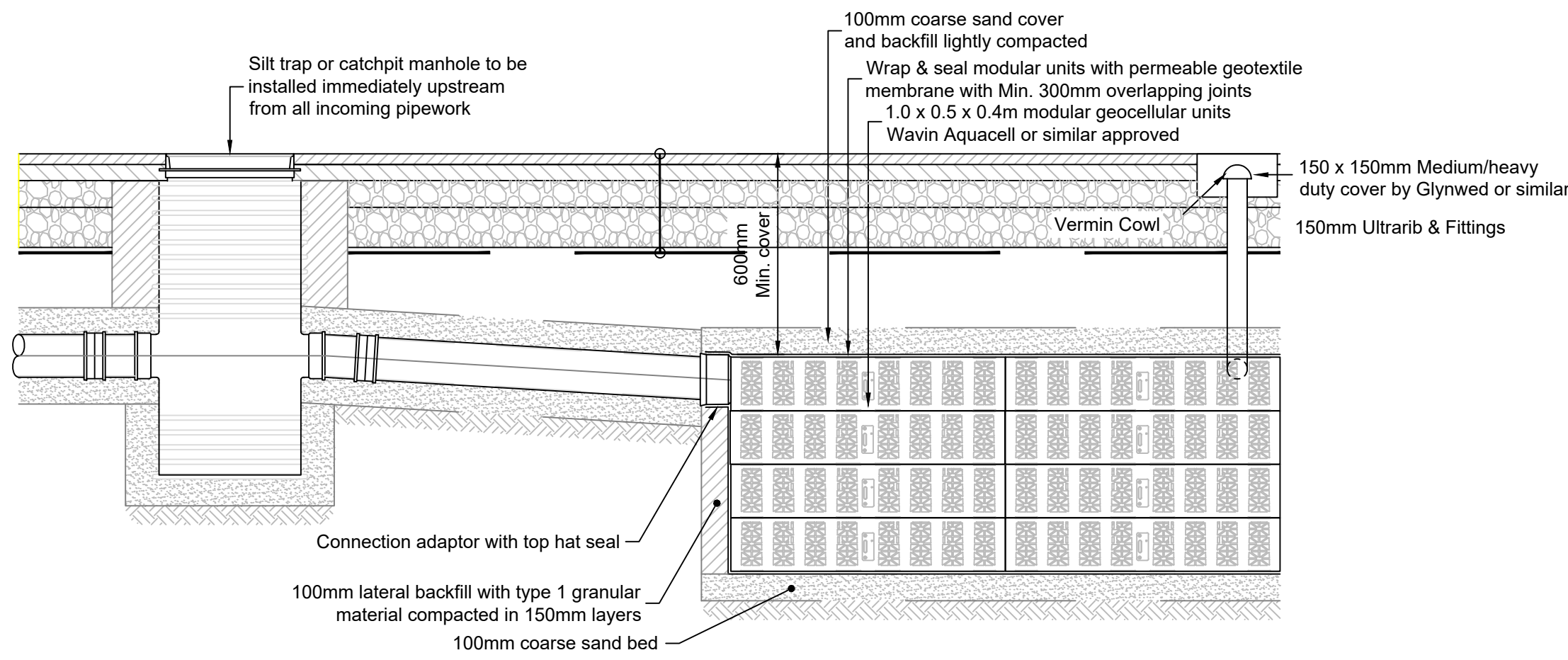




Notes: To be installed in accordance with manufacturer's details & specification.

TYPICAL SECTION THROUGH ATTENUATION TANK

Scale 1:20

MINIMUM DIMENSIONS FOR ACCESS FITTINGS AND INSPECTION CHAMBERS (table 11 Part H)					
TYPE OF ACCESS	DEPTH TO INVERT FROM COVER LEVEL (m)	MINIMUM INTERNAL DIMENSIONS - LENGTH x WIDTH (mm x mm)		MINIMUM CLEAR OPENING SIZE - LENGTH x WIDTH (mm x mm)	
RODDING EYE	-	AS DRAIN BUT MINIMUM 100mm		SAME SIZE AS PIPEWORK	
ACCESS FITTING: SMALL-150mm DIA. EXCEPT WHERE SITUATED IN A CHAMBER	0.6m OR LESS	150 x 100	150	150 x 100(1)	SAME SIZE AS ACCESS FITTING
INSPECTION CHAMBER	225 x 100	225	225	225 x 100(1)	
SHALLOW	0.6m OR LESS	225 x 100	190(2)	190(1)	
MEDIUM	1.2m OR LESS	450 x 450	450	MIN 430 x 430	430
DEEP	GREATER THAN 1.2m	450 x 450	450	MAX 300 x 300(3)	ACCESS RESTRICTED TO MAX 300(1)

