Vacuum Sewerage Code of Australia

The Power and Water Corporation has moved to adopt the Vacuum Sewerage Code of Australia as the general basis for the design of vacuum sewerage infrastructure under its control in the Northern Territory. This document is read as a supplement to the Vacuum Sewerage Code of Australia to provide details of those modification and additions to suit the particular requirements of the Power and Water Corporation.

Where appropriate WSA Standard Drawings are either:

- Adopted in full (AIF)
- Adopted with minor amendments or qualification (NT Variant)
- Not Applicable to PWC works. Refer to PWC issue Standard Drawings for equivalent details (N/A)

In addition, PWC have issued some standard drawings for which there is no WSA equivalent

Requirement	WSAA Drawing Title	WSAA Drawing
NT Variant	Vacuum Sewer Profile – Typical Example with Design Detail	VAC-1100
N/A	~~Vacuum Sewer Profile – PVC~~	~~VAC-1101~~
AIF	Vacuum Sewer Profile – PE	VAC-1102
N/A	~~DN1050 Collection Chamber with Single Vacuum Interface Valve – DN150 & DN225 Sewers, 1.8 & 2.4 Metres Deep – Typical Example With Design Detail~~	~~VAC-1200~~
N/A Refer W2-2-10	~~DN1500 Collection Chamber with Single Vacuum Interface Valve - DN150 & DN225 Sewers, 1.8 & 2.4 Metres Deep – Typical Example With Design Detail~~	~~VAC-1201~~
NT Variant	DN1500 Collection Chamber with Two Vacuum Interface Valves - DN150 & DN225 Sewers, 1.8 & 2.4 Metres Deep – Typical Example With Design Detail	VAC-1202
NT Variant	DN1800 Collection Chamber with Two Vacuum Interface Valves - DN150 & DN225 Sewers, 1.8 & 2.4 Metres Deep – Typical Example With Design Detail	VAC-1203
N/A	~~Collection Chambers Deeper Than 2.4m – Typical Landing Details~~	~~VAC-1204~~
NT Variant	Collection Chamber – Emergency Storage Pipe – Typical Arrangements	VAC-1205
NT Variant	Collection Chamber – Service Connection, Pipe Penetration Through Collection Chamber Walls and Typical Property Connection Layout	VAC-1206
AIF	Vacuum Station Layout – Horizontal Vacuum Vessel	VAC-1301
AIF	Vacuum Station Layout – Vertical Vacuum Vessel	VAC-1302
AIF	Soil Classification Guidelines – Allowable Bearing Pressures for Anchors and Thrust Blocks	VAC-1400
AIF	Embedment & Trenchfill – Typical Arrangement	VAC-1401
NT Variant	Standard Embedment – Flexible & Rigid Pipes	VAC-1402
NT Variant	Standard Embedment – Inadequate Foundations Requiring Over-Excavation and Replacement	VAC-1403

