NOTES

GENERAL
1. INVERT LEVELS AND REFERENCE POINT DATA ARE SPECIFIED IN THE DESIGN DRAWINGS.
2. INLET/OUTLET PIPES MAY JOIN STRUCTURE AT SKEW ANGLES.
3. THIS STRUCTURE IS NOT APPROPRIATE FOR DIRECT CONNECTION TO WATER CORROSION DRIP UNLESS PROVIDED WITH SLT TRAP OR INCOMING SURFACE DRAINAGE HAS BEEN 'TRAPPED' UPSTREAM.
4. FOR INFORMATION REGARDING PREPARATION OF STRUCTURES REFER TO MAIN ROADS TENDER DOCUMENT - PREPARATION NO. 445 (DRAINAGE STRUCTURES).

CONCRETE & REINFORCEMENT
5. ALL IN-SITU CONCRETE SHALL BE CLASS N32 IN ACCORDANCE WITH AS1379.
6. ALL IN-SITU CONCRETE CORNERS SHALL HAVE A 28 CHAMFER UNLESS OTHERWISE NOTED.
7. CEMENT MORTAR SHALL CONSIST OF ONE PART PORTLAND CEMENT (OR SIMILAR) AND THREE PARTS SAND.
8. SLT REINFORCEMENT SHALL CONFORM WITH HARD DRAWN FABRIC TO AS4671.
9. MINIMUM CLEAR COVER TO REINFORCEMENT SHALL BE 50.

LINER
10. THE LINER SHALL BE REINFORCED CONCRETE SPUN TO AS4490.
11. THE MAXIMUM INLET/OUTLET PIPE OUTSIDE DIAMETER MUST BE LESS THAN 60% OF THE LINER INTERNAL DIAMETER. SEE TABLE 2.
12. MINIMUM SPACE OF 200 BETWEEN HOLES IN LINER.
13. MINIMUM OF 44% OF LINER SHALL REMAIN IN ANY HORIZONTAL PLANE.
14. HOLES TO BE PUNCHED/CUT IN ACCORDANCE WITH MANUFACTURER’S SPECIFICATION.
15. THE LINER SHALL HAVE EQUIVALENT PROPERTIES AND REINFORCEMENT OF CLASS 2 RCP EXCEPT THAT THE REINFORCEMENT SHALL BE CIRCULAR.

STEP IRONS
16. FOR STRUCTURES DEEPER THAN 1200, STEP IRONS OR PREFABRICATED GALVANISED STEEL LADDER SHALL BE FITTED. THE LADDER SHALL BE FIXED WITH STAINLESS STEEL MASONRY ANCHORS IN ACCORDANCE WITH AS/NZS1577.
17. ORIENTATE STEP IRONS OR LADDER TO ENABLE EASY ACCESS AND TO FACE ONCOMING TRAFFIC.

SUPERSEDED DRAWINGS
18. THIS DRAWING SUPERSEDES DRAWINGS 9831-5014, 9831-5017 & 9831-5826.

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**TABLE 1**

<table>
<thead>
<tr>
<th>STRUCTURE TYPE</th>
<th>PIT DEPTH</th>
<th>COVER TYPE</th>
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</thead>
<tbody>
<tr>
<td>TWN</td>
<td>600-1200</td>
<td>WN</td>
</tr>
<tr>
<td>SWN</td>
<td>1260-1800</td>
<td>WN</td>
</tr>
<tr>
<td>SRN</td>
<td>1800-3600</td>
<td>RN</td>
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**TABLE 2**

<table>
<thead>
<tr>
<th>LINER Ø</th>
<th>MAX. Ø PIPE CONNECTING TO LINER</th>
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</thead>
<tbody>
<tr>
<td>NOM. Ø900</td>
<td>NOM. Ø450</td>
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<tr>
<td>NOM. Ø1050</td>
<td>NOM. Ø525</td>
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<tr>
<td>NOM. Ø1200</td>
<td>NOM. Ø600</td>
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</tbody>
</table>

**DRAWING REFERENCES**

| STRUCTURE SELECTION GUIDE | 298231-100
|---------------------------|------------------|
| COVER TYPE WN (RECTANGULAR) | 298231-107
| COVER TYPE RN (RECTANGULAR) | 298231-109
| COVER TYPE RN (ROUND) | 298231-110
| STEP IRON DETAILS | 298231-116
| PIT SLT TRAP (IF REQUIRED) | 298231-120

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ALL UNITS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.