



Central Coast Council
WSAA Sewerage Code of Australia Supplement
(WSA 02 2002-2.2 - SWC Edition Version 4)

Planning and Delivery Unit,
Water and Sewer Directorate

Version Control			
Version	Date	Author	Description of changes
1.0	01/08/2022	Luke Drury	New document, to reflect change to adopted version of WSAA Code and replace former GCC and WSC supplements.



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Author: Water Planning and Delivery Unit, Water and Sewer Directorate

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Wyong Office:

2 Hely St / PO Box 20 Wyong NSW 2259

1300 463 954

E ask@centralcoast.nsw.gov.au

W www.centralcoast.nsw.gov.au



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1 Introduction

Central Coast Council (CCC) has adopted the Water Services Association of Australia (WSAA) Sewerage Code of Australia – WSA 02-2002-2.2 (Sydney Water Edition) Version 4 ('the Code') for the planning, design and construction of sewerage networks across the Central Coast area.

This Supplement is to be read in conjunction with the aforementioned Code, and the amendments and supplementary information outlined below shall be adopted when used for CCC related works.

Please note that this Supplement is a controlled document, so Central Coast Council's website should be consulted for the most current version.

2 Complementary Documents

The following documents complement the requirements set out above. Any deviation from the specification required must be confirmed with a CCC representative prior to commencing works.

- a. WSAA Sewerage Code of Australia – WSA 02-2002-2.2 (Sydney Water Edition) Version 4 (available from the Water Services Association of Australia)
- b. Sydney Water Deemed to Comply drawings
- c. Central Coast Council Civil Works Construction Specification (2018)
- d. Central Coast Council Gravity Sewer Construction Notes (**appended to this document**)
- e. Central Coast Council's Building in Proximity to Water and Sewer Pipelines Procedure
- f. Central Coast Council Work as Executed CAD Drawing Standard and Requirements
- g. Central Coast Council Minor Works Sewer Guideline
- h. Hunter Water Corporation WSA 02–2014-3.1 – Appendix HW N
- i. Hunter Water Corporation WSA 02–2014-3.1 – Appendix HW R.

Note: Central Coast Council owned specifications take precedence over all other specifications and drawings.

3 Supplement

Proposed amendments to the Code (and other supplementary information) to be adopted for CCC related works are outlined in the sections below, with clause / section numbers provided for ease of reference.

3.1 General

The following general notes apply across multiple / all sections of the adopted Code and should be adopted wherever relevant when referencing the Code.

Clause / Section	Amendment / supplementary information
All	<u>Replace all references to 'Sydney Water', 'SWC', 'the Superintendent' or 'the Water Agency' with "Central Coast Council".</u>
All	<u>Replace all references to DN100 property connections with DN150, as Central Coast Council does not accept DN100 property connection.</u>
All	<u>This Supplement is intended to read in conjunction with the Water Services Association of Australia (WSAA) Sewerage Code of Australia – WSA 02-2002-2.2 (Sydney Water Edition) Version 4. Where inconsistencies are</u>

identified, clarification shall be sought from Central Coast Council, with the Supplement generally taking precedence.

All	Where there is conflict between the DTC Drawings and the WSAA Standard Drawings, the WSAA Standard Drawings (when considered in conjunction with this Supplement) takes precedence.
All	Delete all references to 'Maintenance Shaft' and 'Terminal Maintenance Shaft' and replace with 'Maintenance Chamber' where required.

3.2 Introduction

Clause / Section	Amendment / supplementary information
Scope of Code	<p><u>Insert the following paragraph at the end of this Clause:</u></p> <p><i>“Central Coast Council will as of 4th July 2022, adopt the WSAA Sewerage Codes of Australia (WSA 02-2002-2.2 - SWC Edition Version 4) as the reference manual for the planning, design and construction of sewerage assets within the Central Coast local government area.”</i></p>
Code Purpose	<p><u>Replace the sixth paragraph with the following:</u></p> <p><i>“Any reference to the Sewerage Code of Australia (“the Code”) shall be deemed to refer to the version of the Sydney Water Edition of the Code as described in the latest version of the Central Coast Council Supplement. The Code specifies mandatory requirements for the design and construction of sewers that are to become the responsibility of Central Coast Council”</i></p> <p><u>Insert the following at the end of this Clause:</u></p> <p>“Purpose of Supplement</p> <p><i>The purpose of the CCC Supplement is to provide information specific to Central Coast Council’s area of operation, in particular design and construction standards and procedures.</i></p> <p><i>CCC reserves the right to change or amend the Code or Supplement without notice.</i></p> <p>Approval Authority</p> <p><i>All water and sewerage works proposed within the Central Coast local government area that are covered by the Codes, will require approval by Council’s Water Assessment Team.”</i></p>

3.3 Part 0: Glossary of Terms, Abbreviations and references

Clause / Section	Amendment / supplementary information
Glossary of Terms	<p><u>Insert the following abbreviation:</u></p> <p>“CCC <i>Central Coast Council”</i></p>

