06 MINUTES

Venue: Teams Meeting

Date and Time: 24 June 2022 11:00 am

Item	Item																																							
1	Welcome Attendance: Richard Bywater (MCE), Grant Vaughan (RRC), Scott McDonald (GRC), Graham Sweetlove (MRC), Mohit Paudyal (RRC), Michael Stanton (IRC), Jon Ashman (LSC)																																							
2	Apologies Chris Hegarty (MCE), Jamie McCaul (RRC), Brendan Fuller (GRC), Daniel Price (BSC), Kym Downey (CHRC), Joel Kuczynski (IRC), Anthony Lipsys (BSC), Greg Abbotts (LSC), Allan Heit (BSC), Tony Lau (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 27 May 2022 be formally adopted.																																							
4	Terms of reference and Budget Invoices issued 17 th June 2022. Review of spend vs updated budget estimate shows slightly higher rate of spend. MCE will monitor and update the committee prior to reaching estimated budget fee.																																							
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>M15.18</td><td>D1 Geometric Road Design – solar lighting rural and urban</td><td>GRC</td></tr><tr><td>M15.8</td><td>D1 Geometric Road Design – Rural Heavy Industry Access Road</td><td>IRC</td></tr><tr><td>M15.7</td><td>D2 Pavement Design – amend APRG Report 21 as outdated reference and LSC to review design procedure and references</td><td>LSC</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>M16.5</td><td>D5 Stormwater Design – Provide template for SWMP</td><td>GRC</td></tr><tr><td>M16.9</td><td>PS5 PVC Pressure Pipe (Poly services to be PN16 not PN 12)</td><td>GRC</td></tr><tr><td>M16.10</td><td>Trial Register</td><td>LSC</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></table>	Item number	Item	Proponent	M22.01.01	Website Update	All	M15.5	D1 Geometric Road Design – finalise new tables	All	M15.18	D1 Geometric Road Design – solar lighting rural and urban	GRC	M15.8	D1 Geometric Road Design – Rural Heavy Industry Access Road	IRC	M15.7	D2 Pavement Design – amend APRG Report 21 as outdated reference and LSC to review design procedure and references	LSC	M15.15	D9 Cycleway and Pathway Design revision		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)	GRC	M16.10	Trial Register	LSC	M16.11	C273 Landscaping – amend hydromulch spec	GRC	M15.20	PS26 Marker Posts	GRC
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	M15.21	PS28 Gaskets	GRC
	M15.22	C242 Pavements – Amend references as advised by GRC	GRC
	M22.01.08	CMDG-S-030 Type C Vertical H.C.	RRC
	M22.02.07	CMDG-W-040 and S-090 Trenching Detail	
	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
	M10.5.1	D6 Site regrading – consider retaining wall issue	LSC
	M22.03.01	Lockrail park access	
	M22.03.03	D2, C242 & C221 Use of Recycled Glass	GRC
	M13.10	D11 and D12 -Removal of "Trunk" and "Non-Trunk" wording from scope section. D11.01.01 and D12.01.01	GRC
	M22.03.05	CP1.28 Bonding of uncompleted works. Amendments to document.	GRC
	M22.04.01	Review of Reference documents in all Specifications	BSC
	M22.04.02	D1 – Road Truncations	GRC
	M22.04.03	D1 - National Light Pollution Guidelines for wildlife	GRC
6	New Agenda Items		
	Item number	Item	Proponent
7	General Business <ul style="list-style-type: none">Grant mentioned that RRC have internal standard drawings that they have previously trialled and that they may have benefit to CMDG. Jon mentioned that LSC have similar drawings. It was agreed that individual Councils could upload things such as standard drawings to the Council Specific Section of the website and the committee could discuss them at the meetings to determine whether to include in CMDG.		
8	Next Meeting Next meeting to be in Calliope to be 04/08/22.		
9	CMDG Action Register The latest register is Attachment B		
10	Meeting Closed at 12.05pm		

