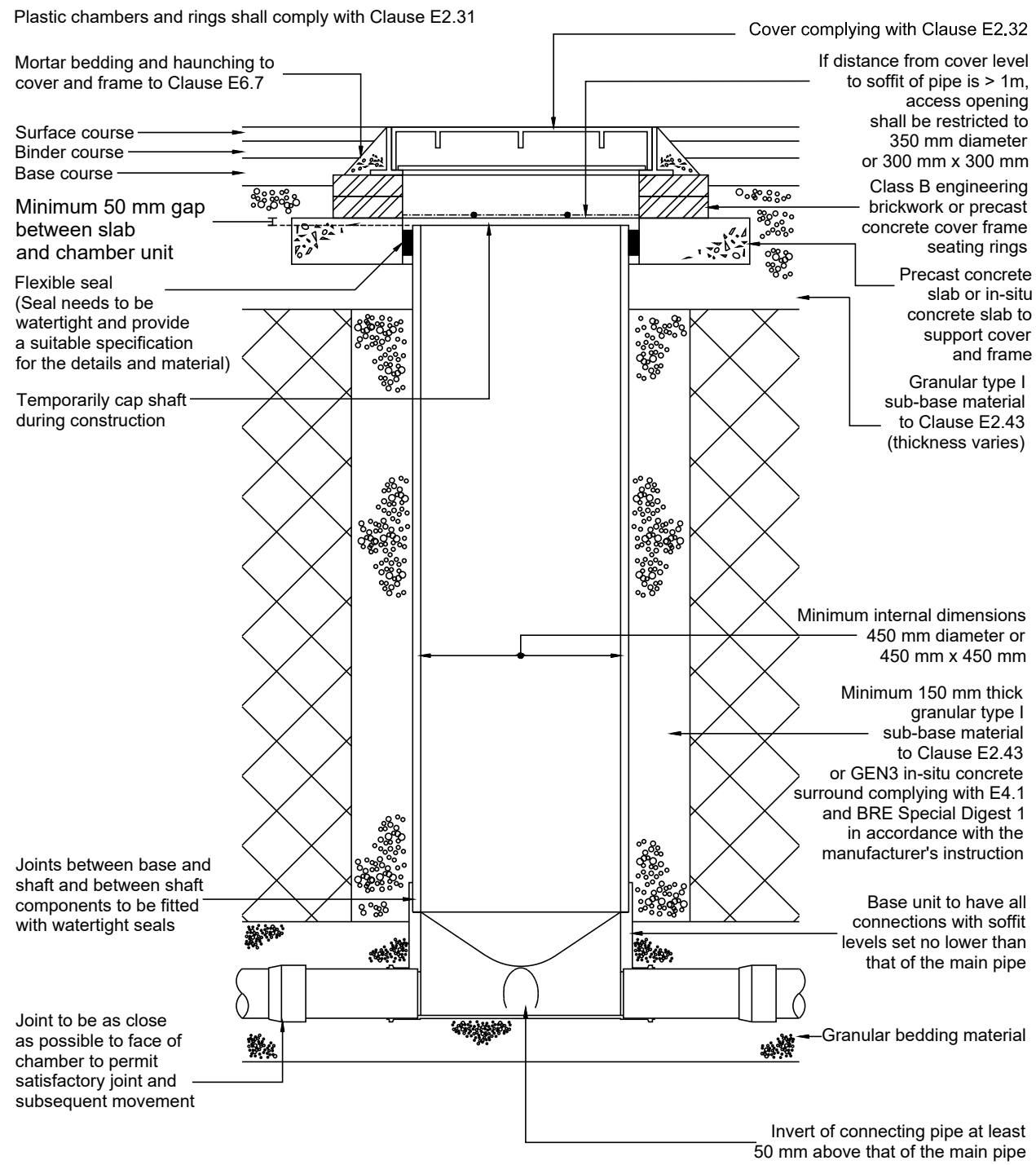


FIGURE B 37
TYPICAL INSPECTION CHAMBER DETAIL - TYPE D

Depth from cover level to soffit of pipe up to 3 m
Flexible material construction for use in areas subject to vehicle loading