NOTES:
(1) THE CLEAR OPENING MAY BE REDUCED BY 20mm IN ORDER TO PROVIDE PROPER SUPPORT FOR THE COVER AND FRAME.
(2) DRAINS UP TO 150mm DIAMETER.
(3) A LARGER CLEAR OPENING COVER MAY BE USED IN CONJUNCTION WITH A RESTRICTED ACCESS. THE SIZE IS RESTRICTED FOR HEALTH AND SAFETY REASONS TO DETER ENTRY.

MINIMUM DIMENSIONS FOR MANHOLES (table 12 Part H)					
TYPE OF ACCESS	SIZE OF LARGEST PIPE (DN)	MINIMUM INTERNAL DIMENSIONS - RECTANGULAR LENGTH x WIDTH (mm x mm)		MINIMUM CLEAR OPENING SIZE - RECTANGULAR LENGTH x WIDTH (mm x mm)	
MANHOLE LESS THAN 1.5m DEEP TO SOFFIT	LESS THAN OR EQUAL TO 150	750x675 (7)	1050(7)	750x675(2)	N/A(3)
	225	1200x675	1200	1200x675(2)	
	300	1200x750	1200		
	GREATER THAN 300	1800x(DN+450)	THE LARGER OF 1800 OR (DN+450)		
MANHOLE GREATER THAN 1.5m DEEP TO SOFFIT	LESS THAN OR EQUAL TO 225	1200x1000	1200	600x600	600
	300	1200x1075	1200		
	375-450	1350x1225	1200		
	GREATER THAN 450	1800x(DN+775)	THE LARGER OF 1800 OR (DN+775)		
MANHOLE SHAFT (4)	STEPS(5)	1050x800	1050	600x600	600
	LADDER(S)	1200x800	1200		
	WINCH(6)	900x800	900	600x600	600

NOTES:
(1) LARGER SIZES MAY BE REQUIRED FOR MANHOLES ON BENDS OR WHERE THERE ARE JUNCTIONS.
(2) MAY BE REDUCED TO 600x600mm WHERE REQUIRED BY HIGHWAY LOADING CONSIDERATIONS, SUBJECT TO A SAFE SYSTEM OF WORK BEING SPECIFIED.
(3) NOT APPLICABLE DUE TO WORKING SPACE NEEDED.
(4) MINIMUM HEIGHT OF CHAMBER IN SHAFED MANHOLE 3m FROM BENCHING TO UNDERSIDE OF REDUCING SLAB.
(5) MINIMUM CLEAR SPACE BETWEEN LADDER OR STEPS AND THE OPPOSITE FACE OF THE SHAFT SHOULD BE APPROXIMATELY 900mm.
(6) WINCH ONLY - NO STEPS OR LADDERS, PERMANENT OR REMOVABLE.
(7) THE MINIMUM SIZE OF ANY MANHOLE SERVING A SEWER (i.e. ANY DRAIN SERVING MORE THAN ONE PROPERTY) SHOULD BE 1200x750mm RECTANGULAR OR 1200mm DIAMETER.

