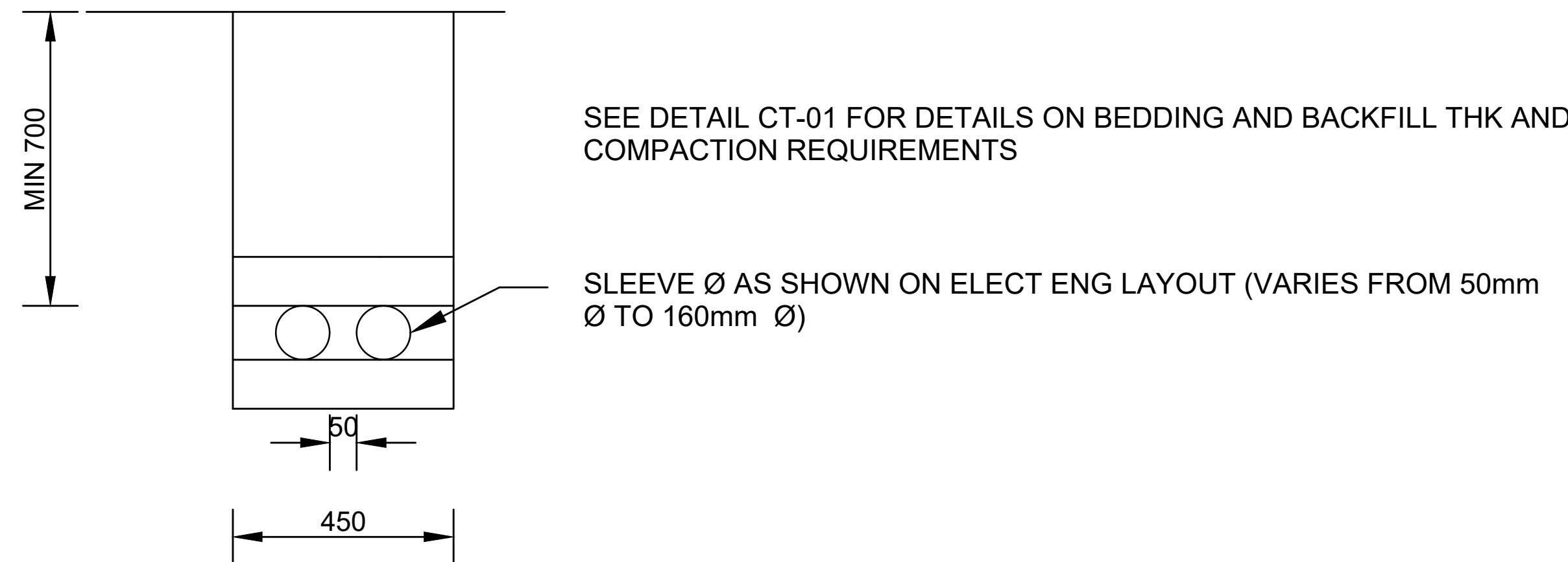


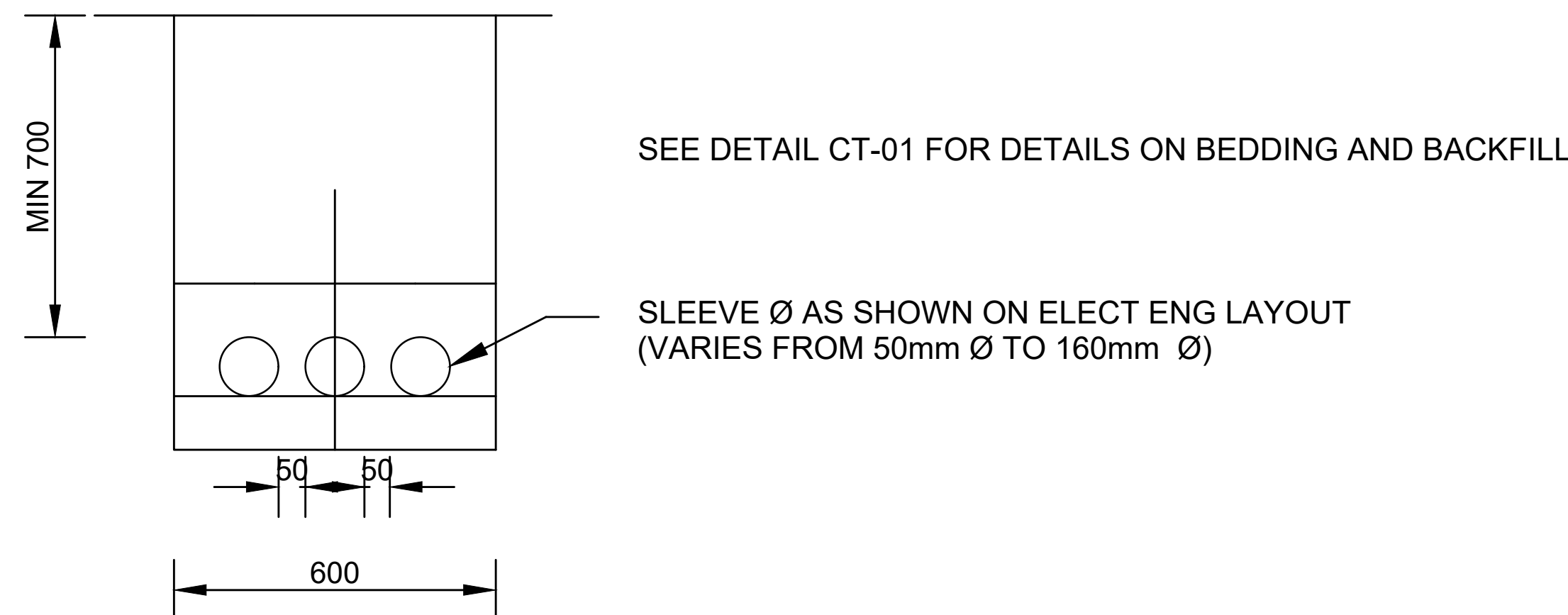
DETAIL CT-01: SINGLE PIPE