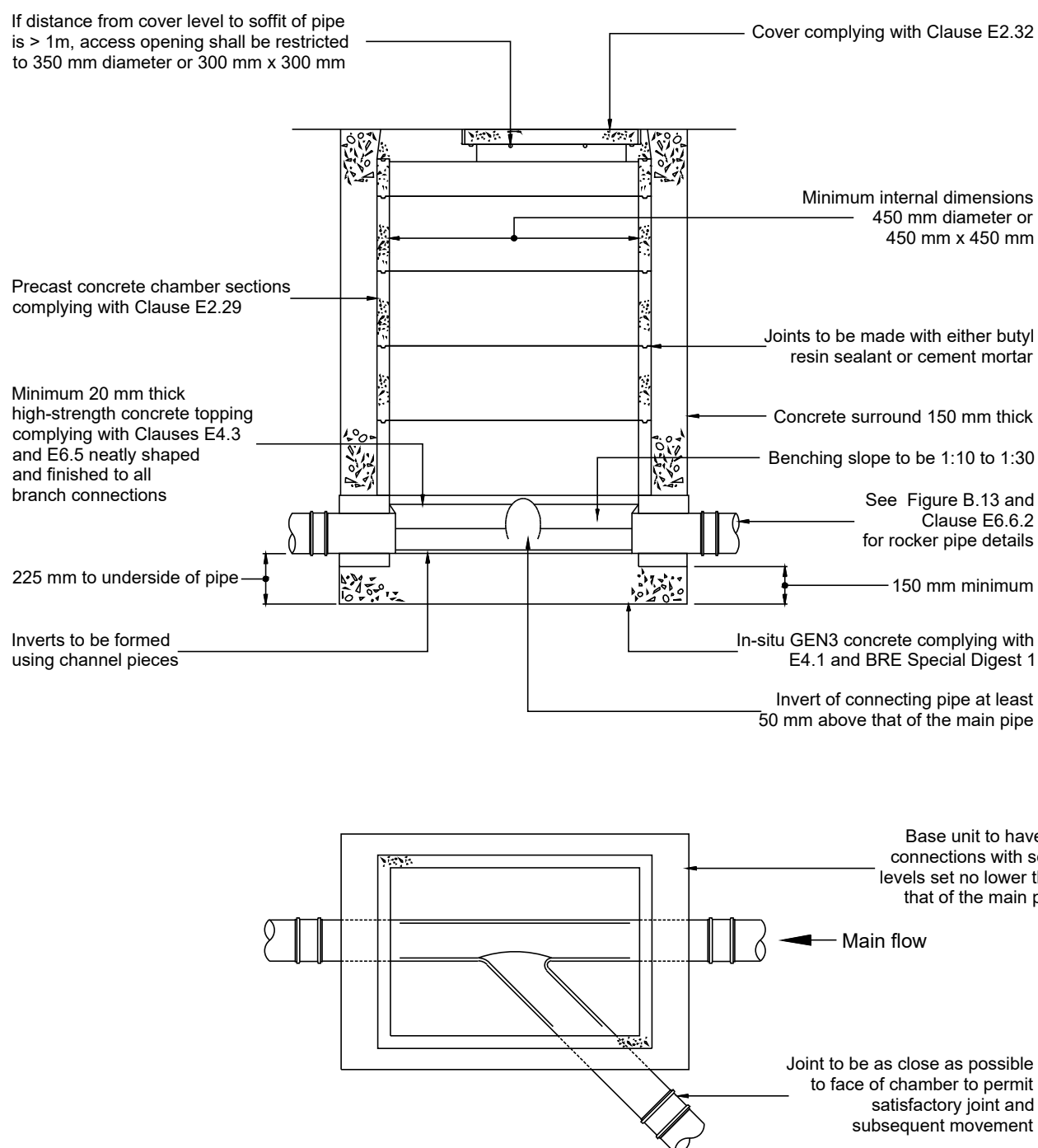


Note: Where the access chamber is in the highway (including any footway), the highway authority can have specific requirements.

Not to scale

FIGURE B.21
TYPICAL INSPECTION CHAMBER DETAIL - TYPE D

Depth from cover level to soffit of pipe up to 3 m
Rigid material construction for use in areas of light vehicle loading or landscaped areas

