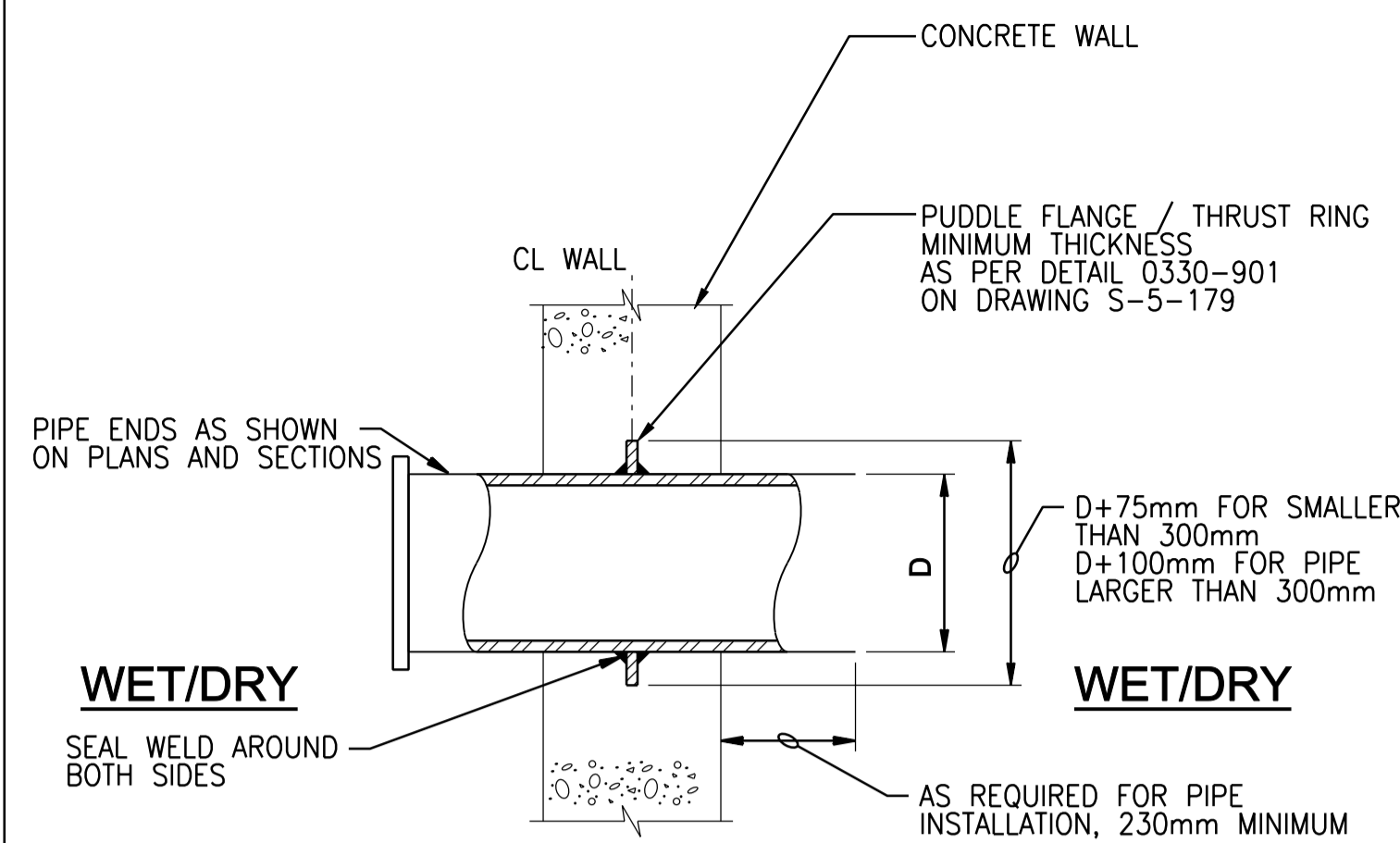


NOTES:

1. ALL DIMENSIONS IN MILLIMETERS, UNLESS OTHERWISE NOTED.
2. DO NOT USE WHERE SUBJECT TO HYDROSTATIC PRESSURE. PAINT ENTIRE SLEEVE AND PUDDLE FLANGE AS SPECIFIED, PRIOR TO CONCRETE PLACEMENT.
3. ALL PIPE SUPPORT COMPONENTS SHALL BE DESIGNED AND FABRICATED FROM STAINLESS STEEL MATERIAL, UNLESS NOTED OTHERWISE.
4. SEE ALSO ARCHITECTURAL DETAIL 6, DWG A-5-064
5. USE STAINLESS STEEL 316L PIPE SLEEVE FOR STAINLESS STEEL PIPES.
6. USE CARBON STEEL EPOXY COATED FOR ALL OTHERS PIPE MATERIALS.
7. REFER TO ARCHITECTURAL DETAILS FOR PENETRATION OF FINISHED WALL.

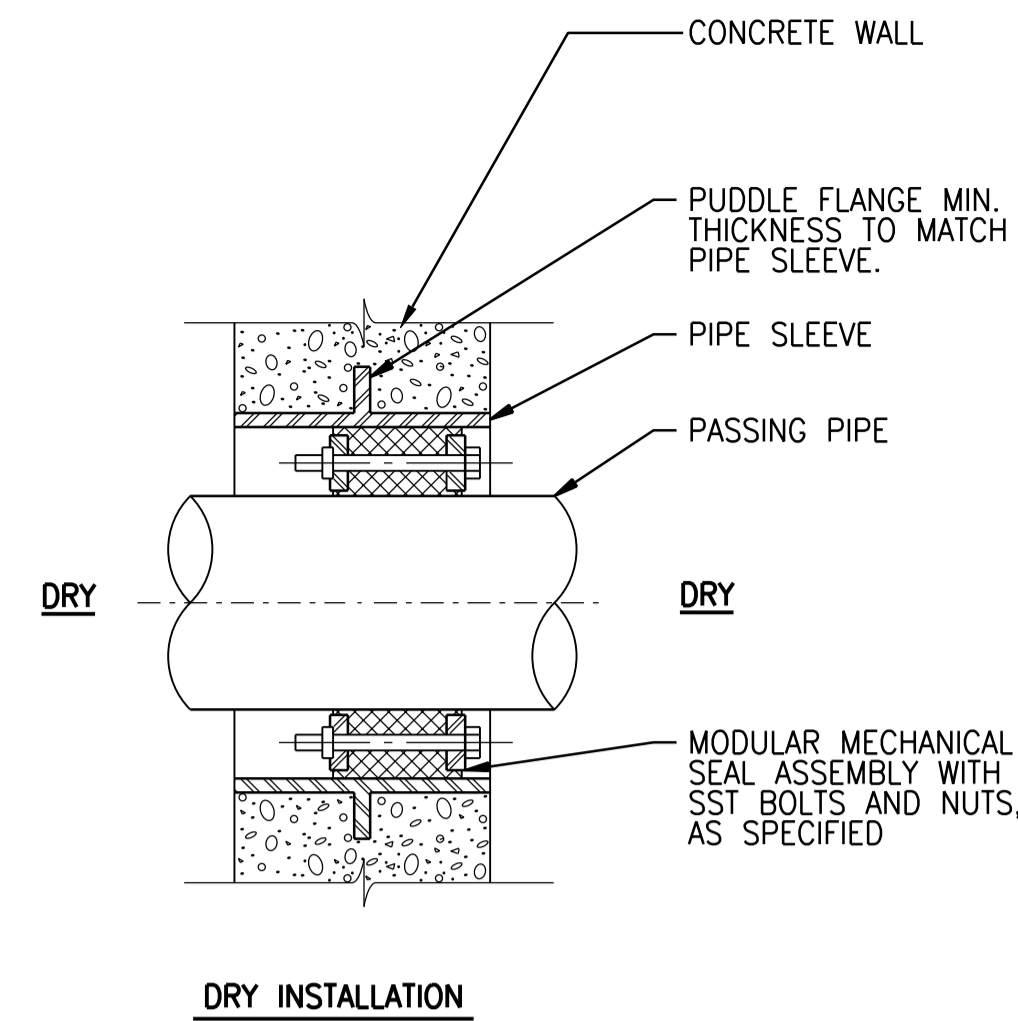
**PIPE SLEEVE THRU EXTERIOR CONCRETE WALLS ABOVE GRADE**  
NTS (4027-604)



NOTES:

1. ALL DIMENSIONS IN MILLIMETERS, UNLESS OTHERWISE NOTED.
2. PIPE MATERIAL 316L STAINLESS STEEL.
3. PROVIDE WATER TIGHT JOINT AS PERFORMANCE REQUIREMENT.