Agenda Items Detail

Item No.	Item Details
M22.01.01	<p>Website Update</p> <ul style="list-style-type: none"> Preparation of a brief is currently underway. <p><u>Previous resolution on 1 April 2022 was</u> Jamie mentioned that there has been internal discussion at RRC regarding the tender assessment criteria. Grant to provide further details in relation to the assessment criteria. Potential for MCE to facilitate website tender process. Draft scope document to be sent to Scott for GRC procurement/ legal team to review.</p> <p><u>Action By</u> Grant Vaughan (RRC) and Richard Bywater (MCE)</p> <p>Feedback has now been received from a number of Councils and the latest document incorporating this feedback is attached (Attachment C).</p> <p>There are two points in the scope of works that are highlighted in yellow for consideration. Richard has added his thoughts to promote discussion.</p> <p>Scott from GRC has indicated that there may be an opportunity to do the work through LGAQ (Using Jadu) which apparently is a platform utilised by many Local Governments. GRC are happy for work to be done through MCE with certain provisos including ownership of website and transfer of all info if MCE no longer in the role etc</p> <p><u>Previous resolution on 27 May 2022:</u> GRC to further investigate opportunity through LGAQ. Richard (MCE) to remove social media and search engine optimisation from the scope requirements. Richard to include Jadu as a preference for the proposed website content management system. Chris to send clause from governance document regarding website ownership including I.P. address. MCE to organise procurement of new website once details are confirmed and final acceptance received from the committee.</p> <p><u>Resolution</u> MCE to request a quotation from LGAQ for the new website. Grant to confirm with RRC procurement whether 3 quotes are required or LGAQ can be engaged directly (maybe via local buy). MCE to request additional quotes if advised by Grant.</p> <p><u>Action By</u> MCE and RRC</p>
M15.5	<p>D1 Geometric Road Design – finalise new tables</p> <p>Proposed D1 Document ver 10C is at Attachment D</p> <p>Proposed Type Section standard drawings (amended since last meeting) at Attachment E</p> <p><u>The previous resolution was</u> Tables:</p> <ul style="list-style-type: none"> RRC – Jamie to tidy up a few minor errors and send new version to Chris CHRC – Kym to send through details/ response to proposed changes made by Chris. Confirmed that industry consultation with be completed. GRC – to confirm details around industrial access – in progress MRC – Graham is awaiting feedback internally to MRC

	<ul style="list-style-type: none"> LSC – Rural table to be provided/ confirmation that RRC table will be used. Chris to send to Jon for comment. <p>D1 document:</p> <ul style="list-style-type: none"> Chris to remove references to Councils in the document – should be Local Governments. Richard to update standard drawings with discussed minor changes and additional cross section on the industrial collector drawing (line marked median) Jamie discussed RRC comments on the document – Chris to implement changes as follows: <ul style="list-style-type: none"> Include reference to Planning Regulations Remove references to IMEA Number each clause Under road hierarchy section review terminology to ensure different terminologies used in the D1 tables are included eg Access Street / Local Access. Reword D1.09 Truncations clause 3 for clarity Remove In very flat conditions it may be reduced to 0.3% from section D1.11 Longitudinal Gradient D1.18 Clause (f) Critical dimensions – replace two lane 5.5m minimum to reference D1 tables instead. D1.21 Bus Routes Clause 1 – replace 5% of residents with 10% of residents D1.2.6 Clear Zone Width was discussed in relation to the changes to Austroads part 6. Resolution from committee was to leave as is for now and monitor how other organisations implement changes. <p><u>Actions since last meeting</u></p> <ul style="list-style-type: none"> Industry consultation was carried out for RRC and CHRC. Response received from Hartecs (Dan Toon). One internal response received from Scott at GRC relating to the provision of a footpath for an access Place for CHRC. This is being discussed with CHRC. D1 Ver 10C has been amended to reflect changes from the last meeting and additional content (highlighted turquoise) from the original document GRC prepared when the D1 review process kicked off. New solar lighting wording suggested by Jamie Highlighted Yellow. Rural Road Type section drawing amended in an attempt to reflect new table requirements. <p><u>Resolution</u></p> <ul style="list-style-type: none"> MCE to prepare a response to the Hartecs feedback in a document that will be distributed to the committee for comment prior to the next meeting. D1 Ver 10C draft to be discussed at next meeting in conjunction with the feedback responses. Rural road cross section drawing to be discussed and approved at next meeting. <p><u>Action By</u> MCE</p>
M15.18	<p>D1 Geometric Road Design – Solar Lighting</p> <p><u>Resolution from 27 May 2022 meeting was</u></p> <p>Jamie/ RRC to provide updated proposal for solar lighting paragraph.</p> <p>Proposal</p> <p>Solar Lighting</p> <ol style="list-style-type: none"> It is Local Government's preference not to accept Solar Street Lights as an alternative product to grid tied lighting for lighting to be installed on Local Government roads because the current state of development of Solar Street Light technology does not, in the Local Government view, provide a reliable and cost effective solution for the provision of such lighting in most cases. Exceptions to the above will be considered on a case-by-case basis, and must be approved by the relevant local government.

