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EMBEDMENT, BACKFILL AND SUPPORTS

SEW-100 TRENCH AND BACKFILL TYPICAL ARRANGEMENT
Note the following changes:
- Note 5 – Detector tape shall be used on all pipelines including property connections that exceed 5m in length.
- Note 6 – Adopt minimum pipe cover requirements of AS/NZS 2566.1.
- For pipe embedment material refer to Table 6 of Part 4.
- Backfill for areas subject to vehicular loading shall be noted on the drawings as “Type A”. Where backfill type is not shown on the drawings it is assumed to be “Type B” which is suitable for areas not subject to vehicular loading.

SEW-101 PIPE EMBEDMENT AND SUPPORT TYPES 1 TO 8
Note the following changes:
- Note 6 – Detector tape shall be used on all pipelines and is required to be placed on top of the pipe embedment.

SEW-102 PIPE SUPPORTS TYPES 9 TO 11 & FOR NON-SUPPORTIVE SOILS
No addendum.

SEW-103 TRENCHSTOP AND BULKHEADS TYPICAL ARRANGEMENT
Note the following changes:
- The table of additional requirements for varying slopes conflicts with Table 2.9 in Part 1. The table in this drawing shall be replaced with Table 2.9 in Part 1.

SEW-104 TRENCH DRAINAGE TYPICAL ARRANGEMENT
No addendum.

SEW-105 SYPHON CREEK CROSSING TYPICAL ARRANGEMENT
No addendum.
Refer to addendum Clause 2.12 in Part 1.

SEW-106 AQUEDUCT TYPICAL ARRANGEMENT
No addendum.
This drawing is typical for DI aqueducts. Other materials can be used subject to approval from Gippsland Water. Gippsland Water will have specific requirements for aqueducts.

SEW-107 PROTECTION GRILLE TYPICAL ARRANGEMENT
No addendum.

SEWER MAINS

SEW-201 PRECAST MAINTENANCE HOLE TYPE P1 & P2 TYPICAL ARRANGEMENT
Note the following changes:
- References to specific note numbers should be made “Refer to notes on this drawing”.
- Note 3 – Gippsland Water authorises the use of Precast and Cast Insitu combinations to suit application.
- Insitu concrete shall be as per Part 1 Clause 2.9.3.6.

SEW-202 CAST IN-SITU MAINTENANCE HOLE TYPE C1 & C2 TYPICAL ARRANGEMENT
Note the following changes:
- All concrete to be Grade S32 as per Part 1 Clause 2.9.3.6.
- 200mm base depth is a minimum.
SEW-203 SEWER MAINTENANCE HOLE BASE ARRANGEMENT TYPES A, B, C & GENERAL DETAILS
Note the following changes:
- Gippsland Water does not approve manhole drops Type B and Type C for use.

SEW-204 SEWER MAINTENANCE HOLE TYPICAL CHANNEL AND WORKING AREA ARRANGEMENTS
Note the following changes:
- External manhole drops are not applicable. Delete bottom detail.

SEW-205 SEWER MAINTENANCE HOLE TYPICAL CHANNEL DETAILS
Note the following changes:
- The offset dimension is assumed to be zero unless shown otherwise on the design drawings.

SEW-206 SEWER MAINTENANCE HOLE TYPE C2 & P2 INTERNAL DROP CONNECTION DETAILS
Note the following changes:
- Gippsland Water does not approve the Typical Tapered Wall Entry arrangement for use. All entries into MH’s shall be made in the vertical wall section of the structure.
- Drop pipe clips and fasteners shall be grade 316 stainless steel. Spacing between clips shall be 1500 mm maximum.

SEW-207 SEWER MAINTENANCE HOLE ACCESS COVERS TYPICAL INSTALLATIONS
Note the following changes:
- Note 3 to be replaced with Clause 2.9.3.8 in Part 1.
- The finished level for a 100 year flood level H=300mm.

SEW-208 SEWER MAINTENANCE HOLE STEP IRON & LADDERS TYPICAL ARRANGEMENT
Note the following changes:
- Note 4 – All fittings, step iron and ladders shall be in accordance with Part 2 Section 9.7 and 9.8 of the Addendum.
- Remove Note 5.

SEW-209 SEWER MAINTENANCE SHAFT TYPICAL ARRANGEMENT
Note the following changes:
- Sealing cap to be screw type only.
- Note 6 – Access cover frames and support slab in accordance with Section 10 of Part 2.

SEW-210 TERMINAL MAINTENANCE SHAFT AND INSPECTION SHAFTS TYPICAL ARRANGEMENTS
Note the following changes:
- Inspection shafts are not applicable on reticulated sewer mains as they relate to property connection sewers
- Note 3 – Inspection shaft covers and support base in accordance with Section 10 of Part 2.
- Note 4 – Bedding of pipe below inspection shaft to be compacted in layers not exceeding 75mm using a vibrating plate or similar mechanical means.
- Use only PE or UPVC pipe and fittings.
- Gippsland Water will only accept DN 225 long radius 90 deg. Vertical sweep bends for use in terminal maintenance shafts.
- Gippsland Water require terminal maintenance shafts to be DN 225.

SEW-211 SEWER MAINS EXPOSED AND CONCEALED VERTICAL RISERS
No addendum.
Refer to addendum Clause 2.9.7 in Part 1.