Requirement	WSAA Drawing Title	WSAA Drawing
AIF	Special Embedment – Concrete & Stabilised Supports	VAC-1404
AIF	Special Embedment – Support Utilising Piles	SEW-1204
AIF	Trench Drainage – Bulkheads & Trenchstop	SEW-1206
AIF	Trench Drainage – Typical Systems	SEW-1207
AIF	Verticals & Near Verticals – Exposed & Concealed Methods	SEW-1208
NT Variant	Thrust Block Details Concrete Blocks	WAT-1205
N/A	~~Thrust Block Details – Timber & Recycled Plastic Blocks~~	~~WAT-1206~~
NT Variant	Thrust and Anchor Blocks – Gate Valves and Vertical Bends	WAT-1207
AIF	Restrained Joint System - DN100 to DN375 DI Mains	WAT-1208
AIF	Trench Drainage – Bulkheads & Trenchstop	WAT-1209
N/A	~~Trench Drainage - Typical Systems~~	~~WAT-1210~~
AIF	Buried Crossings Under Obstructions	WAT-1211
AIF	Buried Crossing Major Roadways	WAT-1212
AIF	Buried Crossings - Railways	WAT-1213
NT Variant	Buried Crossings – Bored & Jacked Encasing Pipe Details	WAT-1214
N/A	~~Property Connection Details – Sewer in Road Reserve~~	~~SEW-1104~~
N/A	~~Property Connection Details – Sewer in Easements & Inside Property~~	~~SEW-1105~~
N/A	~~Property Connection Details – IO Interface Method~~	~~SEW-1106~~
N/A	~~Property Connection Details – Buried Interface Method~~	~~SEW-1107~~
N/A	~~Property Connection Details – "Y" Branch & Around Obstructions~~	~~SEW-1108~~
N/A	~~Property Connection Details – Private Property & Marking Systems~~	~~SEW-1109~~
N/A	~~Maintenance Holes – Sewers ≤ DN300 – Precast Types P1 & P2~~	~~SEW-1300~~
N/A	~~Maintenance Holes - Sewers ≤ DN300 – Cast Insitu Types C1 & C2~~	~~SEW-1301~~
N/A	~~Maintenance Holes – Pipe Connection Details~~	~~SEW-1302~~
N/A	~~Maintenance Holes - Sewers ≤ DN300 – Changes in Level Details~~	~~SEW-1303~~
N/A	~~Maintenance Holes - Sewers ≤ DN300 – Typical Channel Arrangements~~	~~SEW-1304~~
N/A	~~Maintenance Holes – Typical Channel Arrangements~~	~~SEW-1305~~
N/A	~~Maintenance Holes – Alternative Drop Connections~~	~~SEW-1307~~
N/A	~~Maintenance Holes – Typical MH Cover Arrangements~~	~~SEW-1308~~
N/A	~~Maintenance Holes – MH Connection Details – DN110 to DN450 PE Pipe~~	~~SEW-1313~~
NT Variant	Maintenance Shafts – Typical Installation	SEW-1314
N/A	~~Maintenance Shafts – MS & Variable Bend Installations~~	~~SEW-1315~~
NT Variant	Maintenance Shafts – TMS and Connection Installations	SEW-1316
NT Variant	Maintenance Shafts – Typical MS Cover Arrangements	SEW-1317
AIF	Buried Crossings – Syphon Arrangement	SEW-1400
NT Variant	Buried Crossings - Railways	SEW-1401
NT Variant	Buried Crossings – Major Roadways	SEW-1402
AIF	Buried Crossings – Bored & Jacked Encasing Pipe Details	SEW-1403
AIF	Aerial Crossings – Bridge Crossing Concepts	SEW-1406

Requirement	WSAA Drawing Title	WSAA Drawing
N/A	~~Typical Surface Fitting Installation – Gate Valve Surface Boxes- Non-Trafficable~~	~~WAT-1303~~
N/A	~~Typical Surface Fitting Installation – Gate Valve Surface Boxes-Trafficable~~	~~WAT-1304~~
N/A	~~Typical Surface Fitting Installation – Hydrant Surface Boxes – Trafficable & Non-Trafficable~~	~~WAT-1305~~
N/A	~~Typical Surface Fitting Installation – Hydrant Surface Boxes – Trafficable~~	~~WAT-1306~~
NT Variant	Typical Appurtenance Installation – Scour Arrangements	WAT-1307
N/A	~~Typical Appurtenance Installation – Valve Chambers~~	~~WAT-1308~~
NT Variant	Typical Appurtenance Installation – Pressure Reducing Valves (PRV)	WAT-1309
AIF	Aerial Crossings - Aqueduct	WAT-1310
AIF	Aerial Crossings – Aqueduct - Protection Grille	WAT-1311
AIF	Aerial Crossings – Bridge Crossing Concepts	WAT-1312
AIF	Flanged joints – Bolting Details	WAT-1313
AIF	Typical Steel Pipe Jointing – Butt Welding of Joints	WAT-1400
AIF	Typical Steel Pipe Jointing – Rubber Ring Joint Spigot Bands	WAT-1401
NT Variant	Typical Steel Pipe Jointing – Welded Pipe Collars	WAT-1402
NT Variant	Typical Steel Fabrication - Bends	WAT-1403
NT Variant	Joint Corrosion Protection Cement Mortar Lined Steel Pipe DN300 to DN1200	WAT-1408