	<p><u>Resolution</u></p> <p>Following discussions between Jamie and Scott, the resolution is to adopt the original Solar Lighting proposal from GRC:</p> <p>Urban</p> <p>Solar Lighting</p> <ol style="list-style-type: none"> 1. It is Council's the Local Government's preference not to accept Solar Street Lights as an alternative product to grid tied lighting for lighting to be installed on Local Government roads because the current state of development of Solar Street Light technology does not, in the Local Government view, provide a reliable and cost effective solution for the provision of such lighting in most cases. 2. Exceptions On a case-by-case basis the Local Government will consider the use of Solar Street Lights under the following circumstances: <ol style="list-style-type: none"> 1) The provision of lighting is within a community titled subdivision where the Local Government is not responsible for its ongoing operations and maintenance; 2) The provision of lighting is to be on a Local Government controlled road and a funding agreement is secured between the Local Government and the developer or the manufacturer of the lighting equipment for that developer or manufacturer to accept the costs of the future operation and maintenance of that lighting; 3) The provision of lighting for car parks and other Local Government facilities where non-compliance with AS1158 does not, in the Local Government's opinion, present a high risk to the Local Government. 3. An approval for an exception to allow the installation of Solar Street Lights under one of the above-mentioned circumstances must be obtained from the Local Government before any works permit or development approval for the installation of Solar Street Lights will be considered by the Local Government. 4. As Solar Street Lights are not subject to a Network Extension Agreement (NEA) with Ergon Energy, an indemnity for such lighting shall not be required. The Local Government will, however, provide a non-standard street lighting indemnity where the Local Government approves the installation of Solar Street Lights on Local Government controlled roads, if such an indemnity is required by Ergon Energy <p>Rural:</p> <p>Solar Lighting</p> <ol style="list-style-type: none"> 3. It is the Local Government's Council's preference not to accept Solar Street Lights as an alternative product to grid tied lighting for lighting to be installed on Local Government roads because the current state of development of Solar Street Light technology does not, in the Local Government view, provide a reliable and cost effective solution for the provision of such lighting in most cases. 4. Exceptions On a case-by-case basis the Local Government will consider the use of Solar Street Lights under the following circumstances: <ol style="list-style-type: none"> 1) The provision of lighting is in an isolated location, e.g. a rural intersection, where low voltage power supply is not available 5. An approval for an exception to allow the installation of Solar Street Lights under one of the above-mentioned circumstances must be obtained from the Local Government before any works permit or development approval for the installation of Solar Street Lights will be considered by the Local Government. 6. As Solar Street Lights are not subject to a Network Extension Agreement (NEA) with Ergon Energy, an indemnity for such lighting shall not be required. The Local Government will, however, provide a non-standard street lighting indemnity where the Local Government approves the installation of Solar Street Lights on Local Government controlled roads, if such an indemnity is required by Ergon Energy. <p><u>Action By</u></p> <p>MCE</p>
M15.7	D1 Geometric Road Design – Rural Heavy Industry Access Road – Not discussed