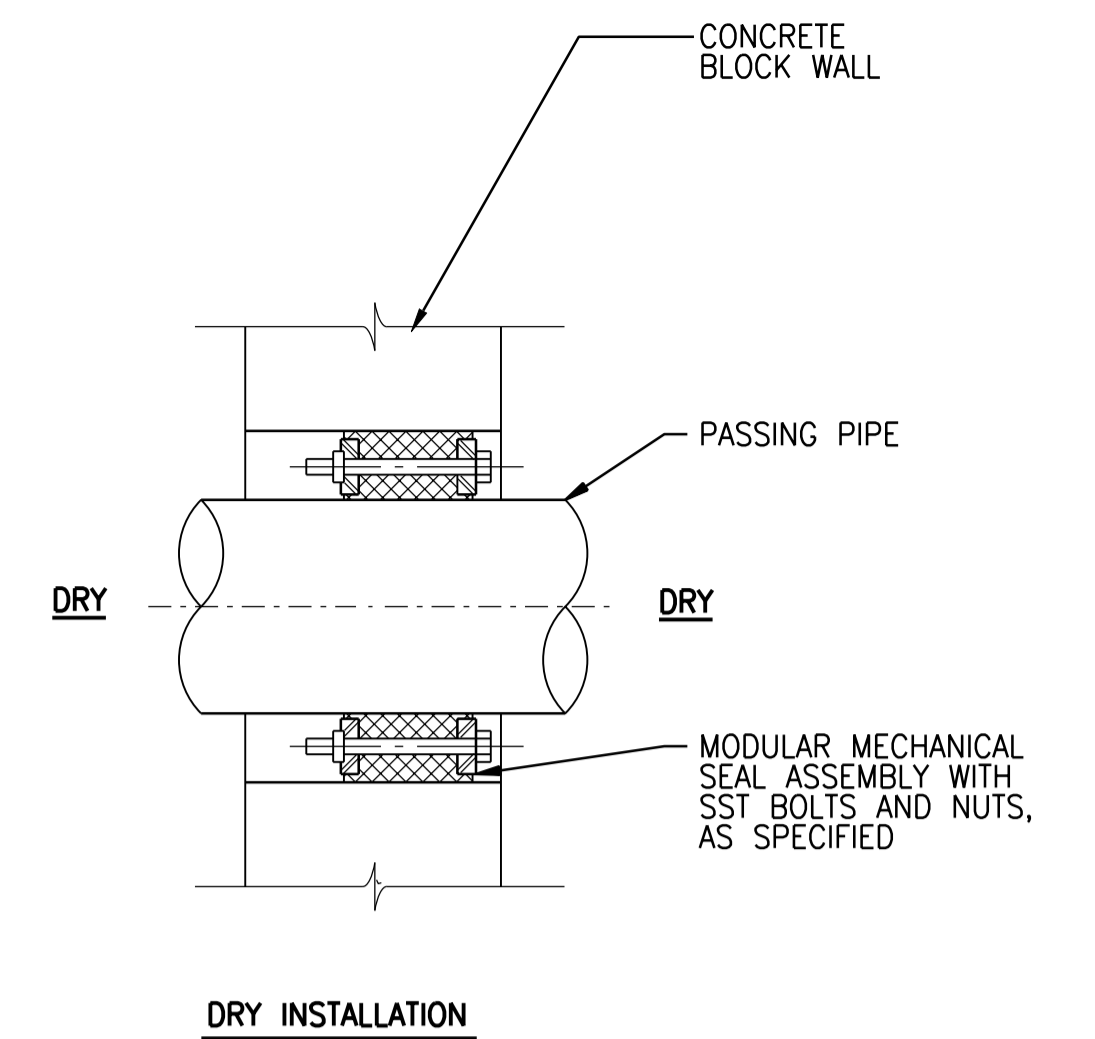
**WALL OR SLAB PIPE PENETRATION**  
NTS (4027-605)