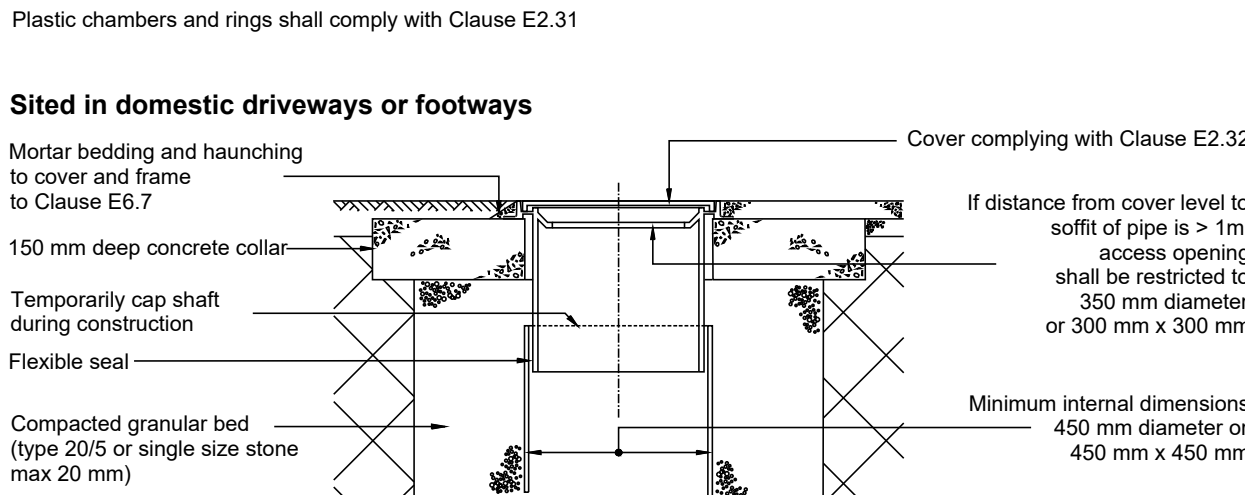


Note: Where the access chamber is in the highway (including any footway), the highway authority can have specific requirements.

Not to scale

FIGURE B 38
TYPICAL INSPECTION CHAMBER DETAIL - TYPE D