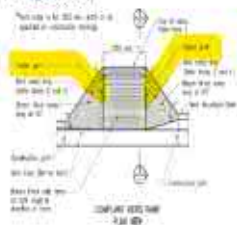
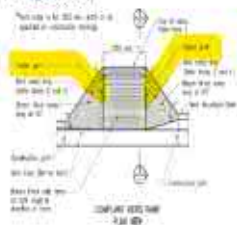
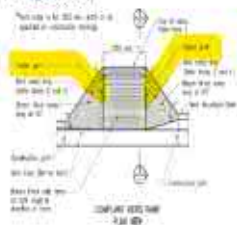
	<ul style="list-style-type: none"> • Attachment G is the previous information provided on this matter referred to in the resolution below. • The following resolution was made in late 2020. <p><i>Question raised by IRC for the consideration of the inclusion of a “Rural Heavy Industry Access Road” (Mine Access) or similar wording with appropriate associated elements within the Road hierarchy.</i></p> <ul style="list-style-type: none"> - GRC to provide the TMR drawing for Industrial Collector that was presented in the meeting. This will be distributed to the other council's. - 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 <p><u>The resolution from the 1 April 2022 meeting was</u></p> <ul style="list-style-type: none"> • Further information required from IRC • Committee to review GRC drawings to determine if they should be added to CMDG standard drawings. • Need to discuss the status of this item and any proposed changes to D1 and D2. <p><u>Suggested Resolution</u> Nil</p> <p><u>Action By</u></p>
M15.7	<p>D2 Pavement Design – amend APRG Report 21 as outdated reference and LSC to review design procedure and references – Not discussed</p> <p><u>Previous Resolution at 1 April 2022 was</u> Grant to review document and construction specification (e.g. C242)</p> <p><u>Action By</u> RRC</p> <p><u>Suggested Resolution</u> Nil</p> <p><u>Action By</u></p>
M15.15	<p>D9 Cycleway and Pathway Design revision – Not discussed</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 not progressed the review at this stage. <p><u>Suggested Resolution</u> Nil</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 <i>Cardno to provide draft underbore detail for consideration.</i>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>Resolution</u> MCE to commence investigation into underbore detail.</p> <p><u>Action By</u> MCE</p>																								
M16.5	<p>D5 Stormwater Design – Template for SWMP</p> <ul style="list-style-type: none">Previously an agenda item 16.5 (Meeting did not proceed)GRC have provided a template Attachment H for consideration and discussion.Clause D05.21 currently reads as follows. <p>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.</p> <p><u>Resolution</u> That the Stormwater template be included as Annexure D05A and Clause D05.21 be amended to reference the new Annexure.</p> <p>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. The template provided in Annexure D05A should be utilised unless noted in Table D05.21.1.</p> <p>Table D05.21.1 – Site Based Stormwater Management Plan Template</p> <table><tr><th>Local Government</th><th>Annexure D05A Applies</th><th>Alternative</th></tr><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></td></tr><tr><td>Isaac Regional</td><td>Yes</td><td></td></tr><tr><td>Maranoa Regional</td><td>Yes</td><td></td></tr><tr><td>Livingstone Regional</td><td>Yes</td><td></td></tr><tr><td>Rockhampton Regional</td><td>No</td><td>Refer to planning scheme</td></tr></table> <p><u>Action By</u> MCE</p>	Local Government	Annexure D05A Applies	Alternative	Banana Shire	Yes		Central Highlands Regional	Yes		Gladstone Regional	Yes		Isaac Regional	Yes		Maranoa Regional	Yes		Livingstone Regional	Yes		Rockhampton Regional	No	Refer to planning scheme
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M16.9	<p>PS5 PVC Pressure Pipe (Poly services to be PN16 not PN 12)</p> <ul style="list-style-type: none">PS-4 CMDG Purchase Specification. Clause 4.0. Pressure Classification (PN) – New Installations – PN 12.5 (1250 KPa or 1.25 MPa @ 20o C). <div><p>4.0 Pressure Classification (PN) –</p><p>New Installations - PN 12.5 (1250 kPa or 1.25 MPa @ 20° C); Repairs - PN 16 (1600 kPa or 1.6 MPa @ 20° C).</p></div>																								