NOTES:

1. ALL DIMENSIONS IN MILLIMETERS, UNLESS OTHERWISE NOTED.
2. COAT WALL SLEEVE WITH SPECIFIED PAINT SYSTEM PRIOR TO CONCRETE PLACEMENT.
3. ALL PIPE SUPPORT COMPONENTS SHALL BE DESIGNED AND FABRICATED FROM STAINLESS STEEL MATERIAL, UNLESS NOTED OTHERWISE.

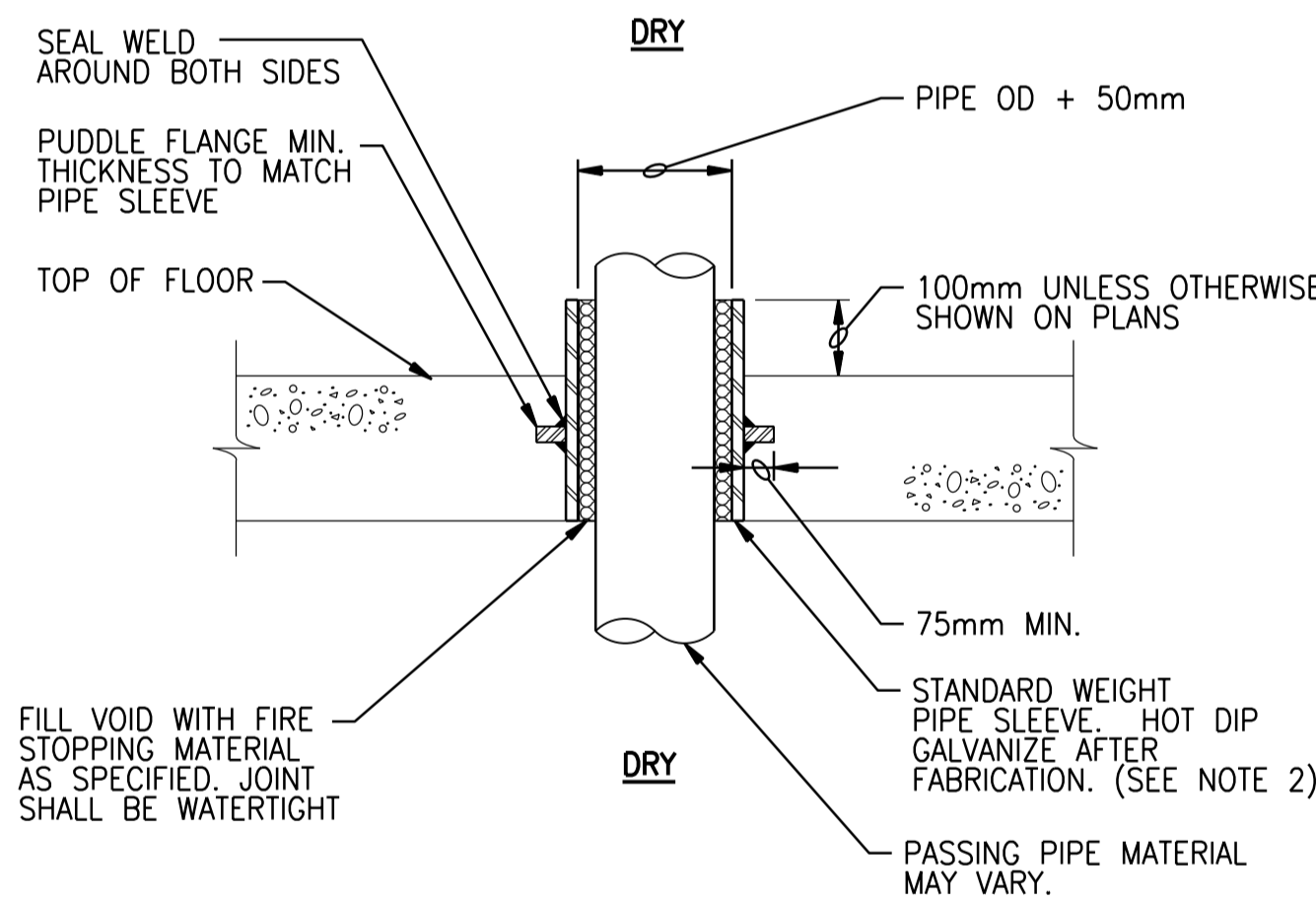
**INTERIOR WALL PENETRATION SEAL**  
NTS (4027-607A)