Flexible material construction alternative top details for use in areas of light vehicle loading c landscaped areas

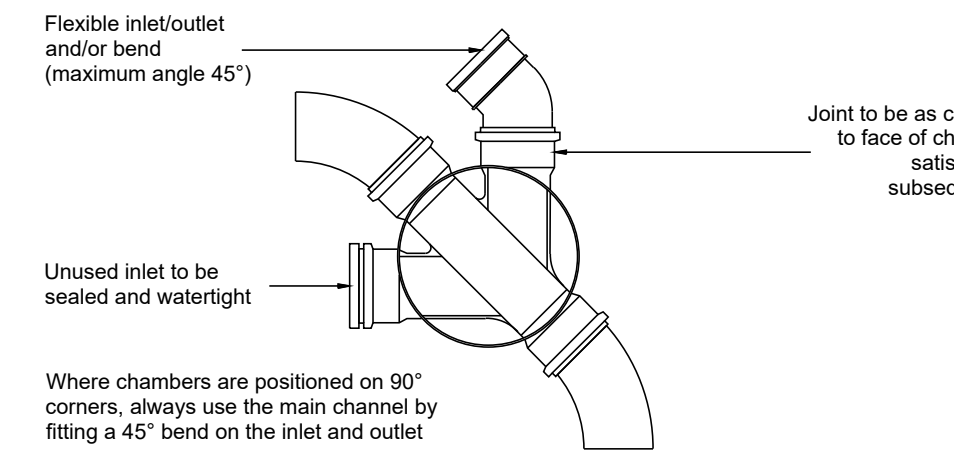
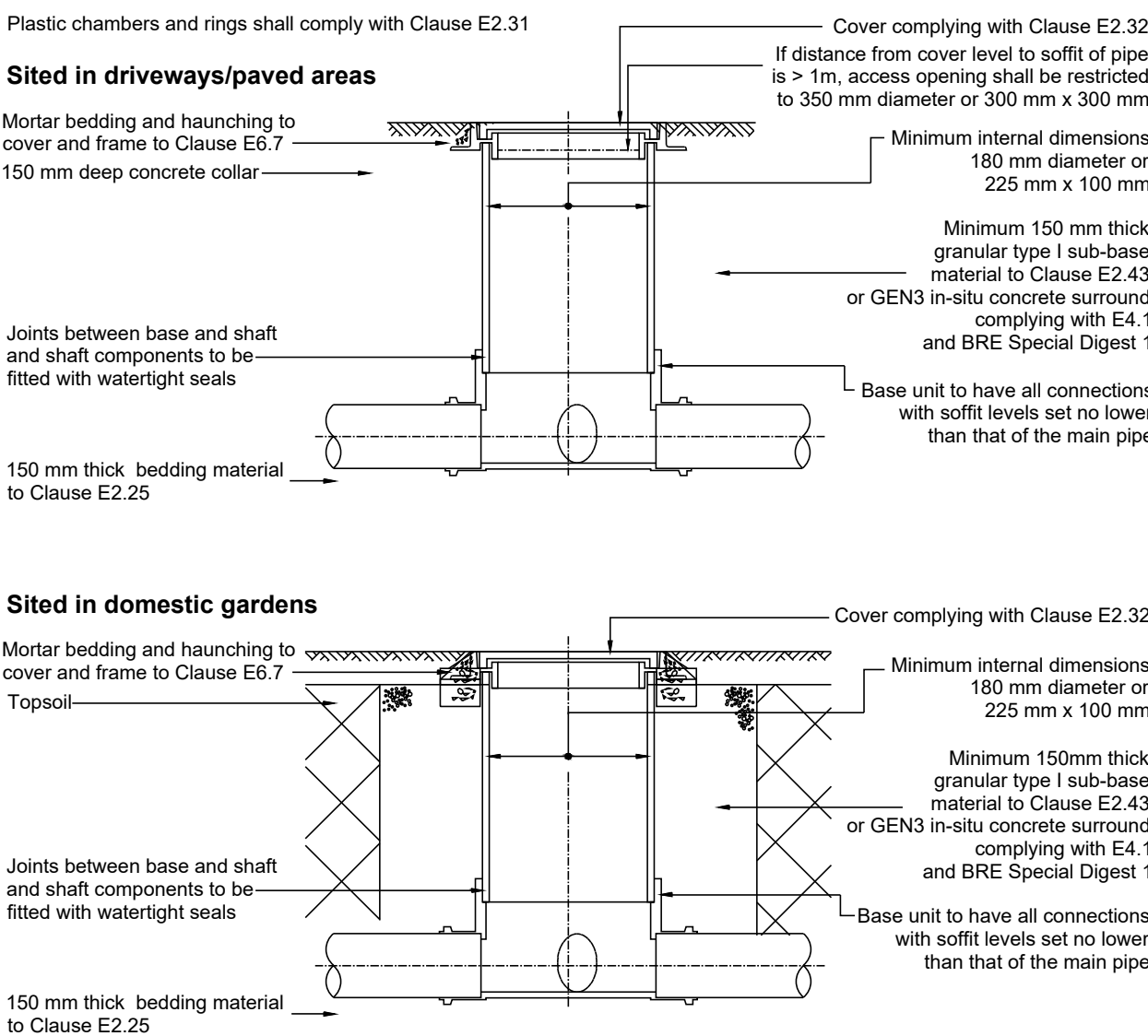