	<p>See Attachment I for current PS-4 Purchase Specification</p> <p>Proposal:</p> <ul style="list-style-type: none"> PS-5 CMDG Purchase Specification Clause 5.0 Pressure Classification (PN) – (generally below ground use) uPVC Series 2 - PN 12; MPVC Series 2 - PN 16; OPVC Series 2 - PN 16, Material Class 400. <p><i>PS-5 Clause 5 for reference</i></p> <div style="border: 2px solid black; padding: 10px; margin: 10px 0;"> <p>5.0 Pressure Classification (PN) – (generally below ground use)</p> <p>uPVC Series 2 - PN 12; MPVC Series 2 - PN 16; OPVC Series 2 - PN 16, Material Class 400.</p> </div> <ul style="list-style-type: none"> Current Guidelines require water mains to be PN16, but the poly services are required to be PN12. Pressure Testing reaches 1250Kpa. This may compromise the structural integrity of the PN12 pipe. <p><u>Resolution</u></p> <p>Amend PS4 Clause 4.0 as follows</p> <p>Pressure Classification (PN) – New Installations – PN 16 (1600 KPa or 1.6 MPa @ 20o C).</p> <p><u>Action By</u></p> <p>MCE</p>
M16.10	<p>Trial Register</p> <ul style="list-style-type: none"> LSC has proposed the creation of a trial register to track the progress of any ongoing/successful trials. An example of this would be the use of new materials Discussion on implementation (who will have access to this and how?) It is suggested that the trial register be created as a separate page in the Action Register Excel file. That way it should be visited regularly not forgotten. <p><u>Resolution</u></p> <p>A new sheet be created in the Action Register for the Trial Register. All LGAs are to provide information on any trials they have underway.</p> <p>Grant to send through standard drawings that RRC have been using internally, for example driveway crossover grates. Drawings to be reviewed and committee to decide if CMDG standard drawings should be created.</p> <p><u>Action By</u></p> <p>All</p>
M16.11	<p>C273 Landscaping – amend hydromulch spec</p> <ul style="list-style-type: none"> The current hydro mulch specification uses seed variety's that are more suited to colder climates. See Attachment J for example seed mix used by Dennis Contracting Services <p><u>Resolution</u></p> <p>GRC, MRC, LSC are happy with the revised specification. RRC, IRC, CHRC, BSC to review and provide feedback/ acceptance.</p> <p><u>Action By</u></p> <p>RRC, IRC, CHRC and BSC</p>
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> <p>• Need guidance on the above dot points so that PS26 can be finalised.</p> <p><u>Resolution</u></p> <p>Briefly discussed. Mohit stated that RRC are checking if timber marker post are still being used. Councils to confirm if timber posts are still used.</p> <p><u>Action By</u></p> <p>All</p>		
M15.21	<p>PS28 Gaskets</p> <ul style="list-style-type: none"> • Attachment L is draft specification provided by GRC. • The previous resolution was <p><i>Councils happy to include on website.</i></p> <p><i>LSC had previously sent a purchase specification to Cardno. Cardno to locate this document.</i></p> <ul style="list-style-type: none"> • Need clarification on the LSC specification to finalise. <p><u>Resolution</u></p> <p>Committee members to review draft purchase specification and provide comment at next meeting</p> <p><u>Action By</u></p> <p>All</p>		
M15.22	<p>C242 Pavements – Amend references as advised by GRC</p> <table border="1"> <tr> <td> <p>M15.22. C242 Pavements</p> <p>Recommended actions from Brendan at GRC are:</p> <ul style="list-style-type: none"> • Add highlighted Australian standards • Delete reference to Main Roads documents totally (they were all upgraded to AS1289 reference in 2018) <p>C242.03 REFERENCE DOCUMENTS</p> <p>C242.03.01 Documents referenced in this Specification are listed in full below whilst being cited in the text in the abbreviated form or code indicated.</p> <p>(a) Council Specifications:</p> <ul style="list-style-type: none"> C241 - Stabilisers C244 - Sprayed Bituminous Surfacing <p>(b) Australian Standards</p> <ul style="list-style-type: none"> AS 1141.14 - Methods for sampling and testing aggregates AS 1289.3.1 - Methods of testing soils for engineering purposes AS 1141.14 - Particle shape, by proportional caliper AS 1141.22 - Wet/dry strength variation AS 1289.3.1.1 - Determination of the liquid limit of a soil - <u>Four point Casagrande method.</u> AS 1289.3.3.1 - Calculation of the plasticity index of a soil AS 1289.3.6.1 - Determination of the particle size distribution of a soil - Standard method of analysis by sieving AS 1289.3.6.3 - Determination of the particle size distribution of a soil - Standard method of fine analysis using a hydrometer AS 1289.5.1.1 - Determination of the dry density/moisture content relation of a soil using standard compaction effort. AS 1289.5.3.3 - Determination of the field density of a soil - Sand replacement method using a sand cone pouring apparatus AS 1289.5.4.1 - Compaction control test - Dry density ratio, moisture variation and moisture ratio <u>AS 1289.5.4.2</u> - Determination of field density and field moisture content of a soil using a nuclear surface moisture - density gauge - Direct transmission mode AS 1289.5.4.1 - Determination of the California bearing ratio of a soil - Standard laboratory method for a remoulded specimen. <u>AS 1289.6.1.1</u> <u>AS 1289.6.1.1</u> <p>(c) </p> <p>- Cardno to action the above recommendations from GRC.</p> <p>M13.8</p> </td><td> <p><u>Cardno</u></p> </td></tr> </table>	<p>M15.22. C242 Pavements</p> <p>Recommended actions from Brendan at GRC are:</p> <ul style="list-style-type: none"> • Add highlighted Australian standards • Delete reference to Main Roads documents totally (they were all upgraded to AS1289 reference in 2018) <p>C242.03 REFERENCE DOCUMENTS</p> <p>C242.03.01 Documents referenced in this Specification are listed in full below whilst being cited in the text in the abbreviated form or code indicated.</p> <p>(a) Council Specifications:</p> <ul style="list-style-type: none"> C241 - Stabilisers C244 - Sprayed Bituminous Surfacing <p>(b) Australian Standards</p> <ul style="list-style-type: none"> AS 1141.14 - Methods for sampling and testing aggregates AS 1289.3.1 - Methods of testing soils for engineering purposes AS 1141.14 - Particle shape, by proportional caliper AS 1141.22 - Wet/dry strength variation AS 1289.3.1.1 - Determination of the liquid limit of a soil - <u>Four point Casagrande method.</u> AS 1289.3.3.1 - Calculation of the plasticity index of a soil AS 1289.3.6.1 - Determination of the particle size distribution of a soil - Standard method of analysis by sieving AS 1289.3.6.3 - Determination of the particle size distribution of a soil - Standard method of fine analysis using a hydrometer AS 1289.5.1.1 - Determination of the dry density/moisture content relation of a soil using standard compaction effort. AS 1289.5.3.3 - Determination of the field density of a soil - Sand replacement method using a sand cone pouring apparatus AS 1289.5.4.1 - Compaction control test - Dry density ratio, moisture variation and moisture ratio <u>AS 1289.5.4.2</u> - Determination of field density and field moisture content of a soil using a nuclear surface moisture - density gauge - Direct transmission mode AS 1289.5.4.1 - Determination of the California bearing ratio of a soil - Standard laboratory method for a remoulded specimen. <u>AS 1289.6.1.1</u> <u>AS 1289.6.1.1</u> <p>(c) </p> <p>- Cardno to action the above recommendations from GRC.</p> <p>M13.8</p>	<p><u>Cardno</u></p>
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	<p><u>Resolution</u></p> <p>This change to be adopted with current review underway by RRC (Grant). It may be a number of months before this is completed.</p> <p><u>Action By:</u></p>
M22.01.08	<p>CMDG-S-030 Type C Vertical H.C.</p> <ul style="list-style-type: none"> The previous resolution was. <p><i>General acceptance regarding the use of connections directly above main.</i></p> <p><i>Discussion regarding removal of the house drain and Y branch in the Pre Site Development details.</i></p> <p><i>Agreement reached that it should be removed.</i></p> <p><i>Jamie (RRC) to provide markups to drawing CMDG-S-030 for MCE to complete.</i></p> <ul style="list-style-type: none"> Awaiting mark-ups from RRC with a view to providing an amended drawing for consideration <p>MCE are working on a revisions to the CMDG-S-030 drawing.</p> <p><u>Resolution</u></p> <p>Provide updated drawing for discussion at next meeting</p> <p><u>Action By</u></p> <p>MCE</p>
M22.02.07	<p>CMDG-W-040 and S-090</p> <ul style="list-style-type: none"> The previous resolution was <p><i>CMDG-W-040 Ver G - MCE to check specifications for depths etc to be consistent (especially Type C)</i></p> <p><i>Standard drawing S-090 to also be updated by MCE following feedback from GRC after staff consultation</i></p> <ul style="list-style-type: none"> Draft drawing with the proposed changes has been circulated and feedback received. No significant changes requested and W-040 being prepared for website load up. Also need direction on how S-090 is to be modified <p><u>Resolution</u></p> <p>MCE to update drawing based on direction from committee. Scott suggested reviewing SEQ and WSAA drawings.</p> <p><u>Action By</u></p> <p>MCE</p>
	<p>CMDG-R-050</p> <ul style="list-style-type: none"> <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