NOTES:

1. ALL DIMENSIONS IN MILLIMETERS, UNLESS OTHERWISE NOTED.
2. ALL PIPE SUPPORT COMPONENTS SHALL BE DESIGNED AND FABRICATED FROM STAINLESS STEEL MATERIAL, UNLESS NOTED OTHERWISE.

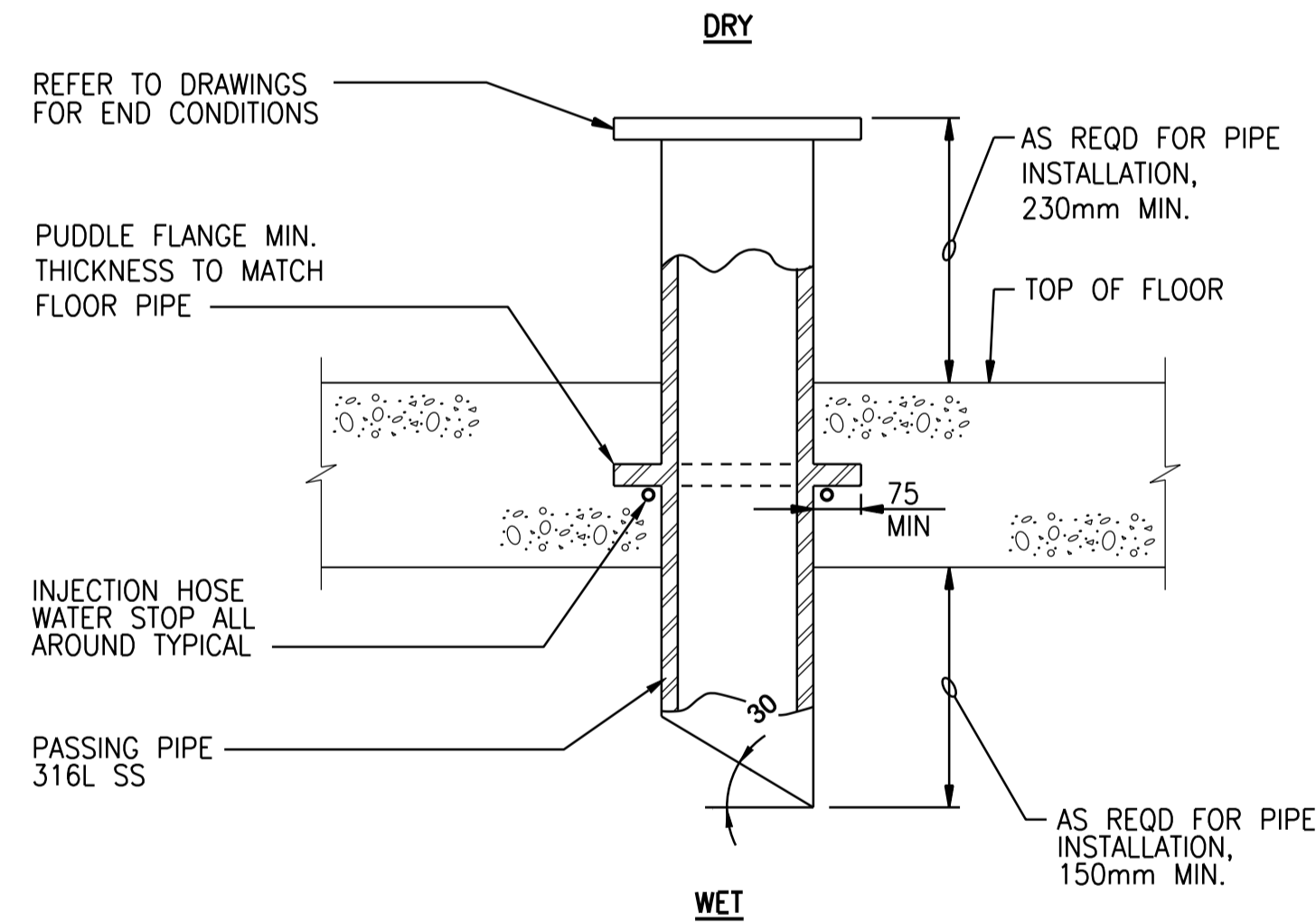
**INTERIOR WALL PENETRATION SEAL**  
NTS (4027-607B)



