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 CORPORATION DRAIN UNLESS PROVIDED WITH SILT TRAP OR INCREASING SURFACE DRAINAGE HAS BEEN TRAPPED UPSTREAM.
4. FOR INFORMATION RELATING TO GROUND PREPARATION OF STRUCTURES REFER TO MAIN ROADS SPECIFICATION Nr. 448 DRAINAGE STRUCTURES.
5. FOR INFORMATION RELATING TO ROCK PITCHING OF STRUCTURES REFER TO MAIN ROADS SPECIFICATION Nr. 406 ROCK PROTECTION.

CONCRETE & REINFORCEMENT
6. ALL IN-SITU CONCRETE SHALL BE CLASS NO. 2 IN ACCORDANCE WITH AS 1727.
7. ALL IN-SITU CONCRETE CORNERS SHALL HAVE A 20 CHAMFER UNLESS OTHERWISE NOTED.
8. CONCRETE MORTAR SHALL CONSIST OF ONE PART PORTLAND CEMENT (OR SIMILAR) AND THREE PARTS SAND.
9. SLAB REINFORCEMENT SHALL CONFORM WITH HARD DRAWN FABRIC TO AS/NZS 4471.
10. MINIMUM CLEAR COVER TO REINFORCEMENT SHALL BE 25.

LINER
11. THE PRECAST LINER SHALL BE REINFORCED CONCRETE TO AS/NZS 4058 AND TO SPECIFICATION 405.
13. MINIMUM SPACE OF 200 BETWEEN HOLES IN LINER.
14. MINIMUM OF 40% OF LINER SHALL RISE IN ANY HORIZONTAL PLANE.
15. HOLES TO BE PONDED/CUT IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATION.
16. THE LINER SHALL HAVE EQUIVALENT PROPERTIES AND REINFORCEMENT OF CLASS 2 RCP EXCEPT THAT THE REINFORCEMENT SHALL BE CIRCULAR.
17. ALL CAPS AND VENTS BETWEEN AND/OR AROUND THE LINER AND COVER SLAB SHALL BE SEALED WITH 902 CONCRETE. DEDICATED TAP TAPS SHALL BE USED WHERE THE CONCRETE IS UNDER THE ROAD SCALED SURFACE. REFER TO DWG NO. 200231-032 FOR DETAILS.

STEP IRONS
18. FOR STRUCTURES DEEPER THAN 900, STEP IRONS OR PREFABRICATED GALVANISED STEEL LADDER SHALL BE FITTED. THE LADDER SHALL BE FITTED WITH STAINLESS STEEL MAJOR ARMS IN ACCORDANCE WITH AS 1837.
19. ORIENTATE STEP IRONS OR LADDER TO ENABLE EASY ACCESS AND TO FACE ONCOMING TRAFFIC.
20. ORIENTATE COVER SLAB 30 GRADE BARS PARALLEL TO DIRECTION OF FLOW.

OUTLET HOOD
21. USE OUTLET HOOD WHERE SPECIFIED IN DESIGN DRAWINGS FOR PIPES FROM #330 TO #450.
22. STRUCTURES REQUIRING AN OUTLET HOOD SHALL BE A MINIMUM OF 300 DEEP.
23. APPROVED RAPLIES MAY BE USED AS REFERRED TO IN PIT SILT TRAP DRAWINGS FOR PIPES FROM #330 TO #450.

SUPERSEDED DRAWINGS
24. THIS DRAWING SUPERSEDES DRAWINGS 9931-5027 & 9931-5030.

DRAWING REFERENCES

TABLE 2

<table>
<thead>
<tr>
<th>LINER Ø</th>
<th>MAX Ø PIPE CONNECTING TO LINER</th>
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<tbody>
<tr>
<td>NOM. 950</td>
<td>NOM. 6450</td>
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<tr>
<td>NOM. 950</td>
<td>NOM. 625</td>
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<tr>
<td>NOM. 1020</td>
<td>NOM. 600</td>
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</tbody>
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DRAINAGE STANDARD DRAWINGS

- TGN & SGN STRUCTURES CONSTRUCTED WITH LINERS

AMENDMENTS

- ALL UNITS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.