	<table><tr><td>4-2021</td><td>CMDG-R-050 L</td><td>Scrap ramp drawings do not specify the provision of a 'tooled joint' at the ramp wing transition. According to TMR, the sharp transitions at these joints serve as <u>way-finding</u> features for the visually impaired.</td><td>Update the standard drawings to include the <u>detail</u> as highlighted from TMR SN 1446 (attached) </td><td>Without this detail, some ramps have been constructed with rounded transitions and 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 to implement a uniform kerb ramp standard. 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 suit and proceed.</td></tr></table> <ul style="list-style-type: none">• Tooled joint note has been added and additional minor changes made. Richard mentioned that it would be worth considering the inclusion of information or reference to the TMR standard drawings KGR1 and KGR2. <p><u>Previous Resolution 1 April 2022</u></p> <p>Revised drawing and TMR drawings KGR1/ KGR2 to be sent to committee for further discussion/ consideration.</p> <ul style="list-style-type: none">• Attachment M1 is the revised R-050 drawing and Attachment M2 is the TMR drawings KGR1/ KGR2 <p><u>Action By</u> MCE</p> <p><u>Resolution</u></p> <p>Discussion on use of TMR drawings vs reference to Australian standard for TGSIs. General agreement that it may be better to leave Australian Standard reference and not refer to the TMR drawings. Further discussion required prior to adopting CMDG-R-050 rev F.</p> <p><u>Action By</u></p>	4-2021	CMDG-R-050 L	Scrap ramp drawings do not specify the provision of a 'tooled joint' at the ramp wing transition. According to TMR, the sharp transitions at these joints serve as <u>way-finding</u> features for the visually impaired.	Update the standard drawings to include the <u>detail</u> as highlighted from TMR SN 1446 (attached) 	Without this detail, some ramps have been constructed with rounded transitions and 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 to implement a uniform kerb ramp standard. 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 suit and proceed.				
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M22.02.05	<p>D5 – Use of corrugated polypropylene drainage pipes – Not discussed</p> <ul style="list-style-type: none">• LSC is suggesting use of corrugated polypropylene drainage pipes. <table><tr><td>6-2021</td><td>CMDG-D, CMDG-D5, C221</td><td></td><td>Addition of corrugated polypropylene drainage pipes.</td><td><p>Two 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 man 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></td></tr></table> <ul style="list-style-type: none">• C221 Section C221.04 mentions FRC and RCP pipes but not Plastic.• Current Section D05.18 reads as follows.					6-2021	CMDG-D, CMDG-D5, C221		Addition of corrugated polypropylene drainage pipes.	<p>Two 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 man 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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	<p>D05.18. PIPE MATERIAL</p> <p>D05.18.01. The following pipe materials are approved subject to minimum cover and installation requirements stated by the manufacturer:</p> <ul style="list-style-type: none"> • 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. <p>D05.18.02. All joints between pipes shall be Rubber Ring Joints (RRJ).</p> <ul style="list-style-type: none"> • It is noted that Hydra Storm supplies pipe as follows: <ul style="list-style-type: none"> ○ Manufactured in accordance to AS – NZS 5065 ○ Available from Diameter Nominal (DN) 225mm to 600mm ○ Manufactured from recycled HDPE  <ul style="list-style-type: none"> • 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. <p><u>Previous Resolution</u></p> <p>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.</p> <p><u>Action By</u> MCE</p> <ul style="list-style-type: none"> • 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. <p><u>Suggested Resolution</u></p> <p>Update D5 and C221 to permit polypropylene pipes (SN8) up to 600mm diameter. Revised documents to be sent to committee for review.</p> <p><u>Action By</u> MCE</p>
M22.02.06	<p>CMDG-D-033 Use of Precast Square roofwater pits – Not discussed</p> <ul style="list-style-type: none"> • 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