NOTES:

1. ALL DIMENSIONS IN MILLIMETERS, UNLESS OTHERWISE NOTED.
2. COAT FLOOR SLEEVE WITH SPECIFIED PAINT SYSTEM PRIOR TO CONCRETE PLACEMENT.
3. ALL PIPE SUPPORT COMPONENTS SHALL BE DESIGNED FABRICATED FROM STAINLESS STEEL MATERIAL, UNLESS NOTED OTHERWISE.

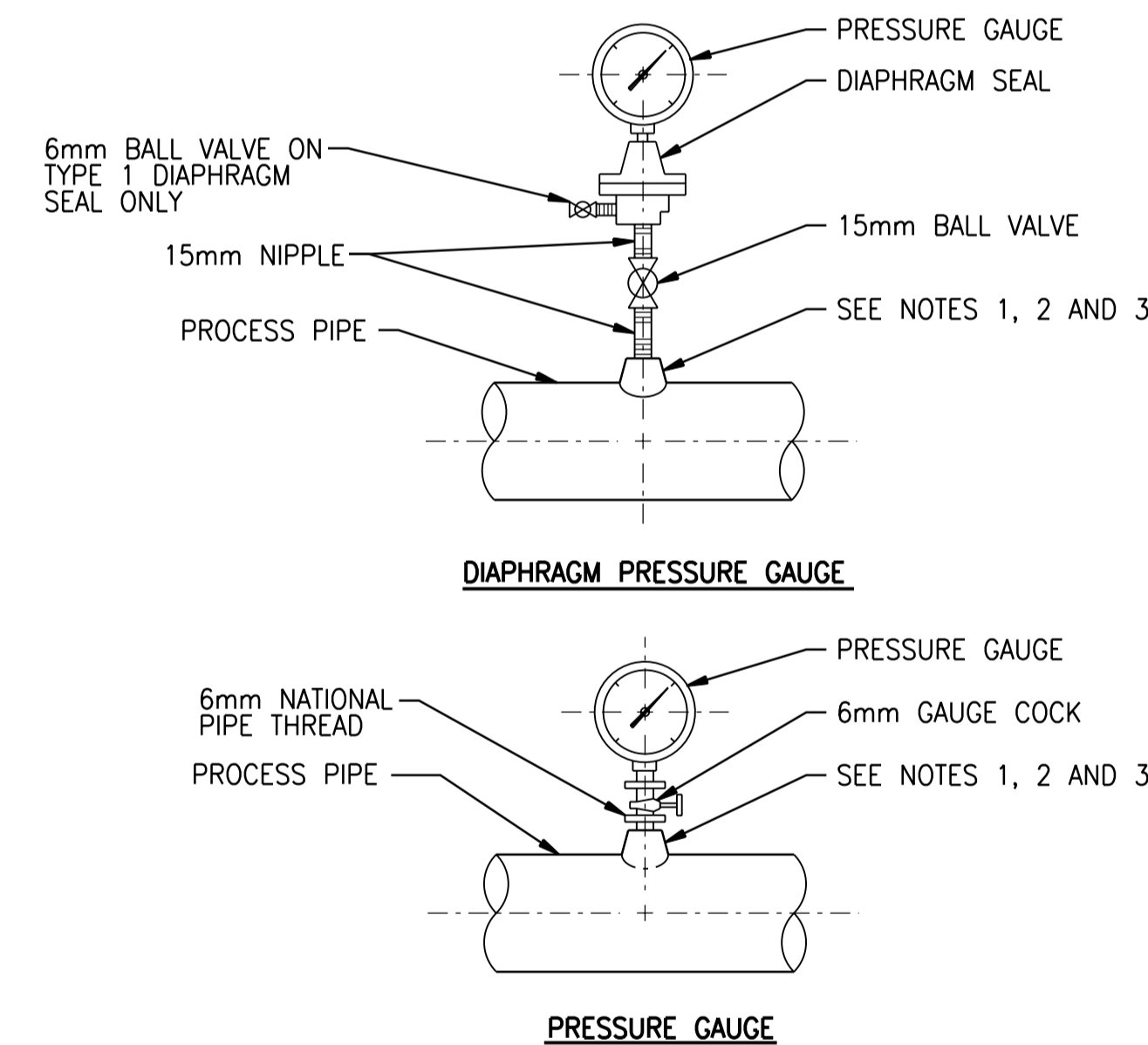
**FLOOR SLEEVE (DRY)**  
NTS (4027-620)