N.T.S.



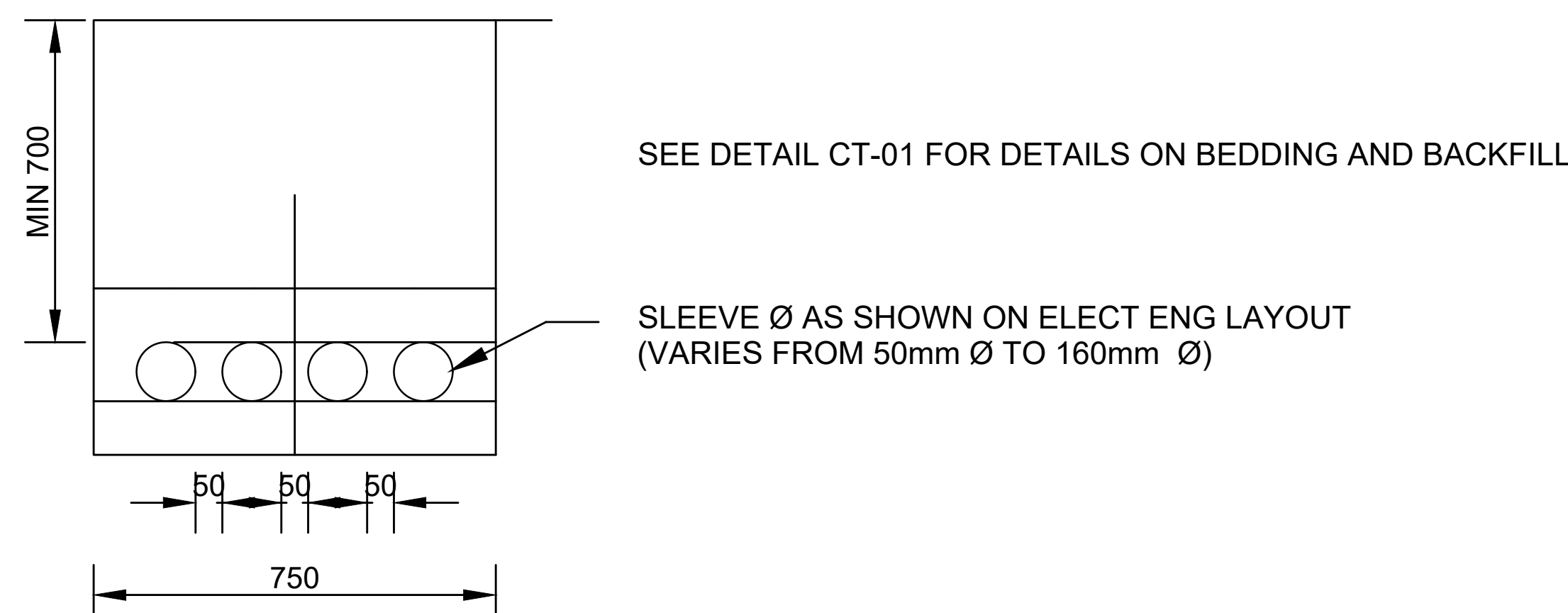
DETAIL CT-02: TWO PIPES
N.T.S.