SEW-212 ACCESS SHAFT COVERS TYPICAL ARRANGEMENTS
Note the following changes:

- All Maintenance Shaft and Terminal Maintenance Shaft covers must be installed as detailed to either a Class “B” (Non-Trafficable) or Class “D” (Trafficable) application. Gippsland Water requires these covers to be manufactured from either ductile iron, cast iron, or steels, which ever is suitable to its application Class, and in line with AS3996 (Typical of a “Gatic” or “Gatic cast body concrete fill” arrangement).
- “Alternate light duty inspection cover arrangement” should read “Alternate cover arrangement for property connection inspection opening”.
- “Alternative light duty inspection cover arrangement” are only to be used on customer property connection openings located in a non trafficable location.
- Customer property connection openings located in trafficable locations (such as driveways) must be constructed to Class “D” requirements, the “Alternative light duty inspection cover arrangement” are not permitted in these locations.

**SEW-213 VENTING TYPICAL ARRANGEMENT**

No addendum.
Refer to addendum Clause 2.11 in Part 1.

**SEW-214 WATER SEALS TYPICAL ARRANGEMENTS**

No addendum.
Refer to addendum Clause 2.10 in Part 1.

**PROPERTY CONNECTIONS**

**SEW-300 PROPERTY CONNECTIONS SHEET 1 PRIVATE PROPERTY & RESERVES**

Refer to Addendum drawing SEW-300 (Appendix 1).

**SEW-301 PROPERTY CONNECTIONS SHEET 2 ROAD RESERVE**

Refer to Addendum drawing SEW-301 (Appendix 2).

**SEW-302 PROPERTY CONNECTIONS TYPE A, B, C1 & C2 TYPICAL ARRANGEMENTS**

Refer to Addendum drawing SEW-302 (Appendix 3). Connection types A, B, C1 & C2 are not permitted. This drawing refers to connection types 1, 2, 2A, 4 & 4A.

**SEW-303 PROPERTY CONNECTIONS TYPE D & E TYPICAL ARRANGEMENTS**

Note the following changes:
- Type E property connections to be DN150.
- Type D property connection not to be used. Refer to Type 4 connection on drawing SEW-302.
- Gippsland Water does not approve the use of concrete thrust blocks on property connections.
- Note 5 – Boundary inspection opening forms part of the property connection.

**SEW-304 PROPERTY CONNECTIONS TYPE F & TEMPORARY END LOCATION MARKER TYPICAL ARRANGEMENTS**

Note the following changes:
- Gippsland Water does not approve the use of Type F connections to sewers in private property.
- Note 5 – Marker tape system shall be used to identify temporary ends of connections.
- Note 6 – Boundary inspection opening forms part of the property connection.
Appendix 1 (SEW-300)

TYPICAL CONNECTION METHODS FOR SEWERS AT REAR OR SIDE PROPERTY BOUNDARIES

TYPICAL CONNECTION METHODS FOR SEWERS INSIDE BOUNDARIES ADJOINING ROADS OR RESERVES

NOTES:
1. ALL DIMENSIONS ARE IN METRES.
2. "AS SPECIFIED" MEANS AS SPECIFIED IN GIPPSLAND WATER'S DOCUMENT "ADDENDUM TO THE WATER INDUSTRY TECHNICAL STANDARDS AND CODES OF PRACTICE".
3. PROPERTY CONNECTION LOCATIONS OR THE DISTANCES AS SPECIFIED ON THE DRAWINGS AND NOT LESS THAN 500MM FROM ANY SIDE BOUNDARY.
4. ALL CONNECTION POINTS, WITH EXCEPTION TO TYPE 2A CONNECTIONS, SHALL BE A MINIMUM OF 500MM FROM THE SEWER MAIN.
5. REFER TO STANDARD DRAWINGS SW-300 FOR SEW-V3 FOR CONNECTION DETAILS.

LEGEND
- ADDITION (WING)
- ACCESS OPENING

GIPPSLAND WATER
SEWERAGE CODE ADDENDUM - STANDARD DRAWING
PROPERTY CONNECTIONS - SHEET 1
PRIVATE PROPERTY & RESERVES
FOR PIPE SYSTEMS UP TO AND INCLUDING DN300
Appendix 2 (SEW-301)

TYPICAL CONNECTION METHODS
FOR SEWERS IN ROAD RESERVE AND
CONNECTIONS IN PRIVATE PROPERTY

TYPICAL CONNECTION METHODS
FOR SEWERS AND CONNECTIONS
IN ROAD RESERVE

NOTES:
1. ALL DIMENSIONS ARE IN MILLIMETERS.
2. PROPERTY CONNECTION LOCATIONS AND DISTANCES AS SPECIFIED ON THE DRAWINGS
   AND NOT LESS THAN 1.2M FROM ANY SIDE BOUNDARY.
3. ALL CONNECTION POINTS, WITH EXCEPTION TO TYPE 2A CONNECTIONS, SHALL BE
   A MINIMUM OF 1.2M FROM THE SEWER MAIN.
4. REFER TO STANDARD DRAWINGS SEW-001 TO SEW-301 FOR CONNECTION DETAILS.

Legend:
A) Access opening (not raised to surface)
C) Inlet opening (raised to surface)
D) Junction opening

GIPPSLAND WATER
SEWERAGE CODE ADDENDUM - STANDARD DRAWING
PROPERTY CONNECTIONS - SHEET 2
ROAD RESERVES
FOR PIPE SYSTEMS UP TO AND INCLUDING DN300