3.4 Part 1: Planning and Design

Clause / Section	Amendment / supplementary information
SW 1.4.4 Safety in Design	<p><u>Delete SW 1.4.4 and insert:</u></p> <p>“SW 1.4.4 Safety in Design</p> <p><i>Safety in Design shall be considered as required by the Work Health and Safety Act.”</i></p>
3 Flow Estimation	<p><u>Ignore this section and consult directly with Central Coast Council prior to undertaking flow estimation calculations, noting the following:</u></p> <p>Central Coast Council have adopted a flow estimation calculation method similar to Hunter Water Corporation, using ET instead of EP.</p> <p>Further information can be obtained from ‘Appendix HW N’ in Hunter Water Corporation’s version of WSA 02–2014-3.1.</p> <p>Note that theoretical loadings for Central Coast Council projects are based on 0.0067 L/s per ET for Average Dry Weather Flow (ADWF)</p>
SW 4.2.3.1 Preferred gravity sewer location	<p><u>Delete the two paragraphs under the heading ‘Preferred Gravity Sewer Location’ and insert:</u></p> <p><i>“The preferred location for gravity sewer mains is:</i></p> <ol style="list-style-type: none"> a. <i>1.0m from rear boundary to centreline of pipe.</i> b. <i>1.5m from rear boundary to centreline of pipe when located parallel to inter allotment storm water drainage.</i> c. <i>1.0m from side boundary to centreline of pipe.</i> d. <i>1.0m to 4.0m from front boundary to centreline of pipe.”</i>
SW 4.2.3.2 Alternative locations	<p><u>Delete all paragraphs under the heading ‘Alternate Locations’ and insert:</u></p> <p><i>“Alternative locations for gravity sewer mains shall be discussed with CCC’s Water Assessment Officer.”</i></p>
SW 4.2.3.4 Sewers in basements	<p>In instances where basement sewer will be adopted, refer to the CCC Building in Proximity to Water and Sewer Pipelines Policy (August 2020).</p>
4.2.4 Environmental considerations	<p>Not used.</p> <p>The proponent is responsible for obtaining any required environmental approvals or licences.</p>
4.2.5 Easements	<p><u>Delete the last paragraph and insert:</u></p> <p><i>“Easements are not normally required for gravity sewer main, but may be necessary in some situations (as per Central Coast Council’s easement business rules).</i></p> <p><i>Any branch line less than 6m is considered as a property service.</i></p> <p><i>Any branch line between 6m and 25m is considered as a sewer main extension and an easement is applied impacting the property it is traversing through. Maintenance of this asset is the responsibility of the owner being serviced by the asset.</i></p>

Any branch line greater than 25m is considered as a Council asset and no easement will be applied in this case and the asset is maintained by Council.”

4.2.6
Disused sewers

Insert the following at the end of this Clause:

“If the redundant pipe is located in private property (regardless of the existence of easements) then full removal of the pipe and associated fittings is required following the decommissioning of the asset. The asset should be shown as removed on the Work as Executed (WAE) plan and removed from Council’s GIS system.

If the redundant pipe is subject to insitu replacement (replacement on the same horizontal alignment), or other services are proposed to be installed in close proximity to the main (triggering its relocation) then full removal of the pipe and associated fittings is required following the decommissioning of the asset.

If the redundant pipe is located in the public road reserve, but outside of a road pavement, then the pipe is to be grout filled and marked as disused AC pipe on both the WAE and Council’s GIS system.

If the redundant pipe is located under a road pavement (existing or proposed), then the pipe (and associated fittings) will either be removed or left in place and grout filled based on the requirements of the road pavement design. The pavement designer may require the removal of the pipe if it occupies a select pavement zone/subgrade area, otherwise the pavement designer may elect to leave the main in place following grout filling.

No pipe cracking/bursting of AC mains is to be undertaken due to the effect of breaking the pipe into smaller pieces.”

SW 4.3.7.1
General

Replace the contents of these clauses with the following:

and

“CCC may consider using long radius horizontal or vertical bends outside a MH, MS or TMS in reticulation sewers in exceptional circumstances. Each situation will be assessed on a case-by-case basis and will require CCC approval prior to use.”

SW 4.3.7.2
Reticulation
sewers

4.4.4
Obstructions and
Clearances

Insert the following at the end of the first paragraph:

“For specific requirements refer to the CCC Building in Proximity to Water and Sewer Pipelines Policy (August 2020).”

