

NOTES:

- CONCRETE TO WALLS AND FLOOR TO BE GRADE N25.
- MAINTENANCE HOLE DESIRABLE MINIMUM AND MAXIMUM DEPTHS TO 1200 AND 3000 RESPECTIVELY.
- MAINTENANCE HOLES DEEPER THAN 3000 TO BE INDIVIDUALLY DESIGNED AND CERTIFIED BY A SUITABLY QUALIFIED REGISTERED PROFESSIONAL ENGINEER OF QUEENSLAND (RPEQ).
- INSTALL STEP IRONS OR FIXED ACCESS LADDER TO MAINTENANCE HOLES ACCORDANCE WITH AS1657.
 - INSTALL STEP IRONS TO MAINTENANCE HOLES UP TO 3000 DEEP;
 - INSTALL FIXED ACCESS LADDER TO MAINTENANCE HOLES DEEPER THAN 3000 DEEP;
 - STAINLESS STEEL LADDERS TO BE USED IN AGGRESSIVE OR MARINE ENVIRONMENTS OR AS DIRECTED.
- ALTERNATIVE STEP IRON OR LADDER MATERIALS COMPLYING TO AS1657 MAY BE USED UPON APPLICATION TO COUNCIL.
- PROVIDE 150 MINIMUM CLEAR DISTANCE BETWEEN INLET PIPES. PROVIDE BENCHING AS REQUIRED BY DESIGN ON THE FLOOR OF MAINTENANCE HOLE (TO HALF THE DIAMETER OF THE OUTLET PIPE) FOR COMPLEX MAINTENANCE HOLES WITH MORE THAN 2 INLET PIPES.
- FRAME AND RISER MAY BE BOLTED TO TOP SLAB WITH 4xM20 BOLTS AND NUTS WITH FLAT AND SPRING WASHERS. BOLTS TO BE EITHER CAST IN-SITU AS PART OF TOP SLAB OR CHEMICALLY FASTENED TO TOP SLAB POST CONSTRUCTION. REFER BSD-8031 FOR FRAME DETAILS AND BSD-8032 FOR RISER DETAILS.
- PRINCIPLES TO MINIMISE HYDRAULIC HEAD LOSS AT MAINTENANCE HOLE:
 - REDUCE CHANGES IN DIRECTION TO A MINIMUM.
 - AVOID "OPPOSED LATERAL" SITUATIONS BY LOCATING ALL INCOMING PIPES WITHIN A 90° ARC.
 - AVOID VERTICAL MISALIGNMENT (DROP MAINTENANCE HOLES) IF POSSIBLE, UNLESS THERE IS A DELIBERATE ATTEMPT TO REDUCE VELOCITY.
 - WHERE POSSIBLE DIRECT INLET PIPES WHOLLY INTO THE BARREL OF OUTLET PIPE.
 - PROVIDE GEOMETRY SUCH THAT THE CHANGE OF DIRECTION OCCURS AT OR NEAR THE DOWNSTREAM FACE OF THE MAINTENANCE HOLE.
- APPLY HEAVY GREASE TO FRAME SEAT PRIOR TO INSTALLING COVER.
- RISER TO BE OMITTED FOR NON-ROADWAY MAINTENANCE HOLES.
- DIMENSIONS IN MILLIMETRES (U.N.O.).