Note: Where the access chamber is in the highway (including any footway), the highway authority can have specific requirements.

Not to scale

FIGURE B.23
TYPICAL INSPECTION CHAMBER DETAIL - TYPE E

Depth from cover level to soffit of pipe up to 2 m
Flexible material construction

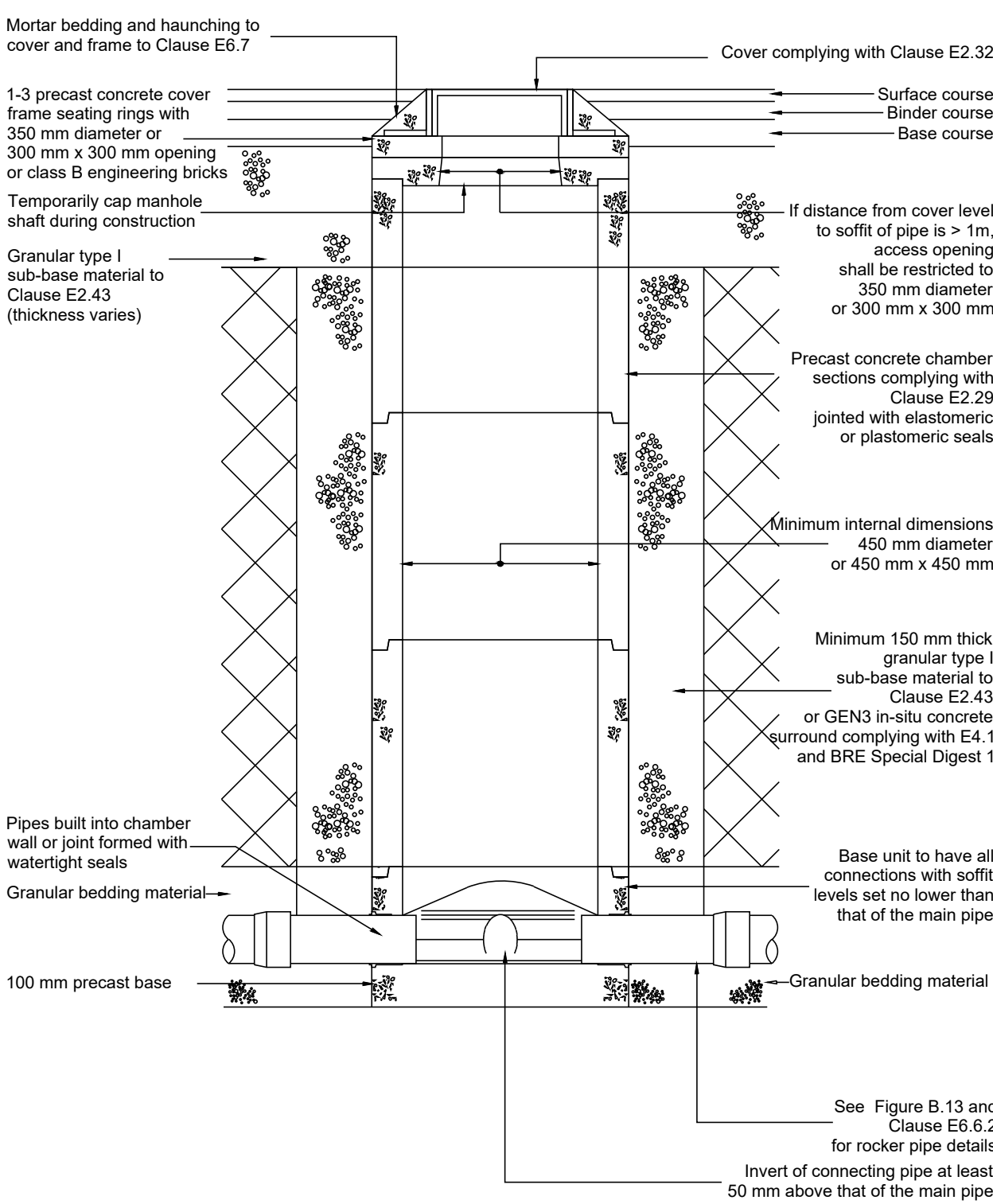


Note: Where the access chamber is in the highway (including any footway), the highway authority can have specific requirements.

Not to scale

FIGURE B 39
TYPICAL INSPECTION CHAMBER DETAIL - TYPE D

Depth from cover level to soffit of pipe up to 3m
Rigid material construction for use in areas subject to vehicle loading

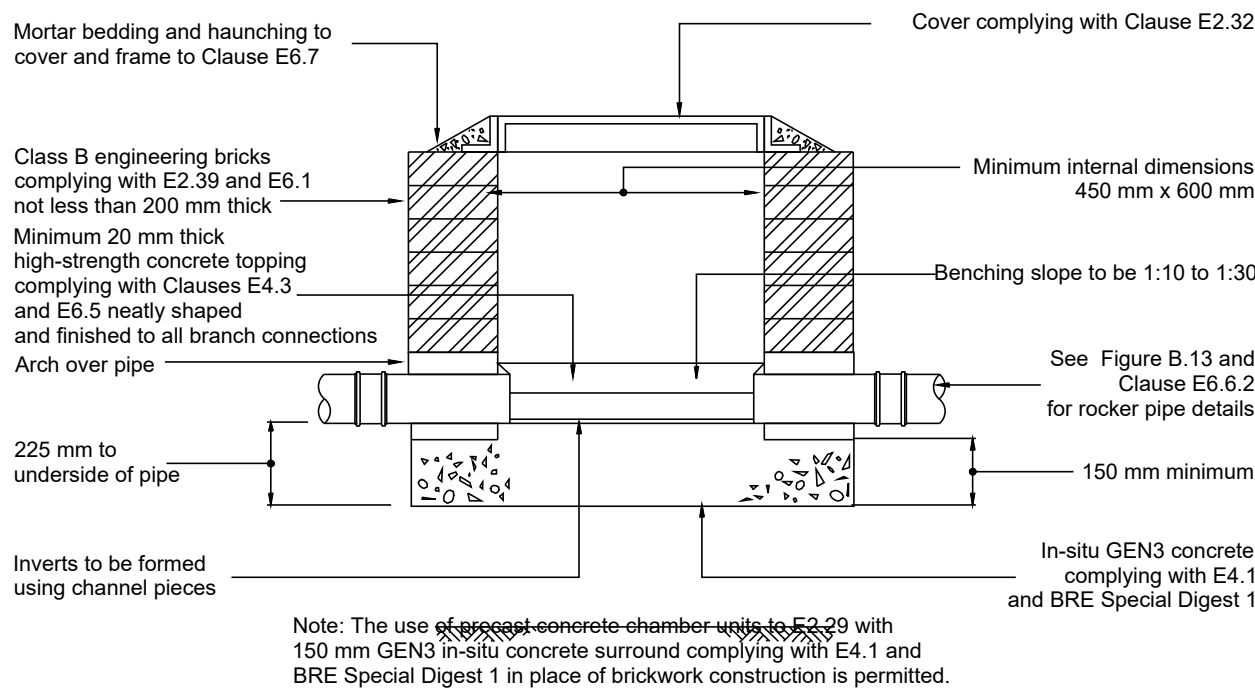


Note: Where the access chamber is in the highway (including any footway), the highway authority can have specific requirements.