4.5 Pipe Sizing and Grading	<p><u>Ignore this section and consult directly with Central Coast Council prior to undertaking pipe sizing and grading calculations, noting the following:</u></p> <p>Central Coast Council have adopted a pipe sizing and grading calculation method similar to Hunter Water Corporation, which specifies empirical relationships as an alternative to hydraulic analysis.</p> <p>Further information can be obtained from 'Appendix HW R' in Hunter Water Corporation's version of WSA 02-2014-3.1. Note that designers should only use the self-cleaning and capacity flow values when determining appropriate pipe grade. Minimum and maximum Tenement values should <i>not</i> be used, due to the difference in Average Dry Weather Flow (ADWF) flow assumption for Central Coast Council.</p> <p>Note that Central Coast Council do not accept DN100 property connections and has adopted a minimum grade of 1.2%.</p>
4.6.7 Vertical curves and 4.6.8 Compound curves	<p><u>Replace the contents of these clauses with the following:</u></p> <p><i>"CCC may consider using long radius horizontal or vertical bends outside a MH, MS or TMS in reticulation sewers in exceptional circumstances. Each situation will be assessed on a case-by-case basis and will require CCC approval prior to use."</i></p>
4.8 Steel Sewers	<p><u>Insert the following at the start of this clause:</u></p> <p><i>"The specification of Steel Sewer mains on designs will only be considered for approval by CCC in circumstance where there are no other options or where other options are cost prohibitive (as determined by CCC)."</i></p>

<p>5.3.1 General</p>	<p><u>Insert the following at the start of this clause:</u></p> <p><i>“Central Coast Council uses the “Buried Interface” method – refer to Section 3.4 of this document for supplement notes to SEW–1151–S for further details.</i></p> <p><i>Use of the IO interface method requires specific approval from Central Coast Council.”</i></p>
<p>6.1 Types of Maintenance Structures</p> <p>and</p> <p>Table 6.1 Acceptable MH, MC, MS And TMS Options for Reticulation Sewers</p>	<p><u>Insert the following at the start of this clause:</u></p> <p><i>“Maintenance Chamber (600mm diameter) is to be used as a minimum size for any maintenance structure.</i></p> <p><i>Maximum change in sewer horizontal direction at base level for Maintenance Chambers will be specified as 30 degrees.</i></p> <p><i>Change in vertical grade at base level will be allowed subject to individual capability of the Maintenance Chamber product.</i></p> <p><i>No high-level inlets will be accepted for Maintenance Chambers.</i></p> <p><i>Products specified in the design must be WSAA appraised.”</i></p>
<p>6.3.2 Maintenance structure spacing— Reticulation sewers</p>	<p><u>Replace the contents of this clause with the following:</u></p> <p><i>“For reticulation sewers, the maximum distance between any two consecutive MHs shall be 120 metres and subject to the provisions of clause 6.3.1.</i></p> <p><i>The maximum distance between a MH and any other MC shall be 60m.</i></p> <p><i>At permanent end of line sewers, the distance from the end of the line MC to the nearest downstream MH shall not exceed 60m.</i></p> <p><i>Central Coast Council do not accept concurrent maintenance chambers, unless in exceptional circumstances and it is demonstrated that there are no viable alternatives.”</i></p>

Figure 6.1
Multiple MCs or
MSs Between MH
and “Last”
MH/TMS

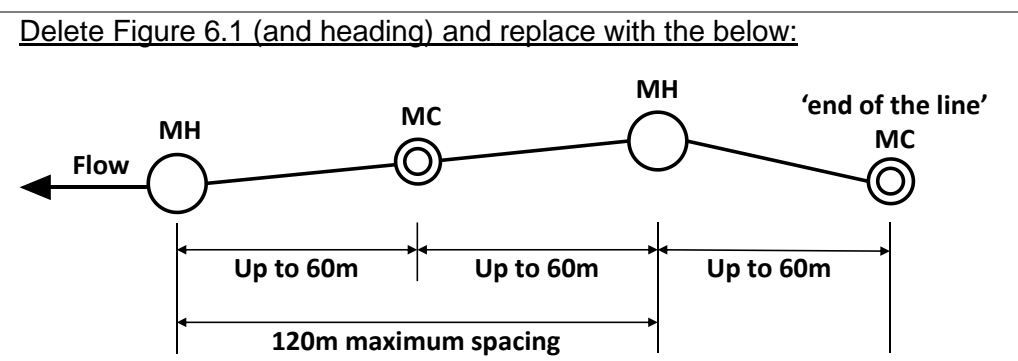


Figure 6.1 MAXIMUM SPACING FOR PERMANENT ‘END OF LINE’ SEWERS

Figure 6.2
 Multiple MCs or
 MSs Between
 Consecutive MHs

Delete Figure 6.2 and replace with the below:

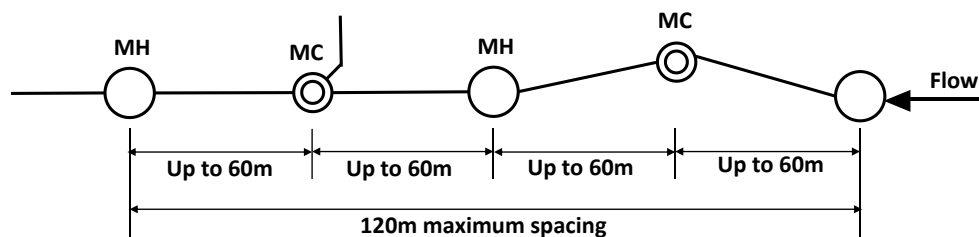


Figure 6.1 MAXIMUM SPACING MCs BETWEEN CONSECUTIVE MHs

6.3.3
 Maintenance
 structure spacing
 – Branch and
 trunk sewers

In the first paragraph delete '180m' and insert "120m".