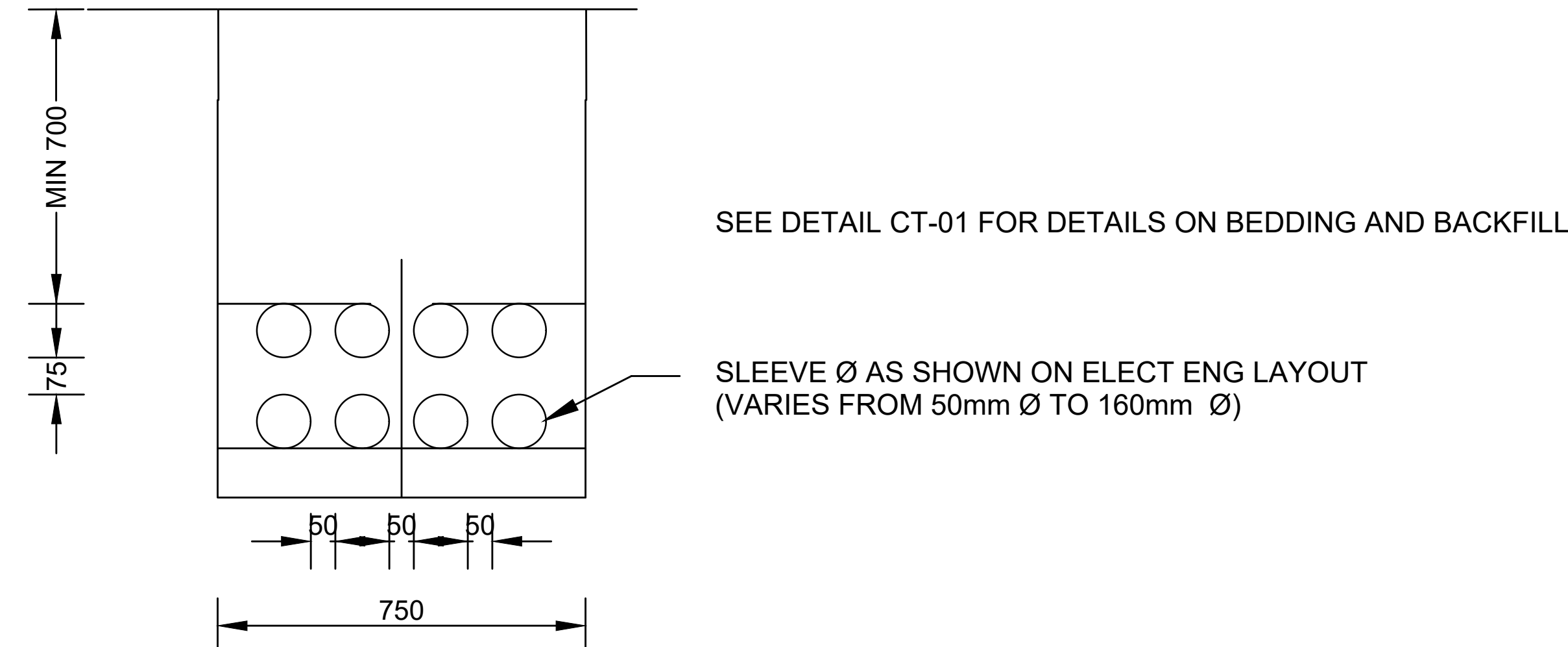
DETAIL CT-03: THREE PIPES
N.T.S.