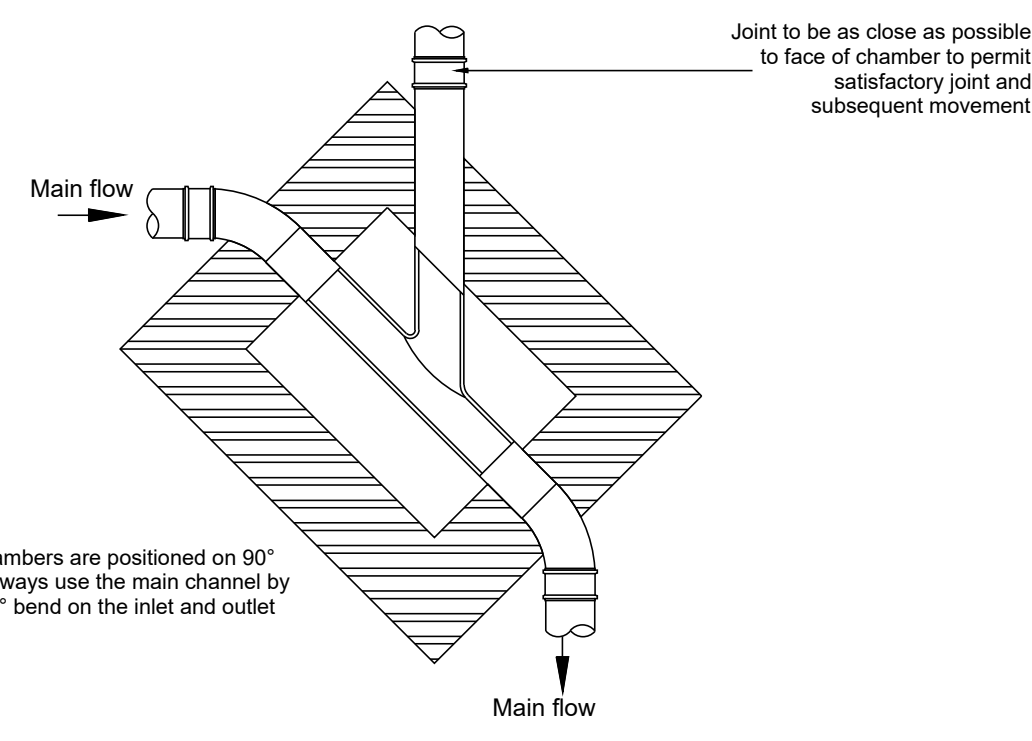
Not to scale

FIGURE B.24
TYPICAL INSPECTION CHAMBER DETAIL - TYPE E

Depth from cover level to soffit of pipe up to 1 m
Rigid material construction



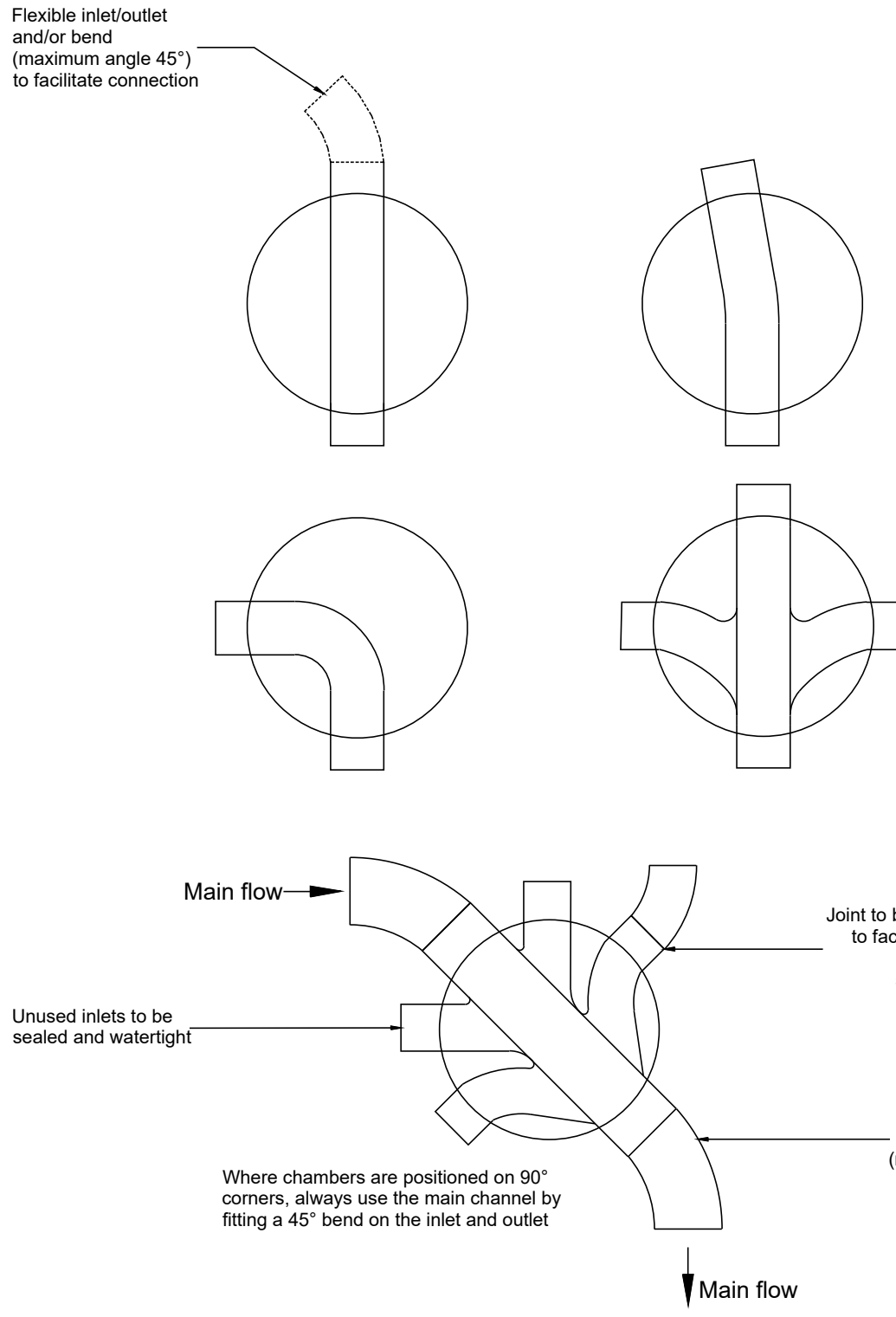
Note: The use of precast concrete chamber units to E2.29 with 150 mm GEN3 in-situ concrete surround complying with E4.1 and BRE Special Digest 1 in place of brickwork construction is permitted.