	<p>2-2021</p> <p>CMDG Request for amendment - Rocla/Rocla inspection chambers (CMDG-D-00)</p> <p>Rocla/Rocla inspection chambers (CMDG-D-00)</p> <p>change drawing to include drawing of 600x600 precast pit with galvanised lid.</p> <p>Comments from Waste: Nil input is required</p> <p>Comments from Water: Nil comments as drawing is related to stormwater drainage access chamber not sewerage access chamber</p> <p>Comments from Infra Design: Rocla/Rocla inspection chamber drawing to show a square pit detail (600x600 Field Inlet type) as this is the most commonly used on site</p> <p>Comments from Infra Planning: No comment provided</p> <p>Comments from Infra DET: No comment provided</p> <p>Comments from Facilities – Assets / GIS: No comment provided</p> <p>Comments from Construction / Maintenance Hi Ellen, I support the proposal as it will be easier to procure these products. If you have any queries regarding the above, please contact me. Thanks Darren Hines</p>
	 <p>Rocla pit left – Holcim pit right</p> <p><u>Suggested Resolution</u></p> <p>For discussion</p> <p><u>Action By</u> MCE</p>
M10.5.1	<p>D6 Site Regrading – consider retaining wall issue – Not discussed</p> <ul style="list-style-type: none"> The previous resolution was Meeting 10 – Sub Committee of Amal Meegahawattage (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>Suggested Resolution</u></p> <p>For discussion</p> <p><u>Action By</u> MCE</p>

M22.03.01	<p>CMDG-G-013 Locking Rail – Not discussed</p> <ul style="list-style-type: none"> The previous resolution was
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	<p><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></p> <ul style="list-style-type: none"> 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. Both drawings are at Attachment O. 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.  <p><u>Suggested Resolution</u> A new CMDG drawing be produced for Swing Gates Lockable Park access</p> <p><u>Action By</u> MCE</p>
M22.03.03	<p>D2, C242 & C221 Use of Recycled Glass – Not discussed</p> <ul style="list-style-type: none"> GRC are seeking was to amend CMDG to allow use of Recycled Glass in line with the TMR specs for pavement design – reference to be considered in either (D2 - Pavement Design) or (C242 - Flexible Pavement). In addition to pavement, having Recycle Glass as a suitable material for stormwater bedding/trenching material around concrete pipes (C221 Pipe Drainage). Proposal: In C242 - Recycle glass aggregate may be considered as an alternative to a quarry or natural sand material for unbound pavements when used in accordance with TMR specifications. References Materials: MTRS05 Unbound Pavements, MTRS36 Recycle Glass Aggregate. In C242 - Recycle glass aggregate may be considered as an alternative to a quarry or natural sand material for bedding material of reinforced concrete and fibre reinforced concrete pipes in accordance with bedding material grading limits. There are other alternative recycle materials that may be considered by the group. Attachment Q is the Current TMR Spec for recycled glass.

Table 7.2.1 – Constituents in Type 2 materials

Subtype	Maximum Limit of each Constituent (percent by mass)				
	Natural gravel or quarried material	Recycled materials			
		Recycled concrete	RAP	Recycled brick	Recycled glass ^
2.1	100	100	0	0	0
2.2	100	100	15	15	0
2.3	100	100	20	20	20
2.4	100	100	20	45	20
2.5	100	100	45	45	20

^ Recycled glass shall comply with the requirements of MRTS36 Recycled Glass Aggregate.

