



TYPICAL INSTALLATION OF PVC & DI PIPES & FITTINGS

TYPICAL INSTALLATION OF PE PIPES & FITTINGS

TYPICAL VALVE CONNECTION DIRECT TO NEW MAIN

NOTE:

1. ALL DIMENSIONS IN MILLIMETRES.
 2. **INSTALL PIPEWORK AFTER KERB LINES ARE INSTALLED TO ENSURE PARALLEL TO KERB AND AT SPECIFIED COVER.**
 3. TAPPING BANDS SHALL BE **FULLY CIRCUMFERENTIAL AND MADE FROM STAINLESS STEEL OR LOW LEAD GUNMETAL** REQUIRING NO ADDITIONAL CORROSION PROTECTION.
 4. **ALL FLANGE DRILLINGS TO NZS 4087 PN16.**
 5. WRAP BOLTED CONNECTIONS USING OTHER THAN NYLON COATED FITTINGS AND STAINLESS STEEL BOLTS WITH A PETROLATUM TAPE SYSTEM
 6. WHERE MAINS ARE 300 OR LARGER BYPASSES SHOULD BE INSTALLED FOR ALL MANUAL SLUIICE VALVES.
 7. ALL VALVES AND FITTINGS SHALL BE COATED WITH A THERMAL BONDED POLYMERIC COATING APPLIED IN ACCORDANCE WITH AS/NZS 4158.
 8. ALL VALVES, FH, TEE'S, **SPOOLS AND SOCKET** CONNECTORS TO BE FLANGED. NZS 4087 PN16.
 9. FLANGED **SPOOLS** INSTALLED TO GIVE SUFFICIENT SPACE FOR COMPACTION AND BOX SURROUNDS.
 10. ALL VALVES TO BE LOCATED IN SAFE OPERATING LOCATION (OUT OF CARRIAGEWAY IF POSSIBLE)
- DI & PVC PIPE**
11. DUCTILE IRON FITTINGS MAY BE USED WITH DI & PVC PIPE. FITTINGS SHALL BE NYLON COATED AND LINED OR CEMENT LINED WITH A BITUMINOUS EXTERNAL COATING. DO NOT USE PVC FITTINGS WITH DI PIPE.
 12. PE SLEEVING REQUIRED ON ALL BITUMINOUS COATED DI PIPE AND FITTINGS APPLIED IN ACCORDANCE WITH AS 3681. TWO THICKNESSES REQUIRED BETWEEN FITTINGS AND THRUST BLOCK. REINSTATE ANY DAMAGED SLEEVING AS PER MANUFACTURER'S SPECIFICATIONS.
 13. USE **D.I.** PRE-TAPPED CONNECTORS ON **DN 50** NEW **RIDER** MAIN INSTALLATIONS.
 14. USE TAPPING BANDS FOR **SERVICE** CONNECTIONS TO EXISTING MAINS AND NEW MAINS >DN 150.
 15. ELECTRICALLY ISOLATE COPPER SERVICES FROM DI/CL PIPE.
 16. WHERE **DI** FITTINGS ARE USED, A PROTECTIVE **POLYTHENE** MEMBRANE IS REQUIRED BETWEEN FITTING AND THRUST BLOCK.
 17. MAXIMUM SIZE OF DRILLED HOLES FOR SERVICE CONNECTIONS IN PVC PIPE TO BE **AS DETAILED IN COUNCIL'S ADDENDUM CLAUSE 6.3.16.2.**
- PE PIPE**
18. PE PIPE MAY BE COLD BENT TO MINIMUM RADIUS OF 25 x (OD) STAKES OR OTHER SOURCES OF POINT LOADS SHALL NOT BE USED TO ASSIST IN BENDING THE PIPE.
 19. MAKE ALLOWANCE DURING CONSTRUCTION FOR EXPANSION AND CONTRACTION OF PE PIPE DUE TO TEMPERATURE CHANGES.
 20. BUTT WELDING IN ACCORDANCE WITH WSA-01 (POLYETHYLENE CODE). BUTT WELDING IS THE PREFERRED JOINTING SYSTEM - **ELECTROFUSION JOINTING SHOULD ONLY BE CONSIDERED IF BUTT WELDING IS NOT PRACTICAL.**
 21. ALL MECHANICAL COUPLINGS FOR PE PIPE TO BE SELF-RESTRAINING.
 22. **ALL PIPES AND FITTINGS TO BE INSTALLED AS PER MANUFACTURERS SPECIFICATION.**

© Copyright Standards New Zealand 2011. Drawings from NZS 4404:2010 have been reproduced with permission from Standards New Zealand under Copyright Licence 000904. Refer to the complete Standard available for purchase from Standards New Zealand.
 KCDC AMENDMENTS TO NZS 4404:2010 SHOWN IN **BOLD**.



STANDARD DETAILS
TYPICAL MAINS CONSTRUCTION
RETICULATION MAIN ARRANGEMENTS

Drawn	Designed	
S. TURKINGTON	J. SAXTON	
Approved	Revision Date	
M. COLE	OCTOBER 2015	
Scale	Drawing No.	Revision
NOT TO SCALE	KCDC-WS-001	R2