Note: Where the access chamber is in the highway (including any footway), the highway authority can have specific requirements.

Not to scale

FIGURE B.22
TYPICAL BASE LAYOUTS FOR TYPE D CHAMBERS



Note: Where a bend is used immediately outside the manhole, this may be used as the rocker pipe.

NOTES:

- D400 covers & frames with kitemark to be used on all adaptable manholes. All covers to be embossed with FW/SW as appropriate. 150mm deep, non rocking cover and frames to be used.
- Cover and Reducing slots, shaft and chamber rings to be bedded with mortar, proprietary bitumen or resin mastic sealant. All lifting holes to be pointed.
- Ensure all slab openings and step irons, ladders are properly aligned. At the foot of each ladder or set of step rungs, a minimum of 450 mm landing area should be provided from the outer edge of the step or rung. This may consist of:
 - a) a single area adjacent to the foot of the ladder or steps; or
 - b) where the channel is no more than DN450, one area of at least 225 mm adjacent to the foot of the ladder or steps with the remainder on the other side of the channel.
- Chamber Diameters:

Dia. of largest pipe in M.H. (mm)	Dia. of chamber ring (mm)
Less than 375	1200
375-450	1500
500-700	1500
750-900	1800
1050-1200	2100
1350-1500	2400
1650-1800	2700
- Above sizes are minimum and may need increasing for more than one incoming pipe to accommodate adequate benching.
- Concrete mix to be in accordance with the chemical analysis report for buried concrete for the site concerned. High strength topping to BS EN 12620 and PD 6682-1 to be brought up to a dense smooth face neatly shaped and finished to all branch connections. Benching slope to be not flatter than 1 in 30.
- Rocker/Short pipe lengths:

Pipe dia. (mm)	Rocker pipe length (m)
150-600	0.6
601-750	1.00
over 750	1.25

Short length pipes to be similar length to rocker pipe. Manhole to large diameter sewers. Chambers with outgoing pipes greater than 600mm dia. to be constructed as per detail. Toe holes to be provided in benching of sewers greater than 450mm dia. for access to invert. Bricks to be solid type and either Class B engineering bricks complying with the relevant provisions of BS EN 771-1 or special bricks shall comply with the relevant provisions of BS 4772 with Sulphate-resisting Portland cement binder. Brickwork to be in English bond.

9. Brick Manhole Widths. Chamber widths to be increased for pipes larger than 225mm dia. to give 225mm benching each side with the brickwork corbelled down to suit cover.