6.4
 Special
 Considerations
 for Location of
 Maintenance
 Structures

Insert the following at the end of the first paragraph:

"For specific requirements refer to CCC Building in Proximity to Water and Sewer Pipelines Policy (August 2020)."

6.6.2
 Types of MH
 construction

Insert the following at the start of this clause:

"Polypropylene maintenance holes (Poly MH's) will be accepted by Council for use (with restrictions as per Table 6.1 of the WSAA Sewerage Code, Sydney Water Edition).

Products specified in the design must be WSAA appraised.

External drops will be accepted.

Internal drops will be accepted in exceptional circumstances with justification provided. Maximum 6m depth allowed.

Poly MH's will also be accepted as pump station discharge maintenance holes.

Concrete Pre-cast maintenance holes must have all joints externally sealed with an approved wrapping system."

6.6.4
 Property
 connections into
 MHs

Insert the following at the end of the first paragraph:

"For specific requirements refer to CCC Building in Proximity to Water and Sewer Pipelines Policy (August 2020)."

6.6.8
 Ladders, step
 irons and
 landings

Replace the contents of this clause with the following:

"Step irons, ladders and landings are not required in Central Coast Council maintenance holes."

6.7.1
 General

In the first line delete 'DN150, DN225, and DN300' and replace with "DN150 and DN225".

7.2.1 General design parameters	<p><u>Delete the first four paragraphs and insert the following:</u></p> <p><i>“CCC requires the property owner/customer to install boundary traps prior to connection to the sewer, for:</i></p> <ul style="list-style-type: none"> • <i>The connection of properties to sewer mains over 375mm in diameter</i> • <i>Areas where the gravity sewer main is subject to positive pressure (such as a nearby rising main entry into the sewer main).</i> • <i>Industrial areas, to allow for trade waste sampling at the point of connection.</i> • <i>Areas known to have a high odour problem as a result of sewer main flows.</i> <p><i>Any additional water sealing devices will be as specified or approved by CCC.”</i></p>
7.2.2 Water seals on reticulation sewers entering branch or trunk sewers	<p><u>Delete this clause.</u></p>
7.5.2 Design parameters for vents	<p><u>Delete all paragraphs after the second paragraph and insert the following:</u></p> <p><i>“Venting requirements for each specific project shall be determined in consultation with CCC. The final locations, colour and types of vent shafts to be used will be as approved by CCC.</i></p> <p><i>The design requirements of educt vents will be determined on a case-by-case basis. The arrangements shown on Standard Drawings SEW-1408 and SEW-1451-S are acceptable but will require prior approval of CCC, as will any alternative design.</i></p> <p><i>Vents are to have ground level filters for ease of maintenance.”</i></p>
7.6.1 General	<p><u>Replace the second paragraph with the following:</u></p> <p><i>“CCC should be consulted in determining requirements for boreholes.”</i></p>
7.7 Vortex Inlets and Water Cushions	<p><u>Delete the reference to ‘the Blue Mountains’ in the third paragraph.</u></p>
8.2 Products and Materials	<p><u>Replace the last paragraph with:</u></p> <p><i>“All products and materials shall conform with WSAA approved product specifications only. All other products or materials (including those on the Sydney Water approved product list) require approval from CCC.”</i></p>
8.10 Bulkheads and Trenchstops and Table 8.1 Requirements for Bulkheads	<p><u>Insert the following at the start of this clause:</u></p> <p><i>“Any grade less than 7.5% does not require trench stops.</i></p> <p><i>For grades between 7.5% to 15%, use trenchstop detail from SEW-1206 and spacing $S = 100 / \text{Grade} (\%) \text{ m}$.</i></p> <p><i>For pipes up to DN300 with excavations greater than 1.5m in height, trench stop and bulkhead can cease at height of first benching.</i></p>

Refer to Table 8.1 of the WSAA Sewerage Code (Sydney Water Edition) for requirements of sewer grades greater than 15%.”

9
 Design Review
 and Drawings

Insert the following at the start of this clause:
“All gravity sewer design drawings shall include CCC’s ‘Gravity Sewer Construction Notes’”.

Note: A copy of this document is appended to this supplement.

9.1
 Design Review

Insert the following at the start of this clause:
“Prior to Central Coast Council review, the designer is to complete and submit a Central Coast Council design review checklist.”

9.2
 Design Drawings

Delete the last sentence in this clause.