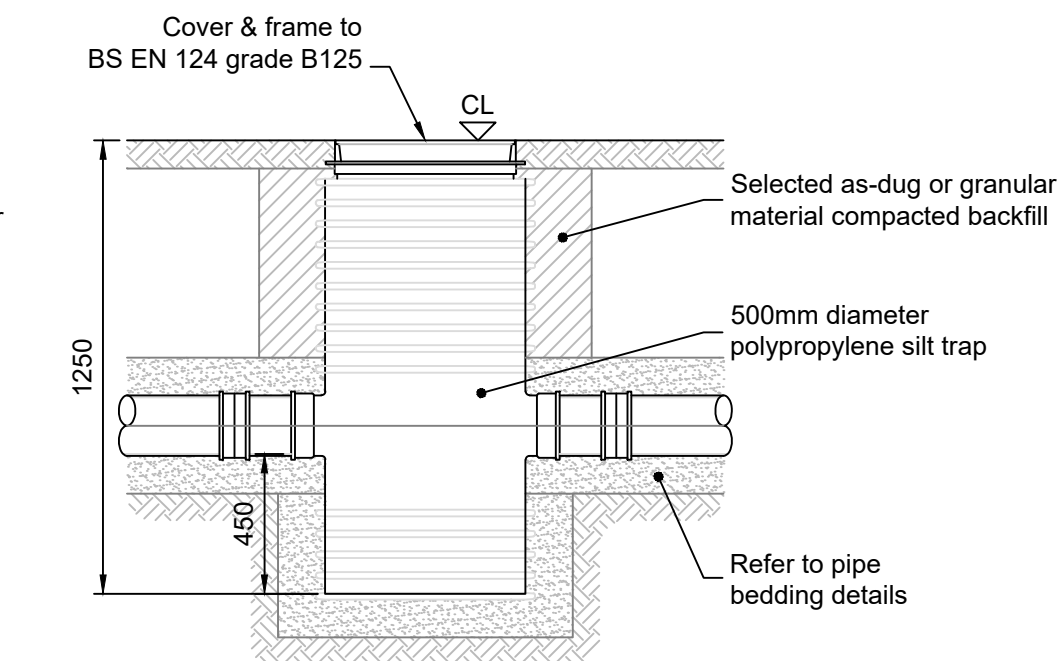
MINIMUM DIMENSIONS FOR ACCESS FITTINGS AND INSPECTION CHAMBERS (table 13 Part H)						
FROM	TO	ACCESS FITTING			INSPECTION CHAMBER	MANHOLE
		SMALL	LARGE	JUNCTION		
START OF EXTERNAL DRAIN		12	12	-	22	45
RODDING EYE		22	22	22	45	45
ACCESS FITTING:						
SMALL-150mm		-	-	12	22	22
SMALL-150x100mm		-	-	45	22	45
LARGE-225x100mm		-	-	-	22	45
INSPECTION CHAMBER						
SHALLOW		22	45	22	45	45
MANHOLE INSPECTION CHAMBER DEEP		-	-	-	45	45(2)

NOTES:
(1) STRUCK OR GROUND FLOOR APPLIANCE;
(2) MAY BE UP TO 300 FOR MAN-ENTRY SIZE DRAINS AND SEWERS;

NOTES:
(1) STACK OR GROUND FLOOR APPLIANCE.
(2) MAY BE UP TO 250 FOR MAN-ENTRY SIZE DRAINS AND SEWERS.

TABLE SHOWING PRIVATE MANHOLE/INSPECTION CHAMBER COVER GRADES AND AREAS OF USE	
COVER GRADE TO BS EN 124	LOCATION
D400	FOR USE IN INDUSTRIAL ROADS AND PARKING AREAS ACCESSIBLE TO ALL TYPES OF ROAD VEHICLES INCLUDING HGV'S.
C250*	FOR USE IN PRIVATE ROADS OR PARKING AREAS eg. CAR PARKS AND MINOR PRIVATE ROADS ACCESSIBLE TO REFUSE VEHICLES, FIRE APPLIANCES ETC WITH POSSIBLE OCCASIONAL HGV USE.
B125	FOR USE IN FOOTWAYS, PEDESTRIAN AREAS, DRIVEWAYS AND CAR PARKS ACCESSIBLE BY LIGHT VEHICLES ONLY.
A15	FOR USE IN AREAS WHICH CAN ONLY BE USED BY PEDESTRIANS AND PEDAL CYCLISTS.

