

GENERAL NOTES:

1. END PREPARATION FOR BUTT WELDS:
ANGLE FOR ALL PIPE THICKNESSES TO BE 30° ± 5° ANGLES.
2. FULL PENETRATION BUTT WELD WITH THICKNESS AND TENSILE STRENGTH AT LEAST EQUAL TO THAT OF THE STEEL PLATE.
3. MAXIMUM WELD BEAD HEIGHT:
INTERNAL: 1mm EXTERNAL: 3mm

COATING

4. RIGID POLYURETHANE TO BE MAINLY USED IN AREAS WITH ACIDIC SOIL OR UNLESS OTHER WISE STATED.
5. BITUMEN SHALL INCLUDE MODIFIED BITUMEN OR FIBRE REINFORCED BITUMEN.

LINING

6. EPOXY SHALL BE SOLVENT FREE.
7. CEMENT MORTAR LINING SHALL BE CUT BACK AT 30°.

NOTE A

MAKING GOOD JOINTS INTERNALLY:
IMMEDIATELY BEFORE JOINING PIPES:

STEP 1

THE INTERNAL COATING AT THE JOINT SHALL BE COMPLETED BY APPLYING A SLURRY OF ORDINARY PORTLAND CEMENT MIXED WITH 'SURFACECRETE' AND CLEAN WATER IN THE PROPORTIONS 1:1 TO THE SHOULDERS OF THE CEMENT MORTAR LININGS IN THE SLEEVE AND SPIGOT ENDS OF THE PIPES TO BE JOINED.

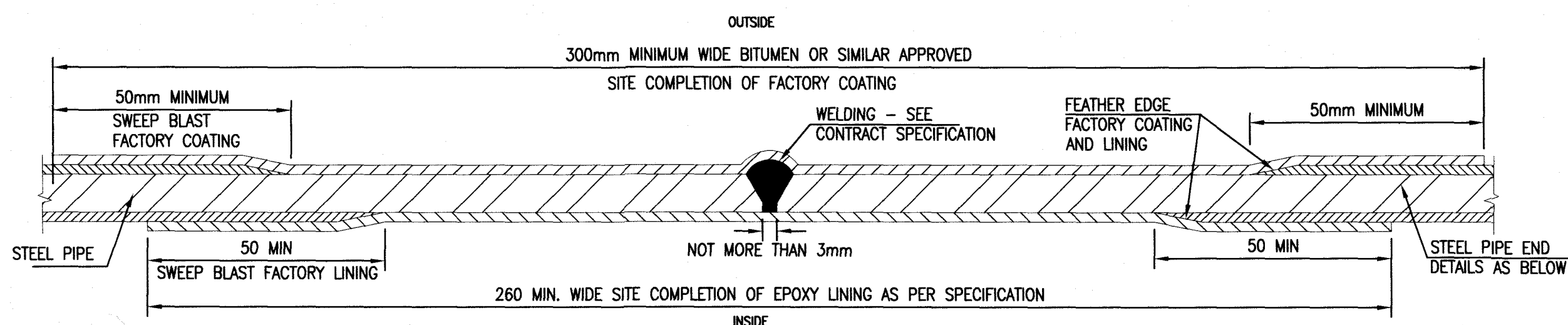
STEP 2

SUFFICIENT 'M-BED' EXPANSIVE CEMENTITIOUS GROUT COMPOUND MIXED WITH CLEAN WATER TO FORM A MORTAR OF REQUIRED STIFFNESS SHALL BE TROWELLED AGAINST THE SHOULDER OF THE CEMENT MORTAR LINING IN THE SLEEVE END.