3.5 Part 2: Products and Materials

Clause / Section	Amendment / supplementary information
10.1 Purpose	<p><u>Insert the following after the first paragraph in the shaded box:</u></p> <p><i>“In general, CCC will only consider the use of pipeline system products that have been appraised by WSAA and/or approved by Sydney Water. The use of any other product will require the prior written approval of CCC.</i></p> <p><i>A proposed materials list must be submitted to and approved by Central Coast Council’s Water Assessment Construction Team for approval prior to commencing works. Any embedment and backfill material proposals must be accompanied by a certificate of conformance with testing completed within 3 months of issue of certificate to Central Coast Council.”</i></p>

3.6 Part 3: Construction

Clause / Section	Amendment / supplementary information
12.1.1 General	<p><u>Replace the contents of this clause with the following:</u></p> <p><i>“The Constructor shall be experienced in the construction of all types of sewerage works covered by this code. Evidence of the Constructors experience and references from other Water Agency type organisations may be required to be provided to Council prior to a Constructor being accepted by Central Coast Council as being suitable to construct the required sewerage works. All Constructors shall carry appropriate levels of Public Liability Insurance and address the requirements of Part 1 and Part 2 and any other part of Central Coast Council’s ‘Civil Works Construction Specification (2018)’ that is applicable to the required construction.”</i></p>
12.1.2 Quality system	<p><u>Replace the contents of this clause with the following:</u></p> <p><i>“The Constructor shall plan and allow for the provision of all testing required by the Code. The Constructor shall obtain all documentation from suppliers of materials as required by the code to confirm quality of materials to be incorporated into the works. All test results and product quality certification from suppliers shall be provided to Council upon request and in all cases a copy of all test certificates, reports and product certification shall be provided to Central Coast Council with Work as Constructed Drawings at the completion of the works. All documentation must be provided and</i></p>

accepted by Central Coast Council prior to Council issuing any certification confirming acceptance of the works.

The Constructor shall not incorporate into the works any materials that do not comply to the requirements of this code without first obtaining the approval of Central Coast Council. The Constructor shall immediately notify Council of any testing carried out on the works that do not comply with the requirements of this code. Failure to notify Central Coast Council of any non-compliance prior to covering up the subject section of works will result in Central Coast Council not accepting the works until the non – compliance has been rectified. Council may consider acceptance of non-complying works in exceptional circumstance (as determined by Central Coast Council).”

12.1.5 Quality tests	<u>In the first paragraph delete ‘under the contract’ and replace ‘of the contract’ with “of this Code”.</u>
13.5.1 Safety of people	<u>In the third paragraph delete “In accordance with the requirements designated by the Water Agency”.</u> <u>In the sixth and seventh paragraphs delete ‘OH&S’ and insert “WHS”.</u>
13.5.6 Protection of the environment and heritage areas	Not used. The proponent is responsible for complying with all protections outlined in the required environmental approvals or licences obtained by the proponent.
17.11 Marking Tapes	<u>Insert the following at the start of this clause:</u> <i>“Detectable marking tape is to be used at all times (where possible) unless specified by Central Coast Council.”</i>
22.1 General	<u>Insert the following at the start of this clause:</u> <i>“Central Coast Council shall not accept any new development related works without appropriate testing having been completed to the satisfaction of CCC’s Water Assessment Team.”</i>
22.4.4.2 Test method	<u>Delete Table 22.5.</u> <u>All Maintenance Holes and Chambers are to be vacuum tested.</u>
22.7 CCTV Inspections	<u>Delete “as directed by Sydney Water” in the first and third paragraphs.</u> <u>Add the following Note (d) under the second paragraph:</u> <u>“CCTV of pipeline shall be recorded starting from the downstream maintenance structure”.</u>
25 Restoration	<u>Insert the following at the start of this clause:</u> <i>“Restoration shall be carried out in accordance with this section unless more specific restoration requirements are required in Central Coast Council’s ‘Civil Works Construction Specification (2018)’”.</i>

3.7 Part 4: Standard Drawings

Clause / Section	Amendment / supplementary information
29.5 SEW–1106 and SEW–1107 –	<u>Delete the first paragraph and replace with:</u>

Property Connection Details – Methods	<i>“Central Coast Council uses the “Buried Interface” method. Use of the IO interface method requires specific approval from Central Cost Council.”</i>
SW 29.9 SEW–1151-S – DN 100 PVC-U Property Connection Arrangement – Install pipework / riser for single property connection	No tees are to be installed on riser pipe. Minimum level connection to be installed as per SEW 1107, with details including Standard Connection, Minimum Level Connection Detail and Extended Connection. Marking tape to be installed as per SEW-1109, with details including Buried Interface Point Method and Location Marking Systems.
31.2 SEW–1300-V – Sewers ≤DN 300 Precast MH Types P1 and P2	Step irons are not permitted within Central Coast Council maintenance holes (refer SEW–1307-V). <u>Add the following to Note 8:</u> <i>“A 32MPa low heat mix is acceptable in place of the specified SCC50 concrete.”</i> <u>Add the following to Note 9:</u> <i>“There may be some circumstances where alternatives to cast in-situ are acceptable, with prior approval from Central Coast Council.”</i> <u>Replace Note 15 with the following:</u> <i>“Pre-cast maintenance holes are permitted if appropriately designed for potential vehicular loadings, however are not suitable for slopes greater than 1V:8H”</i>
31.3 SEW–1301-V – Cast In-Situ MH Types C1 and C2	Coating system EUH (Epoxy Ultra High Build) product Polibrid 705E is to be used for all maintenance holes at the discharge of pumped flows and the next two maintenance holes downstream.
31.7 SEW–1306-V – Alternative MH Drop Connections	Written approval is required from Central Coast Council for the use of an internal drop.
31.9 SEW–1308-V – Typical MH Cover Arrangements	<u>Delete the first paragraph stating that concrete covers are not to be used.</u> <u>Replace Note 6 with the following:</u> <i>“Class D covers are to be installed in all instances.”</i>
31.12 SEW–1314-V, SEW–1315, SEW–1316-V	SEW–1314-V: No high level or property connections are permitted to a maintenance chamber unless approved by Central Coast Council (in exceptional circumstances).