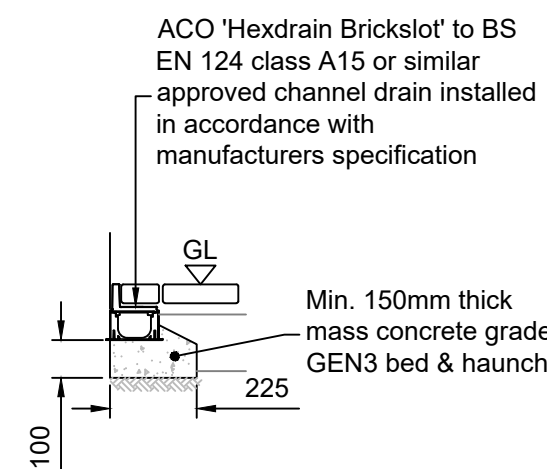
* D400 MAY BE USED IN LIEU OF C250 IF PREFERRED.



Notes: Standard depth 1.25m, can be cut to suit required invert level. Depth can be increased with raising pieces as necessary with non-man entry 350mm Ø restrictor cap to be used for depths over 1.25m. For use with 100mm & 150mm Ø pipework. To be installed in accordance with manufacturer's details.

SILT TRAP DETAIL

Scale 1:20



THRESHOLD DRAIN DETAIL

Scale 1:20

NOTES/LEGEND

- THESE DETAILS TO BE READ IN CONJUNCTION WITH THE EXTERNAL WORKS LAYOUT;
- THE CONTRACTOR SHALL CHECK ALL TIE-INS FOR LINE AND LEVEL WITH EXISTING BEFORE COMMENCING ANY WORKS. ANY ERRORS SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER;
- ALL PRIVATE DRAINAGE WORKS TO BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF BUILDING REGULATIONS 2000, PART H;
- FOUL WATER DRAINS TO HAVE AN INTERNAL DIAMETER OF AT LEAST 75mm, A DRAIN CARRYING EFFLUENT FROM A WC OR TRADE EFFLUENT SHOULD HAVE AN INTERNAL DIAMETER OF AT LEAST 100mm;
- DRAINS SERVING MORE THAN ONE PROPERTY TO HAVE MIN DIAMETER OF 100mm WHEN SERVING NO MORE THAN 10 DWELLINGS. DRAINS SERVING MORE THAN 10 DWELLINGS SHOULD NORMALLY HAVE A MIN 150mm DIAMETER;
- ALL PIPES, CHAMBERS AND FITTINGS ARE TO BE INSTALLED AND BACKFILLED IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS;
- ALL MANHOLES TO BE FITTED WITH COVER GRADES APPROPRIATE FOR THEIR POSITION - SEE TABLE ON SHEET 3. MANHOLES TO BE POSITIONED IN SOFT WHEREVER POSSIBLE AND TO AVOID PAVING SLABS LOCATION WHEREVER POSSIBLE;
- ALL DRAINS IN THE VICINITY OF BUILDINGS TO BE CONSTRUCTED IN ACCORDANCE WITH DETAILS INDICATED ON SHEET 3;
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO EXECUTE THE WORKS AT ALL TIMES IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE HEALTH & SAFETY AT WORK ACT 1974 AND THE CDM REGULATIONS 2015. THE CONTRACTOR WILL BE DEEMED TO HAVE ALLOWED FOR COMPLIANCE WITHIN THEIR RATES;
- ALL DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE INDICATED;
- FLEXIBLE PIPES TO COMPLY WITH:

UPVC	BS EN 1401
PP	BS EN 1852
STRUCTURAL WALLED	BS EN 13476
- RIGID PIPES TO COMPLY WITH:

VITRIFIED CLAY	BS 65/BS EN 295
CONCRETE	BS 5911
DUCTILE IRON	BS EN 598
- CONNECTIONS TO ADOPTABLE SEWERS TO BE MIN. 150mm DIAMETER;
- RUN-OFF FROM PRIVATE DRIVES TO BE RETAINED AND MUST NOT SHED TO ADOPTABLE HIGHWAY AREAS UNDER ANY CIRCUMSTANCE;

A	04/02/2022	ISSUED FOR COMMENT	ZJ	SON
Rev	Date	Description	Made	Checked

Status of Drawing: ISSUED FOR COMMENT

Client:



Project:

LINCS GATEWAY
SPALDING

Drawing Title:
EXTERNAL WORKS
CONSTRUCTION DETAILS – SHEET 3



Drawn	Checked	Approved	Scales	Drawing No.	Rev
ZJ	SON	SON	NTS	AH/LG/119	A

Date: FEB 2022