- For discussion at this stage – if there is appetite for its use we can investigate what document changes may be necessary to make it happen

Suggested Resolution

For discussion

Action By MCE

M13.10

D11 and D12 -Removal of "Trunk" and "Non-Trunk" wording from scope section. D11.01.01 and D12.01.01 – Not discussed

- The resolution at Meeting 13 was - *After a short discussion it was agreed that the CMDG documentation remain unchanged and relate to Non-Trunk items only. In general, specific design requirements for Trunk infrastructure would be dealt with in the LGIP's.*
- GRC has requested further discussion of the matter.
- Agenda text from meeting 13 follows for further background.
- *The current wording in D11.01.01 is as follows – D12 is similar.*

This Guideline sets out the requirements for the design of the NON-TRUNK infrastructure water supply network to achieve the Desirable Standards of Service in accordance with requirements of the Planning Act, the Water Supply (Safety and Reliability) Act and the Plumbing and Drainage Act. For any TRUNK infrastructure, refer to the Water Service Provider.

	10	<p>CMDG Guidelines D11 and D12 - amendments to suit trunk (LSC - Phil McKone)</p> <p>The following advice has been received from Phil McKone (for discussion)</p> <p><i>The introduction paragraph that states the Guideline is intended for non-trunk works can be changed ONLY if the trunk design parameters are included in the document.</i></p> <p><i>The trunk design parameters are listed in the LGIP and AICR.</i></p> <p><i>The risk profile is different and is focused on the bulk transfer of water and no access to individual properties.</i></p> <p><i>The important water supply differences are:</i></p> <ul style="list-style-type: none"> <i>. no pressure limitations, both minimum and maximum.</i> <i>. no velocity limitations</i> <i>. no fluctuation limitations</i> <p><i>For sewerage,</i></p> <ul style="list-style-type: none"> <i>. the ADWF flow patterns will be significantly different from the reticulation flow patterns due to system attenuation and pumped flow rates. This effects scouring velocities.</i> <i>. trunk gravity mains are basically a hydraulic head design, as the grades are so flat compared to the diameter of the pipe</i> <i>. branch main connections should be obvert consistent, not invert level based. A high water level in large trunk main may cause a continuous surcharge a small branch lateral</i> <i>. trunk sewage pump stations will be more sophisticated and greater equipment.</i> 	
		<p>Meeting date: 14 March 2019 Page 2</p> <p style="text-align: right;">Prepared by M Borg & C Hegarty</p> <p><u>Suggested Resolution</u></p> <p>For discussion</p> <p><u>Action By</u></p>	
M22.03.05		<p>CP1.28 Bonding of uncompleted works. Amendments to document – Not discussed</p> <ul style="list-style-type: none"> • 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. <p><u>Suggested Resolution</u></p> <p>The CP1 Version 4 draft be adopted and loaded up to the website.</p> <p>The bonding deed be provided in MS Word format on the website</p> <p><u>Action By</u> MCE</p>	
M22.04.01		<p>Review of Reference documents in all Specifications – Not discussed</p>	

	<ul style="list-style-type: none"> 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. 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? <p><u>Suggested Resolution</u> For discussion</p> <p><u>Action By</u></p>
M22.04.02	<p>D1 – Road Truncations – Not discussed</p> <p><u>Previous Resolution was:</u></p> <p>Mohit to review.</p> <p>MCE to proceed with including the truncations clause into D1. Mohit/ RRC to advise if changes are required. Inclusion of a clause in D1 for truncation of the real property boundary to provide this guidance for development applications and internal design works where new road reserves are being created / land is being purchased or resumed. The wording of this section to be consistent with section 6.3.2 Calliope Shire Council and Gladstone City Council 2005, Roads and Transport Standard 2005</p> <p>Action By MCE/ RRC</p> <p><u>Suggested Resolution</u> None at this stage – awaiting approval of D1 document and RRC review.</p>
M22.04.03	<p>D1 - National Light Pollution Guidelines for wildlife – Not discussed</p> <ul style="list-style-type: none"> This has been actioned and line items included in Draft D1 document under Urban and Rural sections. <p><u>Suggested Resolution</u> None at this stage – awaiting approval of D1 document</p> <p><u>Action By</u></p>
M22.04.04	<p>D5 – Polypropylene maintenance structures for gravity sewers – Not discussed</p> <ul style="list-style-type: none"> 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 EZIpit has been around for a number of years - with about 15 years of use in Australia and 35 years use in Europe.

