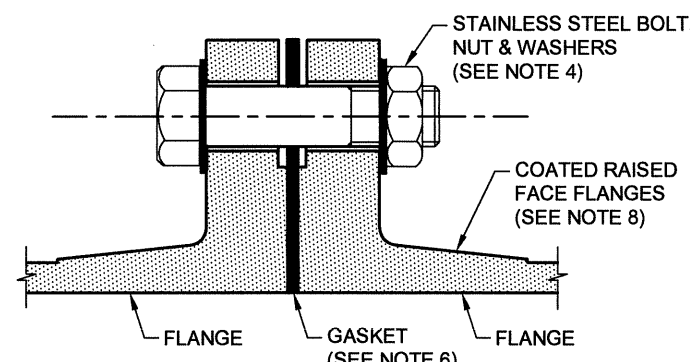
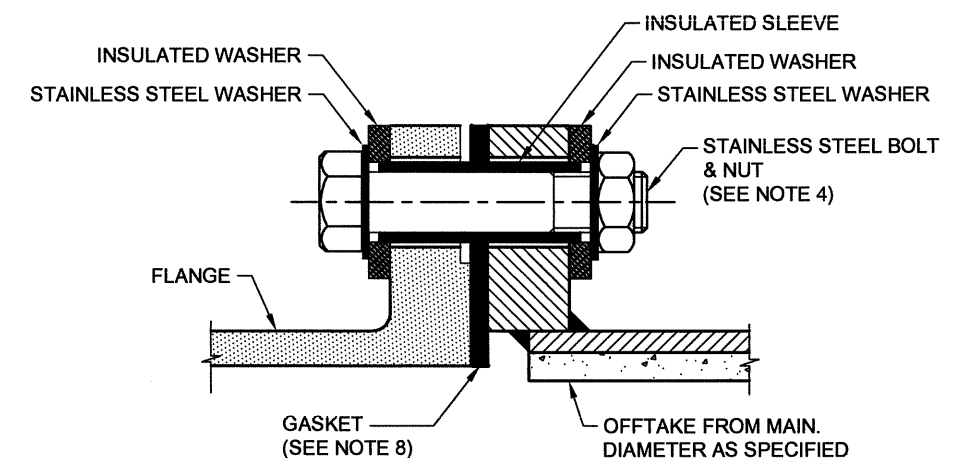


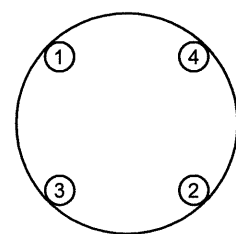
PE BOLTED CONNECTION DETAIL



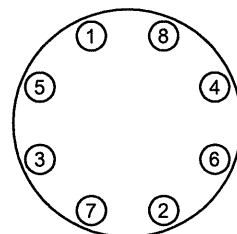
**(RAISED FACE FLANGES SHOWN)
CORROSION PROTECTION PROCEDURE
FOR FUSION BONDED COATED
DUCTILE IRON FLANGES
WITH STAINLESS STEEL BOLTS
(SEE NOTE 2)**



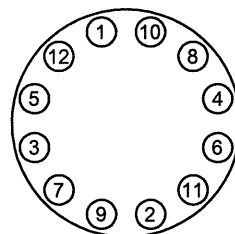
**INSULATED FLANGED JOINT
FOR STEEL MAINS
(SEE NOTE 5)**



4 BOLTS



8 BOLTS



12 BOLTS

TIGHTENING SEQUENCE

NOTES:

1. ALL DIMENSIONS IN MILLIMETRES U.N.O.
2. WHERE FLANGES ARE COATED WITH FUSION BONDED EPOXY OR NYLON THEY DO NOT REQUIRE SLEEVING, USE ONLY STAINLESS STEEL BOLTS (SEE NOTE 5). TAKE CARE TO PREVENT DAMAGE TO THE FLANGES' PROTECTIVE COATING.
3. BOLT SYSTEM - ONLY STAINLESS STEEL TO BE USED
(i) AFTER ASSEMBLY, COVER ALL BOLT HEADS AND NUTS WITH SEALING CAPS FILLED WITH CORROSION PREVENTION PRIMING PASTE.
(ii) WRAP THE ASSEMBLY WITH PETROLATUM TAPE OR WITH PE SLEEVING AND TAPED.
4. STAINLESS STEEL BOLT SYSTEM. ALL STAINLESS STEEL BOLTS, NUTS, WASHERS AND BACKING PLATES TO BE MANUFACTURED FROM 316 GRADE MATERIAL. COAT THE THREADED SECTIONS OF ALL STAINLESS STEEL BOLTS WITH AN ANTI-SIEZE LUBRICANT RECOMMENDED BY THE BOLT MANUFACTURER.
5. VERIFY THE INTEGRITY OF EACH INSULATED FLANGED JOINT AFTER ASSEMBLY.
6. USE SPECIAL HIGH RESISTIVITY (LOW CONDUCTIVITY) GASKET MATERIAL. NOT ALL ELASTOMERS ARE NON CONDUCTIVE.
7. ROUGHEN COATED RAISED FACE FLANGE SURFACES BEFORE ASSEMBLY. PERFORATION OF THE COATING DOES NOT MATTER ON THE CONTACT FLANGE FACES.
8. GASKET MATERIALS TO COMPLY WITH WSA 109.
9. TIGHTENING SEQUENCE SHOWN FOR AS 4087 FLANGES <DN450, LARGER SIZES TO FOLLOW SIMILAR PRINCIPLE.

TAKE SPECIAL CARE WHEN BACKFILLING, TO ENSURE THAT CAPS ARE NOT DISLODGED.

No.	DATE	DESCRIPTION	APVD
D	DEC/14	GALV DETAIL REMOVED	DB
C	MAY/09	AMEND MGR SIGN	JC
B	MAY/08	MODIFIED TO MRC STD	SLR
A	OCT/07	T'FER TO MRC T'BLOCK	SLR
0		WSAA ORIG	
AMENDMENTS AND REVISIONS			

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CHIEF OPERATING OFFICER
WATER & WASTE SERVICES

David Brooker
DAVID BROOKER

DATE *19/12/14*



SEWAGE PUMPING STATION

**FLANGED JOINTS
BOLTING DETAILS**

STANDARD
DRAWING

A3-04304 D