and SEW-1317-V – Maintenance Shafts	SEW-1315: <u>Replace Note 3 with the following:</u> <i>“Bends shall have a maximum 900mm radius in curvature and a maximum 30° in change of direction.”</i> <u>Delete Note 5</u> , as Central Coast Council does not accept consecutive maintenance chambers.
	SEW-1316-V: <u>Replace Note 7 with the following:</u> <i>“A MC shall not incorporate any higher-level incoming reticulation sewer.”</i>
	SEW-1317-V: <u>Replace Note 6 with the following:</u> <i>“Class D covers are to be installed in all instances.”</i>
SW 31.14 SEW-1350-S – Terminal Maintenance Shaft / Rodding Point at Dead End of Property Connection Sewer	Central Coast Council does not accept rodding points, with a minimum requirement for terminal maintenance chamber at end of line sewers.
SW 31.16 SEW-1352-S – Installation, Step Irons for DN 150 – DN 300	<u>Delete this drawing</u> , as it is not used by Central Coast Council.
32.4 SEW-1404, SEW-1405 and SEW-1406 – Aerial Crossings	SEW-1404-V: Where piles are proposed to be within the 1:2,000 year ARI flood level, piles and embedment are to be designed in accordance with the requirement of AS5100 for dynamic loading and scour depth. The design and construction are to be Certified by a Chartered Structural engineer as compliant with AS5100.

32.6 SEW-1409, SEW-1410 and SEW-1411 – Water Seal Arrangements	SEW-1411: <u>Delete this drawing</u> , as it is not used by Central Coast Council.
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3.8 Appendices

Clause / Section	Amendment / supplementary information
Appendix SW1 Environmental Management	This appendix is not used. The proponent is responsible for obtaining any required environmental approvals or licences.
Appendix SW2 – Sewers in Slip and Potentially Unstable Areas	This appendix shall be read for general information only. The Designer of water and sewer reticulation works shall obtain site specific geotechnical advice were required in order to provide adequate specifications for construction. Where adequate specifications for construction have not been provided and it becomes necessary during construction to obtain geotechnical advice that advice shall be arranged by the Developer and/or their Contractors. Copies of all advices shall be provided to Central Coast Council. Central Coast Council may at the design stage request the designer to obtain geotechnical engineering advice prior to issuing design approvals.
Appendix SW3 – Drafting Requirements (1/2)	Note: All gravity sewer design drawings shall include CCC’s ‘Gravity Sewer Construction Notes’. A copy of this document is appended to this supplement. Work as constructed information is to be produced as per Central Coast Council’s ‘Work as Executed Requirements’, prior to issuing of certification accepting the works. Any branch line less than 6m is considered as a property service. Any branch line between 6m and 25m is considered as a sewer main extension and an easement is applied impacting the property it is traversing through. Maintenance of this asset is the responsibility of the owner being serviced by the asset. Any branch line greater than 25m is considered as a Council asset and no easement will be applied in this case and the asset is maintained by Council.
Appendix SW3 – Drafting Requirements (2/2)	<u>Delete any references to “Work Number”, “Project Number” or “Case Number”.</u> <u>Delete any reference to “stormwater plans”.</u>
Appendix SW3 – Drafting Requirements (1 Plan Forms and Case/Project Numbers)	<u>Delete all references to stormwater within this clause.</u>

Appendix SW3 – Drafting Requirements (2 CAD Requirements)	<u>Replace the contents of this clause with the following:</u> <u><i>“All drawings submitted to Central Coast Council shall be prepared using the current release of Autocad or the immediate previous release. A PDF version is to be submitted to Council for review.”</i></u>
Appendix SW3 – Drafting Requirements (3 Scale)	<u>In the first paragraph delete “and storm water channels”.</u>
Appendix SW3 – Drafting Requirements (7 Work Schedule Notation – Sewer/Stormwater Plans)	<u>Delete this clause</u>
Appendix SW3 – Drafting Requirements (9 Sydney Water Catchments and Stormwater Groupings)	<u>Delete this clause</u>
Appendix SW3 – Drafting Requirements (13 Work as Constructed Plans)	<u>In the second paragraph delete “and using the Sydney Water drafting package”.</u> <u>Insert the following paragraph:</u> <i>“Sewer as constructed drawings shall also show junction information as per Central Coast Council’s ‘Work as Executed CAD Drawing Standard and Requirements’.”</i>
Appendix SW3 – Drafting Requirements (14 Sample Standard Drawings)	<u>Insert the following after the first paragraph:</u> <i>“Drawing Title blocks do not have to be in accordance with the standard drawings. However information shown in the sample drawing title blocks, other than the ‘case no.’, will generally be required on most plans.”</i> <u>Delete all standard drawings related to storm water channels.</u>
Appendix SW3 – Drafting Requirements (15 Stormwater Channel Design Drawings)	<u>Delete this clause</u>