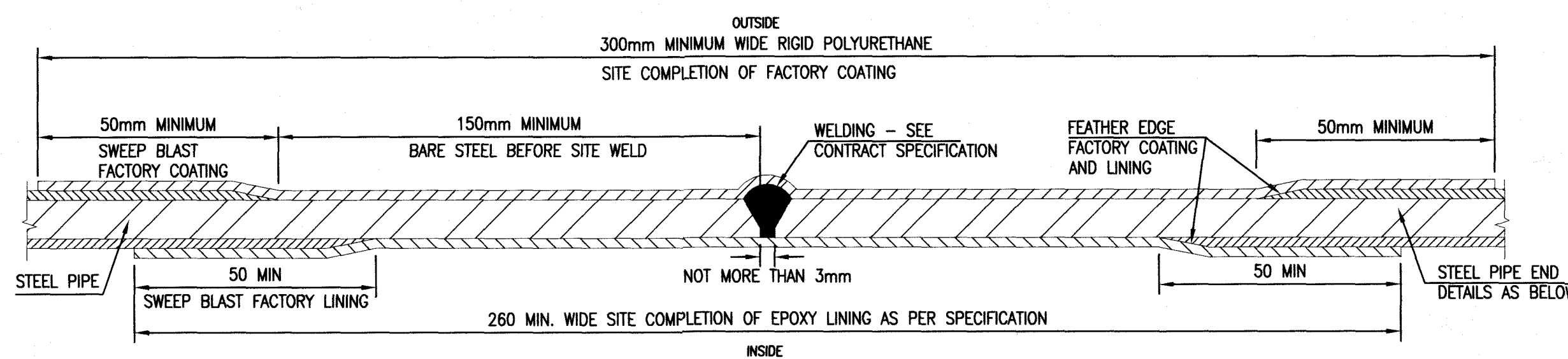
IMMEDIATELY AFTER JOINING PIPES:

THE CEMENT MORTAR LINING IN THE SPIGOT END SHALL HAVE PRESSED AGAINST THE 'M-BED' MORTAR IN THE SLEEVE END TO FORM A CONTINUOUS LINING.
EXCESS MORTAR COMPRESSED FROM THE JOINT IS TO BE REMOVED BY MEANS OF AN INTERNAL SCRAPER AND THE SURFACE SMOOTHED

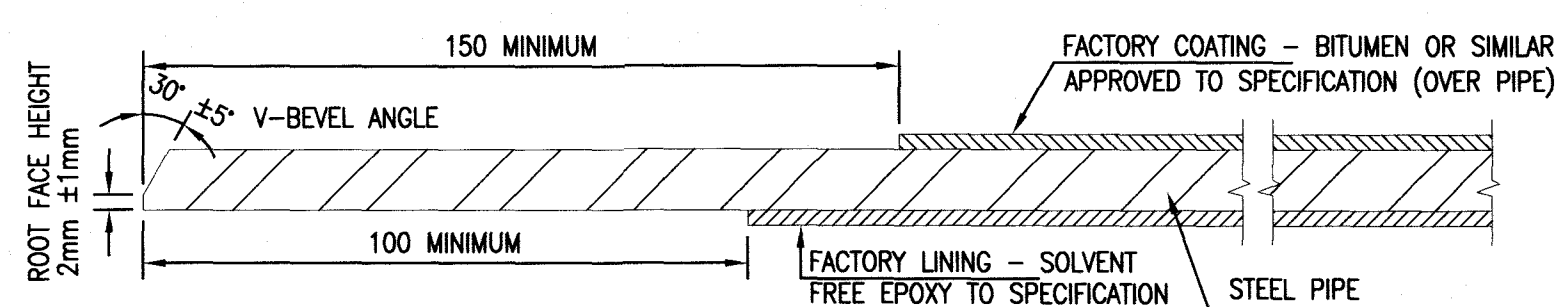
* SURFACECRETE® AND 'M-BED' MATERIALS AVAILABLE FROM STERNSON (SA) (PTY) LTD.