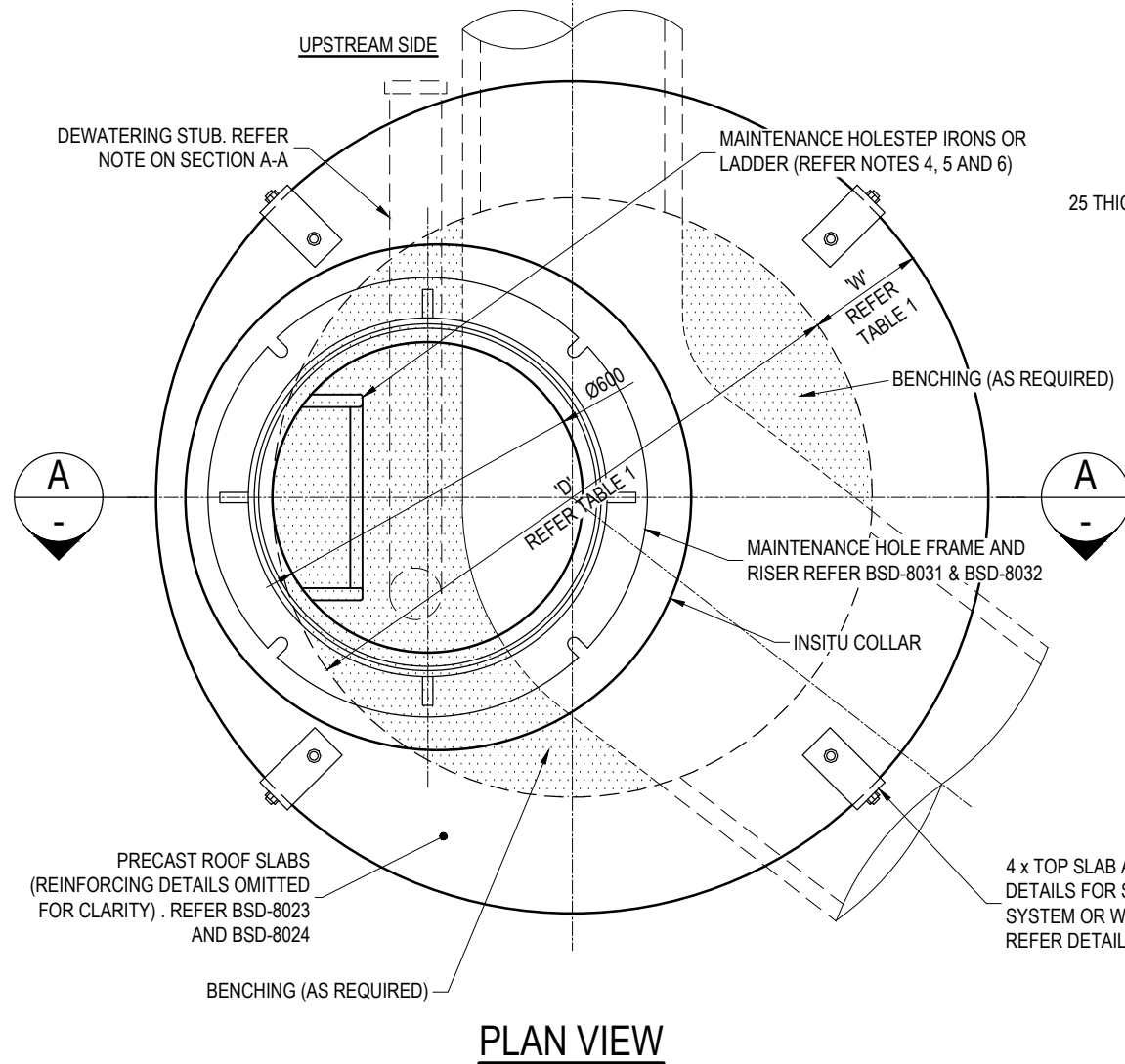
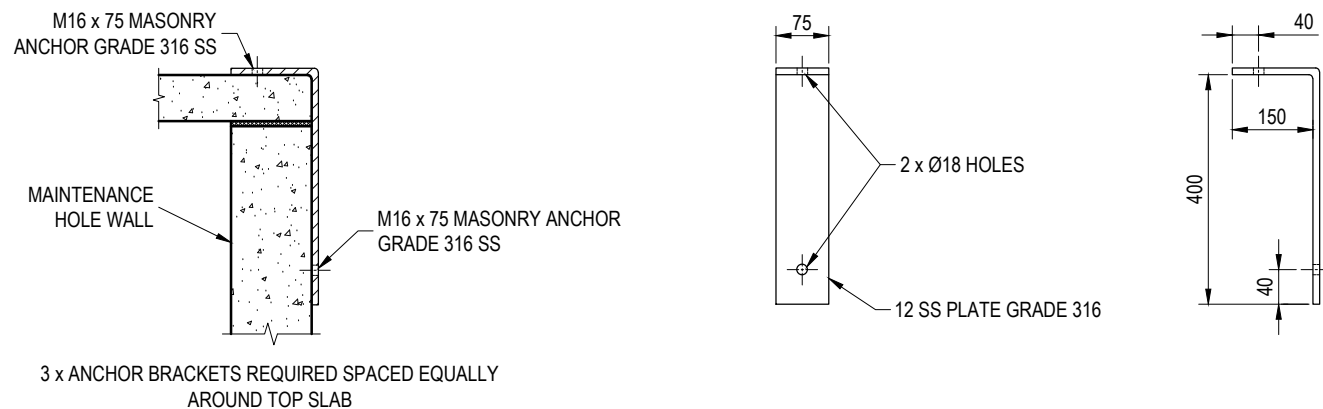
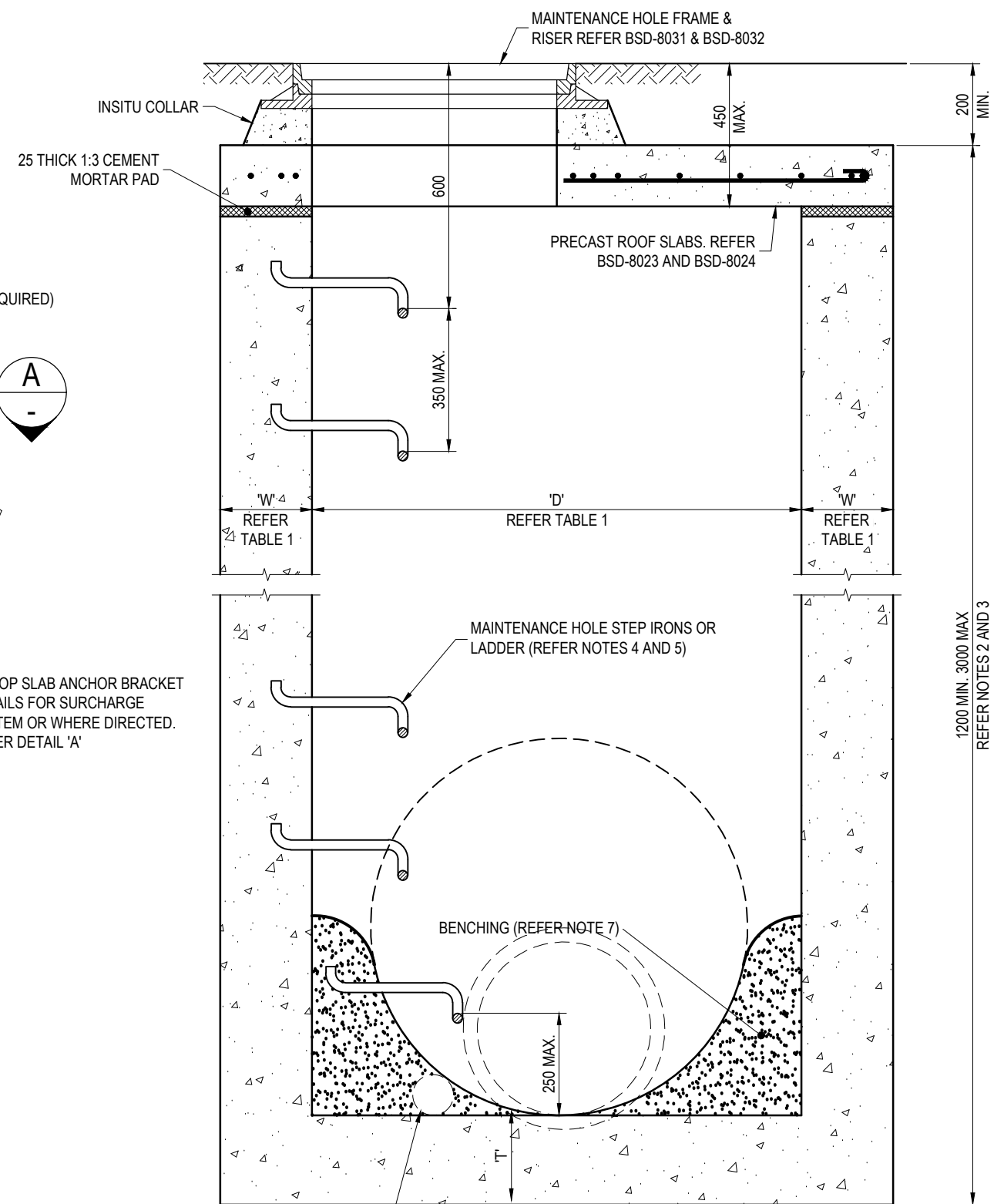