Appendix 1: Central Coast Council Gravity Sewer Construction Notes

Gravity Sewer Construction Notes

1. Construction of gravity sewer lines shall be in accordance with the Sydney Water Edition of the "Sewerage Code of Australia" WSA02-2002 (Version 4) with Central Coast Council Supplements. These notes specify Central Coast Council's particular requirements in these documents in relation to the construction of gravity sewer mains and associated maintenance structures. Central Coast Council Supplements can be found on Council's Water and Sewer Development website.
2. Connection of new sewer reticulation mains to existing Council reticulation mains shall be carried out by the contractor unless specified otherwise by Council. Contractor is to submit a methodology to Council's Water and Sewer Development Engineer at least 10 business days prior to scheduled cut in.
3. The Developer's contractor shall be responsible for the care and maintenance of all existing utilities and services, to the satisfaction of the relevant Authority or owner. This may include arranging or performing relocation, temporary diversion or support of the service. All cost incurred by the Developer's contractor in verifying the location of utilities and services, providing for their care and maintenance shall be borne by the contractor.
4. Pipe for gravity sewer mains shall generally be flexible pipes with rubber ring joints. Pipe must be a minimum class SN8. Pipes in mine subsidence areas shall not be greater than 3m in length, shall incorporate flexible joints and have a smooth external surface. Pipes to be used in mine subsidence areas shall be certified by the pipe supplier to be suitable for the predicted ground strains as advised by the Mine Subsidence Board.
5. Pipe embedment shall be as specified on the drawings and in accordance with WSA standard drawings SEW-1200 series and Central Coast Council's Supplement to the WSA Code document. Pipe embedment material shall be single sized aggregate and comply with WSA-02, Clause 20.3 Embedment Materials. Should ground conditions encountered not be suitable for the specified embedment then the embedment type shall be changed to suit the site conditions. Trench fill under areas of existing road pavement shall be 15:1 stabilised sand in accordance with section 4.9 of Central Coast Council's "Civil Construction Specification".
6. Carry out field compaction testing in accordance with WSA-02, Clause 22.3 Compaction Testing. Submit copy of test documentation to council as part of acceptance testing.
7. Requirements for trench stops and bulkheads shall be as specified on the design drawings and in accordance with standard drawings SEW-1206 and SEW-1207-V. For pipes up to DN300 with excavations greater than 1.5m in height, trench stop and bulkhead can cease at height of first benching.
8. All property connections shall be in accordance with the "Buried Interface Method" as described on standard drawing SEW-1151 and Central Coast Council's supplement to the WSA Code document.
9. Maintenance Holes (MH) shall be constructed in accordance with SEW-1300 series standard drawings and Central Coast Council Supplement to the WSA Code document. The use of internal drops as shown on standard drawing SEW-1306-V will only be allowed if specified on the design drawings or specific approval has been obtained from Central Coast Council. In regards to standard drawing SEW-1308-V, covers must be metal, bolted

down and watertight. Rocker pipes (shorts) of 600mm length will be required on all pipe lines at manholes for all pipe types.

10. Select component maintenance hole lengths to minimise the number of joints. First riser component from base to be between 300mm and 600mm in height. Maximum four (4) riser shafts to be used for maintenance holes up to six (6) metres height (excluding taper). Pre-cast maintenance hole joints to be sealed with approved protective wrap or other approved product to further assist against infiltration and tree root intrusion.
11. In areas subject to surcharge, water charged ground and flooding and / or where MHs are specified, only cast in situ or polypropylene maintenance holes shall be used.
12. Maintenance Chambers (MC) where shown on the design drawings shall be constructed in accordance with WSA standard drawings SEW-1314-V, SEW-1315, SEW-1316-V and SEW-1317 and Central Coast Council Supplement to the WSA Code document . MS's or TMS's shall not be used. No high level sewer is to enter an end of line Maintenance Chamber.
13. Acceptance testing of sewer mains shall be arranged by the Contractor. Acceptance testing shall be in accordance with WSA-02 Part 3 Section 22 and include:
 - a. Compaction testing of trench fill
 - b. Pressure testing or vacuum testing of pipelines
 - c. Vacuum testing of maintenance holes
 - d. CCTV inspection
 - e. Deflection (ovality) for mains >300mm diameter.
 - f. Property sewer connection diagram (line sheet)
14. Surface restoration and pavement restoration shall be in accordance with the requirements of WSA-02, Section 25 Restoration.
15. Clarification of construction requirements should be obtained from Council's Water and Sewer Development Engineer where requirements are not clear on the approved design drawings, these notes and/or the Sydney Water Version of WSA-02 (Version 3) and/or Central Coast Council Supplement to the WSA Code document.
16. Work as Executed (WAE) drawings shall be prepared using the Council approved design drawings and in accordance with Central Coast Council's Work as Executed guidelines (located on Council's Water and Sewer Development website). Submitted plans must be in AutoCAD digital format and PDF (no red pen markups). In addition to providing WAE level information, location and junction information shall be provided. WAE plans to be submitted to waterandsewerworks@centralcoast.nsw.gov.au maximum one month post construction for review.
17. Evidence of the Contractor's experience and references from other Water Agency type organisations is required to be provided to Central Coast Council prior to a Contractor being accepted as suitable to construct the required sewerage works. All Contractors shall carry appropriate levels of Public Liability Insurance.
18. In the event a shutdown of a sewer rising main is required, consult Council's Water and Sewer Development Engineer. Special conditions will apply including maximum shutdown time and duration. Constructor will be required to provide a methodology prior to commencing works. Sewer rising main valves are clockwise closing.