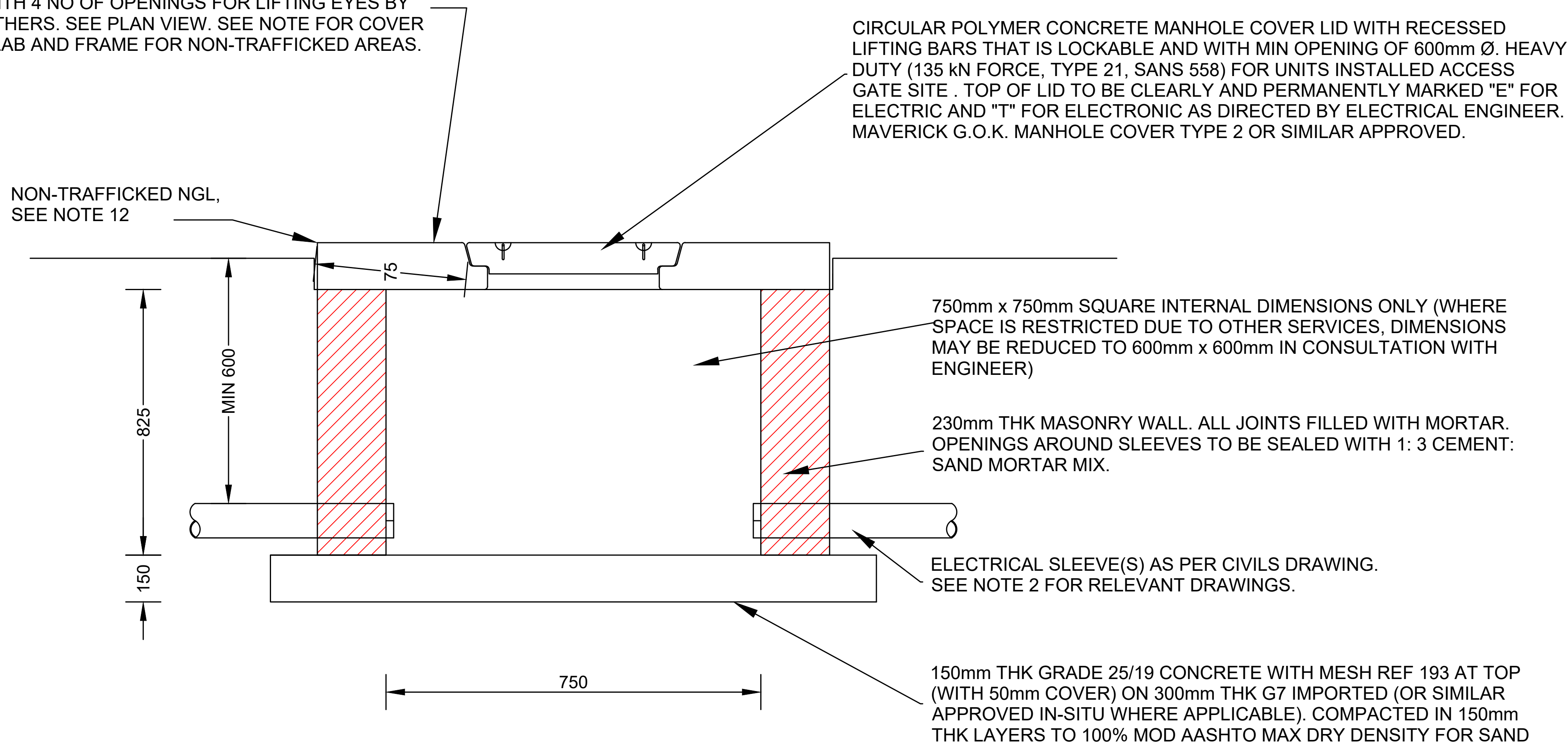
DETAIL CT-04: FOUR PIPES
N.T.S.