10. All pipes built into manhole invert should be installed with soffits level.

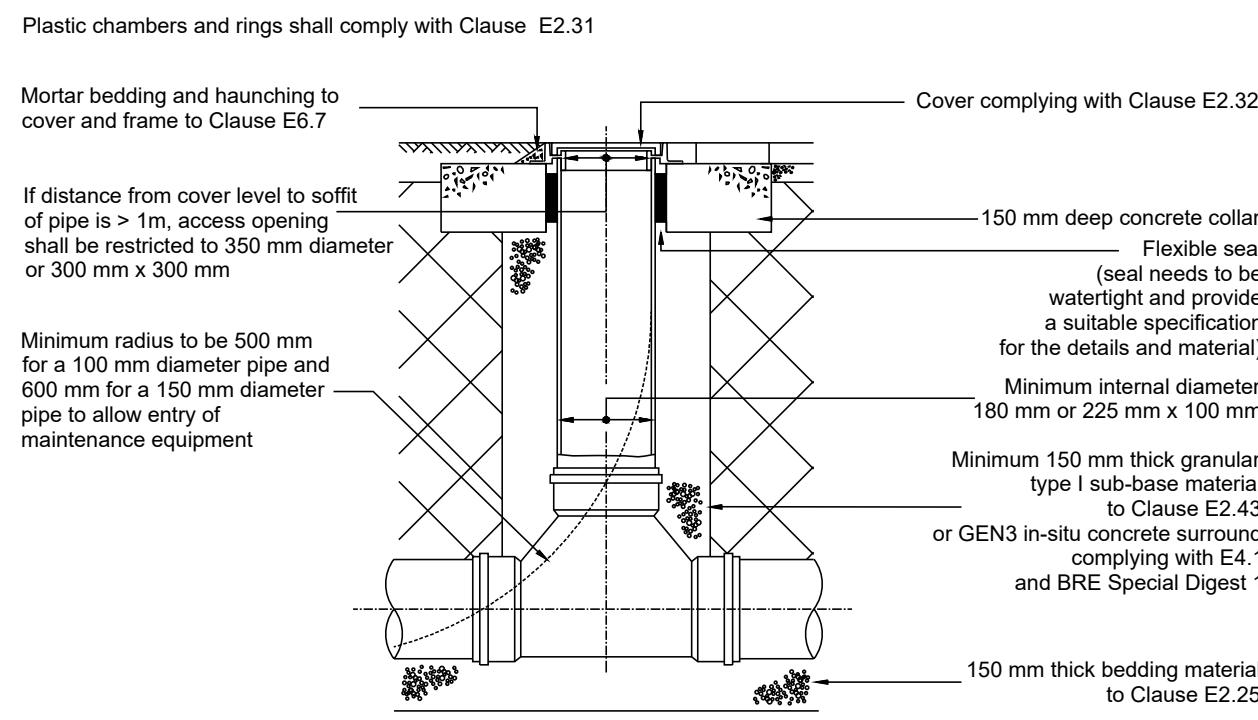
11. PIPE BEDDING AND BACKFILL MATERIALS Granular bedding and siltfill Type A material shall be imported or selected as dug material complying with the recommendations of WAA Notes 4-08-02. Selected fill shall consist of uniform, readily compactible material, free from vegetable matter, building rubbish and frozen materials, or materials susceptible to spontaneous combustion, and excluding clay of liquid limit greater than 80 and/or plastic limit greater than 35 and materials of excessively high moisture content. Clay lumps and stones retained on 75mm and 37.5mm sieves respectively shall be excluded from the fill material. Pipe bedding and fill materials to concrete pipes shall not contain more than 0.3% sulphate, expressed as sulphur trioxide.

TRENCH WIDTHS		
Pipe dia. (mm)	BC (mm)	BD (mm)
150	190	600
225	280	700
300	380	750
375	500	1050
450	580	1150
525	670	1200
600	750	1350
750	960	1560
900	1160	1760
1350	1620	2220
1500	1740	2340
1800	2090	2690

- All Adaptable Drainage pipes to be of spigot & socket type connection.
- During construction all outfall manholes to be fitted with debris screen (mesh size 25mm), over the outgoing pipes
- All Adaptable Drainage Works shall comply with the requirements of Design and Construction Guidance for foul and surface water sewers offered for adoption under the Code for adoption agreements for water and sewerage companies operating wholly or mainly in England ("The Code") Approved Version 2.0

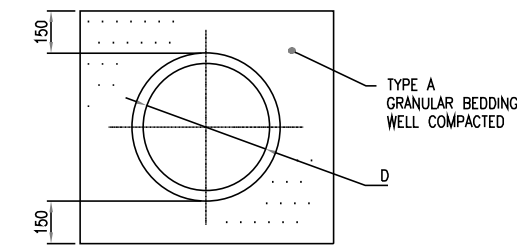
FIGURE B.25
TYPICAL INSPECTION CHAMBER DETAIL - TYPE E

Depth from cover level to soffit of pipe up to 2 m
Flexible material construction



Note: Where the access chamber is in the highway (including any footway), the highway authority can have specific requirements.

BEDDING DETAILS FOR CONCRETE & CLAYWARE PIPES



GRANULAR BED & SURROUND CLASS S BEDDING FACTOR 2.2

- NOTES:
- CLASS 'S' GRANULAR BED AND SURROUND PREFERRED WITH THE ADDITION OF A REINFORCED CONCRETE PROTECTION SLAB WHERE THE DEPTH OF COVER IS LESS THAN 1.2M OR LESS THAN 0.9m IN NON TRAFFICKED AREAS.
 - SEE WIS 4-08-02 FOR BEDDING MATERIAL SPECIFICATION
 - REFER TO IGN 4-11-02 FOR TRENCH WIDTH DETAILS

REV	DESCRIPTION	DATE
STATUS: PRELIMINARY		
SCALE: NTS @ A1		
DATE: Oct 2025		
DRAWN: IDL		
TITLE: Adoptable Drainage Details Sheet 4		
PROJECT: London Road, St Ippolyts		
DRG. NO: 1331-03-07		
FILE REF: 1331-03-04_07		
		
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