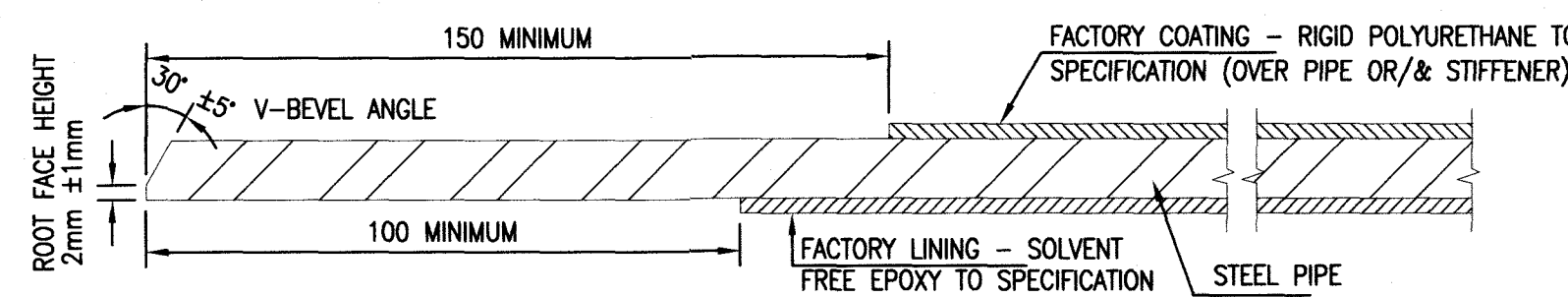
TYPICAL WELDED JOINT DETAIL WITH BITUMEN AND EPOXY



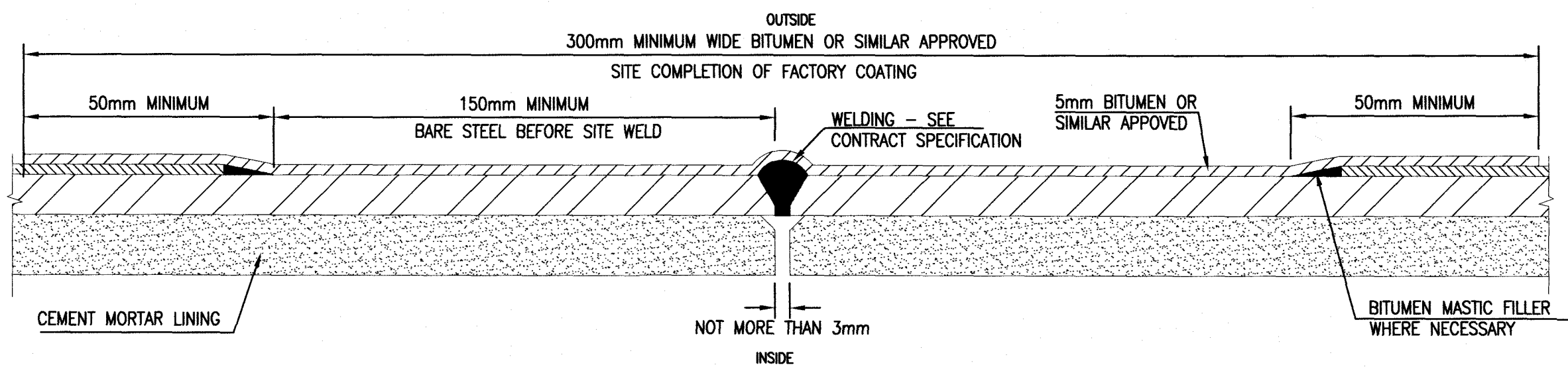
TYPICAL WELDED JOINT DETAIL WITH POLYURETHANE AND EPOXY



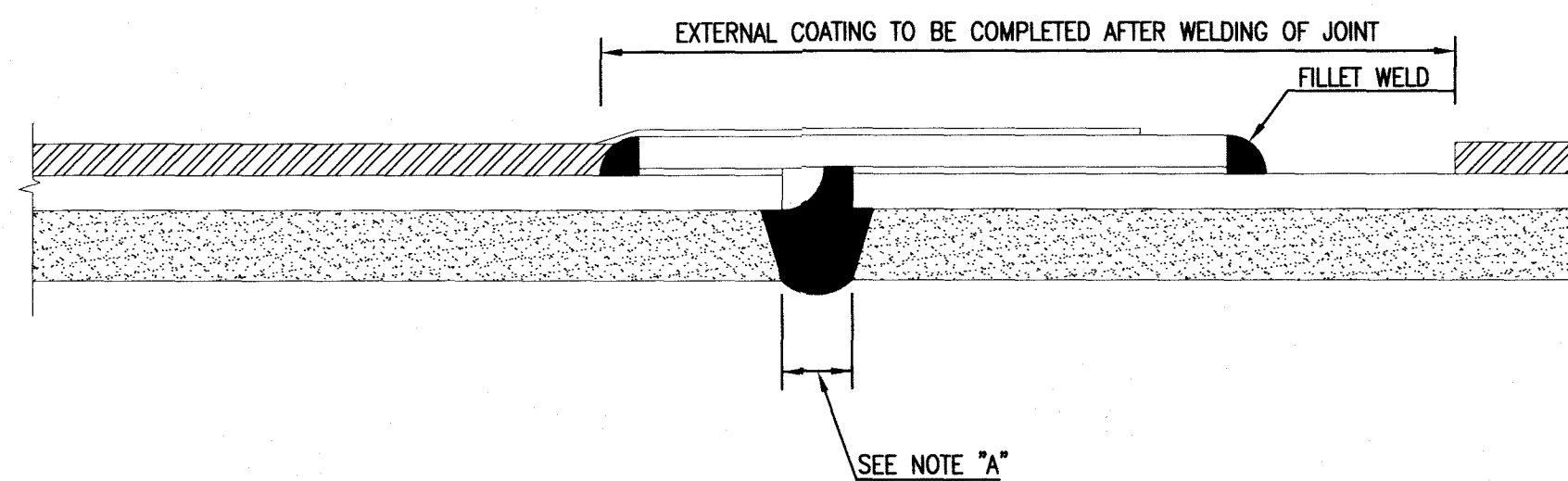
DETAIL OF PLAIN END OF PIPE



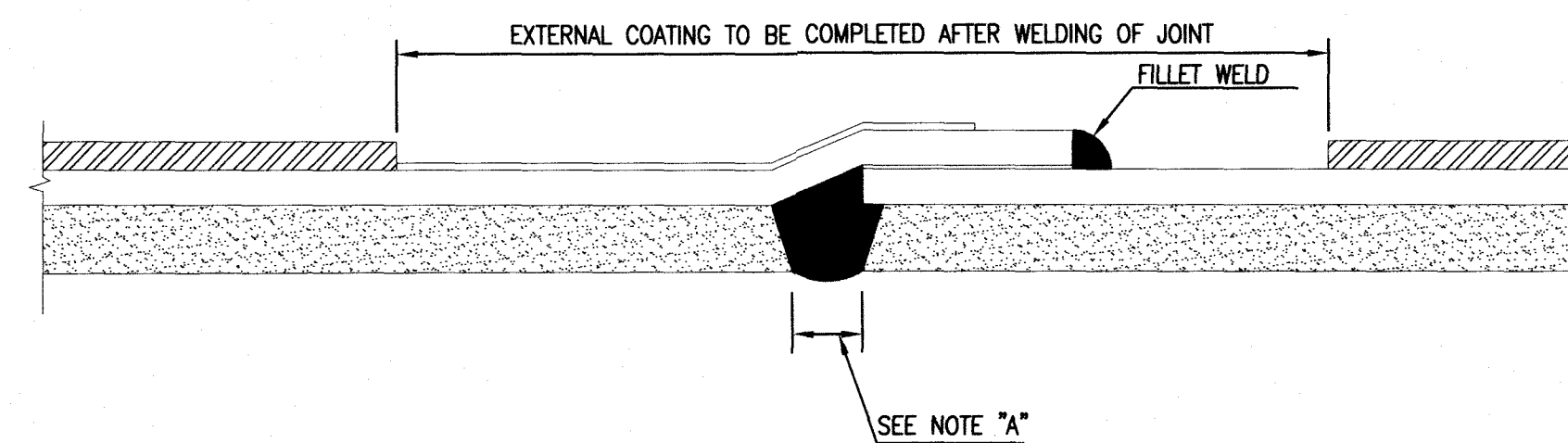
DETAIL OF PLAIN END OF PIPE