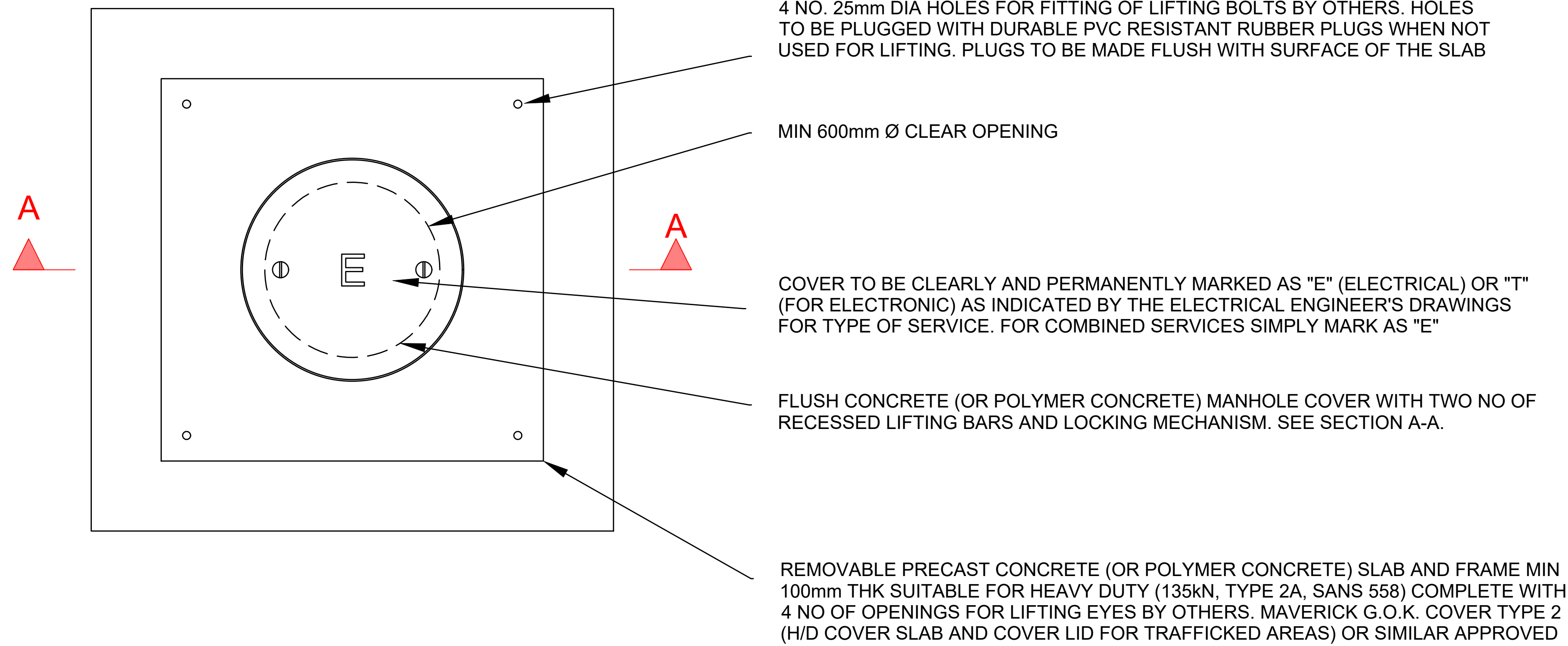
DETAIL CT-05: FIVE TO EIGHT PIPES
SCALE 1:20



RECTANGULAR REMOVABLE PRECAST CONCRETE SLAB AND FRAME MIN 100mm THK SUITABLE FOR HEAVY DUTY (135kN, TYPE 2A, SANS 558) COMPLETE WITH 4 NO OF OPENINGS FOR LIFTING EYES BY OTHERS. SEE PLAN VIEW. SEE NOTE FOR COVER SLAB AND FRAME FOR NON-TRAFFICKED AREAS.



DETAIL DP-xx: DRAW-PIT MANHOLE (SECTION A-A)
N.T.S.



DETAIL DP-xx: DRAW-PIT MANHOLE (PLAN ON COVER SLAB)
N.T.S.