EROSION AND SEDIMENT CONTROL NOTES

1. Disturbed areas to be kept to a minimum.
2. Control clean water from above the site, through the site or around the site.
3. Keep clean water separate from dirty water.
4. Conserve all topsoil, stockpile and protect for re-use on site.
5. Protect all disturbed areas from erosion.
6. Minimise sedimentation.
7. Maintain all erosion and sediment control measures until complete rehabilitation is achieved.
8. Erosion/Sediment Control measures to conform with Erosion and Sediment Control Plan for Subdivision works.
9. **WARNING**

Unless notified to the contrary in writing, the applicant shall be held responsible for any breaches of the Protection of Environment Operations Act 1997. Please note: Failure to implement or maintain appropriate erosion/sediment control measures is a breach of the Act. Such a breach is liable for a on-the-spot fine and/or penalty.

Appendix 2: Water and Sewer Servicing Requirements for Community Title Developments

OBJECTIVES

To provide appropriate water and sewer servicing for community title developments and to protect the Authorities' interests.

REQUIREMENTS

The developer is required to carry out all works necessary to service community title developments in addition to payment of Water and Sewer Development Charges of the relevant Development Servicing Plan.

The developer shall provide details of the development for Council's evaluation of the provision of water and sewerage. Council will determine whether the development is to be classed as Category 1 or 2. The basis and requirements of each category are:

Category 1(a) – Council Water and Sewer Mains (including Sewerage Pumping Station)

Where a main will be part of future extensions to other properties external to the development, then Council shall, in principle, own the assets to ensure continuity of supply/service to all customers. Therefore water and sewer mains should be constructed in accordance with Council's specification and standards.

Easements

Easements are to be created over the water/sewer mains with appropriate access rights for Council registered in the Community Development Management Statement.

A further requirement for water mains only is that the main must be constructed in community property or commonly administered private property or dedicated roadway with twenty-four (24) hour vehicular access along the easement.

Rating

Each property is to have a Council water meter and is subject to Council water and sewer charges in line with the prevailing IPART Determination.

Fire Hydrants

Fire hydrants must be provided to Council's standards.

Category 1(b) - Public Road within Residential Subdivision

Where a main will not be part of a future extension but constructed within a dedicated public road, and full access to the development will be available to Council, Council shall, in principle, own the assets to ensure continuity of supply/service to all customers. Therefore, water and sewer mains should be constructed in accordance with Council's specifications and standards.

Easements

Easements are to be created over the water/sewer mains with appropriate access rights for Council registered in the Community Development Management Statement.

A further requirement for water mains only is that the main must be constructed in community property or commonly administered private property or dedicated roadway with twenty-four (24) hour vehicular access along the easement.

Rating

Each property is to have a Council water meter and is subject to Council water and sewer charges in line with the prevailing IPART Determination.

Fire Hydrants

Fire hydrants must be provided to Council's standards.

Category 2 – Private Water and Sewer Conduits (including Sewerage Pumping Station)

Where a main will not form part of future extensions, all water and sewer mains servicing individual lots within the development shall be private mains. Therefore the water and sewer conduits should be constructed in accordance with the appropriate Plumbing Code. The water service and sewerage connection will be provided at the property boundary.

Easements

Appropriate easements are to be created over internal water/sewer conduits with appropriate access rights for the Community Association in the Community Development Management Statement.

The following wording is to be inserted in the Community Development Management Statement:-

Water reticulation for domestic and fire fighting purposes for the community development are by services provided and maintained by the original proprietor of the Community Association.

This provision of the preceding paragraph is not to be amended, varied or revoked without the express consent of Central Coast Council.”

Rating

The development will be serviced by one “bulk” meter at the property boundary. Council’s will levy water and sewer charges in line with the prevailing IPART Determination. Additional Council metering may be provided in line with CCC Metering Guidelines or private sub-metering may also be provided to allow for more equitable billing arrangements.

Fire Hydrants

The developer is to satisfy any building code or State Fire Agency requirements for fire fighting services.