TABLE 1 - MAINTENANCE HOLE WALL THICKNESS

MANHOLE DIAMETER 'D'	ROOF SLAB DIAMETER	WALL THICKNESS 'W'	DIMENSION 'T' FOR MH INVERT GRADE	
			INLET/S	OUTLET
1050	1350	150	175	150
1200	1650	225	250	225
1350	1800			
1500	1950			



DETAIL 'A' - TOP SLAB ANCHOR BRACKET DETAILS FOR SURCHARGE SYSTEM OR WHERE DIRECTED



UNLESS DIRECTED OTHERWISE, PROVIDE 1000 LONG x Ø100. STUB TO DEWATER PIPE TRENCH. STUB TO BE CORRUGATED PERFORATED POLYETHYLENE PIPE CLASS 400 TO AS2439. (WITH END CAP) INSTALLED ON THE UPSTREAM FACE OF MANHOLES.

TYPICAL SECTION A-A

THE FITNESS FOR PURPOSE OF THIS STANDARD DRAWING FOR A SPECIFIC PROJECT SHALL BE ASSESSED AND ACCEPTED BY A SUITABLY QUALIFIED REGISTERED PROFESSIONAL ENGINEER OF QUEENSLAND (RPEQ).

	BRISBANE CITY COUNCIL STANDARD DRAWING	PUBLISH DATE	MAR 2021	
	STORMWATER MAINTENANCE HOLE DETAILS - 1050 TO 1500 DIAMETER TO 3.0m DEEP	SCALE	NOT TO SCALE	
		DRAWING NUMBER	BSD-8021	
		ORIGINAL SIZE	A3	REVISION