NOTES:

1. ALL DIMENSIONS IN MILLIMETERS, UNLESS OTHERWISE NOTED.
2. COAT FLOOR PIPE WITH SPECIFIED PAINT SYSTEM PRIOR TO CONCRETE PLACEMENT.
3. ALL PIPE SUPPORT COMPONENTS SHALL BE DESIGNED FABRICATED FROM STAINLESS STEEL MATERIAL, UNLESS NOTED OTHERWISE.
4. PROVIDE WATER TIGHT JOINT AS PERFORMANCE REQUIREMENT
5. SEE ALSO INSTRUMENTATION DRAWINGS

**LEVEL INSTRUMENT FLOOR PIPE**  
NTS (4027-622)



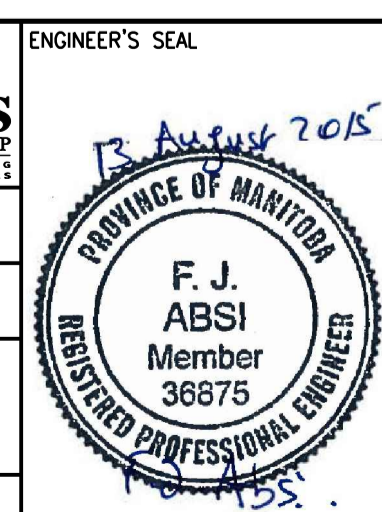
NOTES:

1. ALL DIMENSIONS IN MILLIMETERS, UNLESS OTHERWISE NOTED.
2. FOR STEEL, GALVANISED STEEL, AND PVC 65mm AND SMALLER USE A BUSHING IN A TEE.
3. FOR DUCTILE IRON AND FIBERGLASS REINFORCED PLASTIC PIPE, ALL SIZES, USE PIPE SADDLE WITH BUSHING.
4. FOR STEEL AND STAINLESS STEEL PIPES 80mm AND LARGER, AND PRESSURE VESSELS, USE THRED-O-LET AS SHOWN.
5. PROVIDE SNUBBER FOR POSITIVE DISPLACEMENT PUMP INSTALLATIONS

**PRESSURE GAUGE MOUNTING**  
NTS (4027-690)



CH2MHILL.		KCS GROUP CONSULTING ENGINEERS	
SNC-LAVALIN		DESIGNED BY: F. ABSI	
DESIGNED BY: F. ABSI		CHECKED BY: B. EDGAR	
DRAWN BY: B. COOPER		APPROVED BY: F. ABSI	
SCALE: NTS		ISSUED FOR CONSTRUCTION BY: T. TURZAK	
DATE: 2015/08/13		DATE: 2015/08/13	
CONSULTANT NO.: 474248			
00 ISSUED FOR TENDER	08/2015	B.C.	J.C.
NO. REVISIONS	DATE	DESIGN	CHECK



ENGINEER'S SEAL		THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT	
Winnipeg		SOUTH END WATER POLLUTION CONTROL CENTRE SEWPPCC UPGRADING/EXPANSION PROJECT PROCESS STANDARD DETAILS (3)	
CITY DRAWING NUMBER	SHEET	REV.	SIZE
1-0102-PDTL-A004	00		A1