- NOTES:
- NO DIMENSIONS TO BE SCALED FROM DRAWING.
 - DRAWING TO BE READ WITH:
 - 10000001 - 0421 LAYOUT SHEET 1
 - 10000001 - 0422 LAYOUT SHEET 2
 - 10000001 - 0423 LAYOUT SHEET 3
 - 10000001 - 0110 ALL SERVICES LAYOUT
 - 2.5. ELECTRICAL AND MECHANICAL ENGINEERING DRAWINGS
 - CONTRACTOR TO CONFIRM LOCATION OF EXISTING & NEW PLANNED SERVICE PRIOR TO EXCAVATION.
 - SLEEVE PIPE SIZES & QTY AS PER CIVILS DRAWINGS (SEE NOTE 2). CIVILS DUCT LAYOUTS FOR ELECTRIC & ELECTRONIC (SIGNED) DRAWINGS INDICATE THE USE OF 95% 080 AND 0760 UPVC (CLASS 6) DUCTS FOR BURIED SERVICES.
 - COMPACTION TO SLEEVE TRENCHES: BACKFILL: 98% MOD AASHTO MAX DRY DENSITY BELOW AREAS CARRYING TRAFFIC AND AT LEAST 90% MOD AASHTO MAX DRY DENSITY ELSEWHERE.
 - ALL SLEEVES TO BE PROVIDED WITH SINGLE STRAND OF 2.5mm GRS WIRE WITH ENDS NEATLY COILED IN DRAW PIT (2m SURPLUS LENGTH REQUIRED AT EACH END IN DRAW PIT) FOLLOWING INSPECTION TESTING AS PER SANS 2001: DP3 CLAUSE 5.1.5 (DUCT PROVING)
 - MINIMUM SOIL COVER TO TOP OF SLEEVE IS 700mm FOR LOW VOLTAGE AND ELECTRONIC CABLES AND MIN 800mm FOR HV CABLES.
 - UNLESS OTHERWISE SPECIFIED ON CIVILS LAYOUT, ALL CONCRETE WORKS TO BE 28MPa / 19mm. CONTRACTOR TO PROVIDE MANUFACTURER CERTIFICATES OF STRENGTH COMPLIANCE FOR PRE-CAST CONCRETE / POLYMER COVER SLABS AND LIDS AS PER LOADING REQUIREMENTS ELSEWHERE.
 - ELECTRIC CABLES TO BE PLACED AT LEAST 600mm HORIZONTAL DISTANCE AND 100mm VERTICAL DISTANCE FROM TELECOM / ELECTRONIC CABLES THAT IS NOT ARMOURLED. CONTRACTOR SHALL CHECK WITH ELECTRICAL ENGINEER WHERE IN DOUBT.
 - SLEEVES TERMINATING INSIDE BUILDING INTERIOR FLOOR / SIMILAR SHALL BE INSTALLED USING LONG RADIUS BENDS (NO SHARP BENDS PERMITTED). SLEEVE ENDS TO BE TEMPORARILY SEALED DURING CONSTRUCTION TO AVOID INGRESS OF DIRT. SLEEVE ENDS TO BUILDING INTERIOR / AHEAD TO BE CUT FLUSH WITH FLOOR LEVEL UNLESS OTHERWISE DIRECTED BY ELECTRICAL ENGINEER AND VIDEO AROUND CABLES FILLED WITH NON COMBUSTIBLE AND SANS APPROVED FOAM FILLER ONCE NEW CABLES PULLED THROUGH.
 - SELECTED BACKFILL (SANS 2001:DP3 - 2010) SHALL BE FREE FROM RUBBLE / DEBRIS. EXCLUDES STONES OF MAX DIMENSION GREATER THAN 150mm AND COMPACTED TO 98% MOD AASHTO. NON-TRAFFICKED AREAS AND 98% MOD AASHTO IN TRAFFICKED AREAS. ROAD LAYER WORKS TO APPLY FOR ENGINEERED ROAD LAYERS AS PER DWG 10000001-0300.
 - IN NON-TRAFFICKED AREAS WHERE A SMOOTH SURFACE IS NOT REQUIRED, THE TOP OF THE MANHOLE SHALL BE RAISED AT LEAST 75mm ABOVE SURROUNDING GROUND TO REDUCE RISK OF WATER INGRESS.
 - THIS DRAWING TO BE READ WITH THE BILL OF QUANTITIES AND RELATED DRAWINGS (SEE NOTE 2)

- COMPACTION TESTING:
- COMPACTION TESTING BY 3RD PARTY SANS ACCREDITED LAB USING TRODLER (NUCLEAR) TEST EQUIPMENT SHALL BE ARRANGED BY THE CONTRACTOR AS WORK PROGRESS. TEST LOCATIONS FOR EVERY 30m OF SLEEVE TRENCH PREPARED. TESTS TO BE TAKEN ON BEDDING LAYER AND BACKFILL LAYER.



FOR TENDER

			100
100 MILLIMETRES ON ORIGINAL DRAWING			
Ⓐ BEFORE CONTRACT COMMENCES			
⚠ AFTER CONSTRUCTION CONTRACT HAS COMMENCED			
N:	DATE	AMENDMENTS	
Ⓐ	2025/02/19	ISSUED FOR TENDER	
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PROJECT
TSHAME WWTW REFURBISHMENT
VCW CONTRACT: BW298/TSHWWTW/22

DRAWING DESCRIPTION
ELECTRIC / ELECTRONIC CABLE DUCT AND
DRAW PIT DETAILS

DRAWING NO.	REVISION
10909001 - 0425	T1

DESIGNED: GM	CHECKED: GM
DRAWN: TM	SCALE: AS SHOWN
APPROVED: GM	INCEPTION DATE: 2024.07.08
FILE PATH: V:\Projects\Engineering\2024\10909001 Tshame WWTW\04 Doc Proc\04 Draw\01 V3 Dwg	

ISSUED FOR TENDER