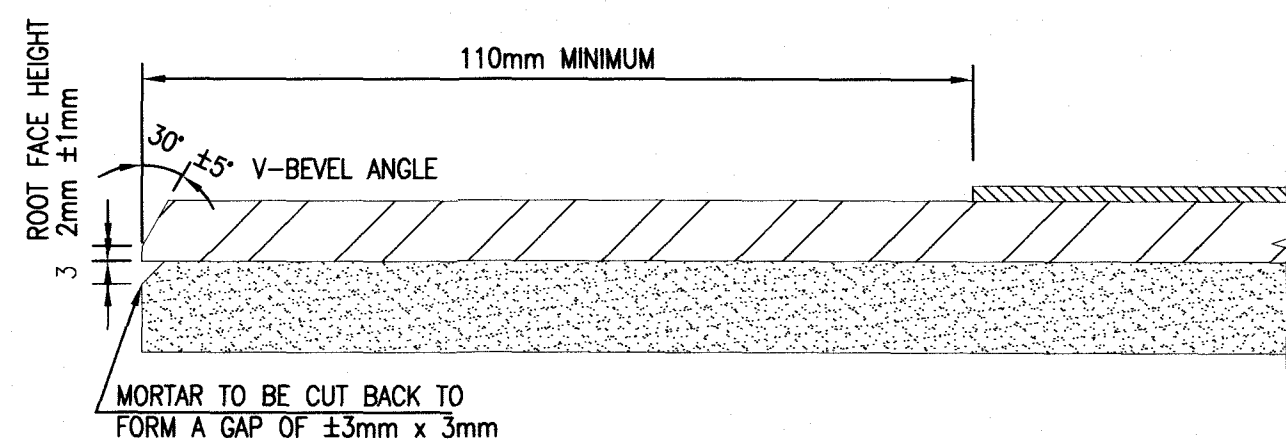
TYPICAL WELDED JOINT DETAIL WITH BITUMEN AND CEMENT MORTAR LINING



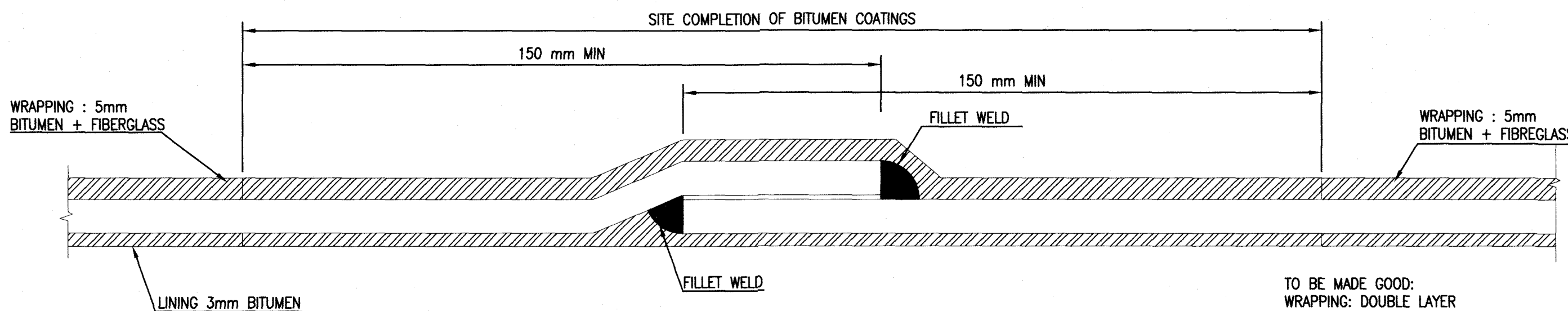
DETAIL OF SHORT SLEEVE JOINT



DETAIL OF SOCKET JOINT

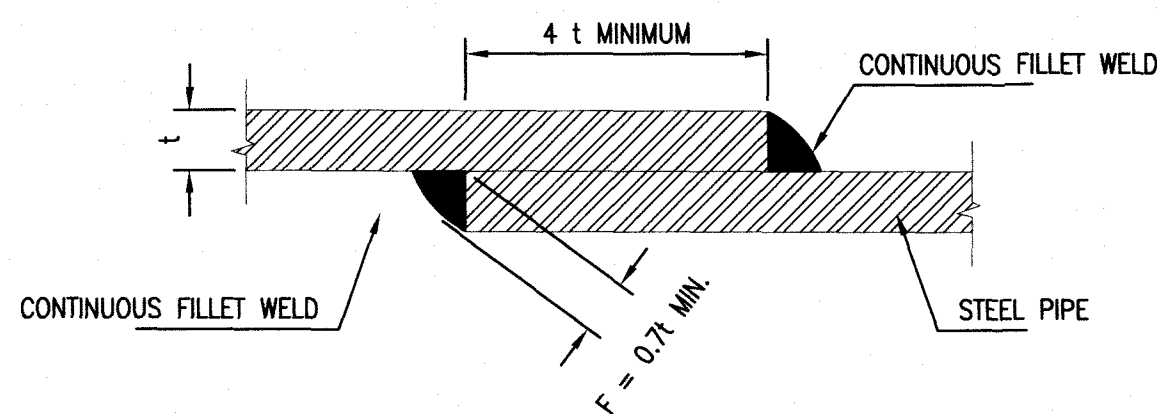


DETAIL OF PLAIN ENDED PIPE

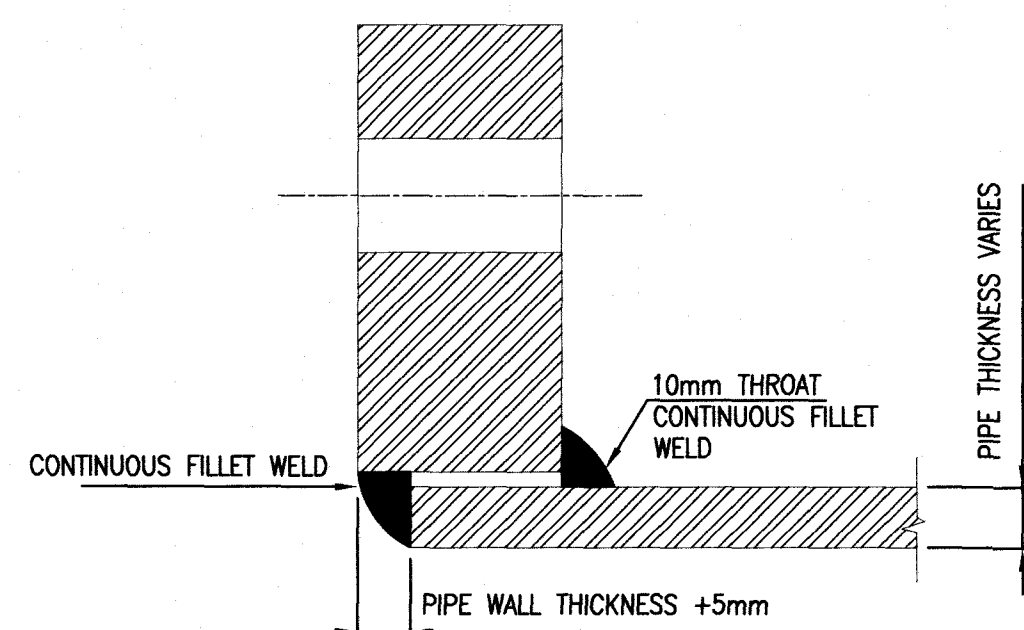


DETAILS OF SHORT SLEEVE WELDED JOINT BITUMEN LINED & WRAPPED

TO BE MADE GOOD:
WRAPPING: DOUBLE LAYER
FIBERGLASS + BITUMEN
LINING: 3mm BITUMEN (PRIME
APPLY HOT + IRON SMOOTH)



DETAIL OF FILLET WELD FOR OVERLAPPING JOINTS



DETAILS OF WELD FOR FLANGES

DRG No: RA 23557
SUPERSEDING DRG No:
B3055
A9311
A917
A9006
4317
B1965

REVISIONS				
No	DATE	CHECKED	APPROVED	DESCRIPTION

REFERENCE DRAWINGS	
NUMBER	TITLE



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SAP No.		CHECKED BY	
CONTRACT No.		D.O.M. C. TUMBARE	
DESIGNED BY		APPROVED	
DRAWN BY	D KATSKY	REG. No.	2014-20174
DATE	2016-12-21	DATE	13/04/17

PIPELINES & BOOSTER STATION:
PIPELINES
TYPICAL DETAILS

FABRICATION DETAILS OF
PLAIN ENDED STEEL PIPES

STATION		WKS		DOC. TYPE	
P L				D C P	
SCALE	1:1				