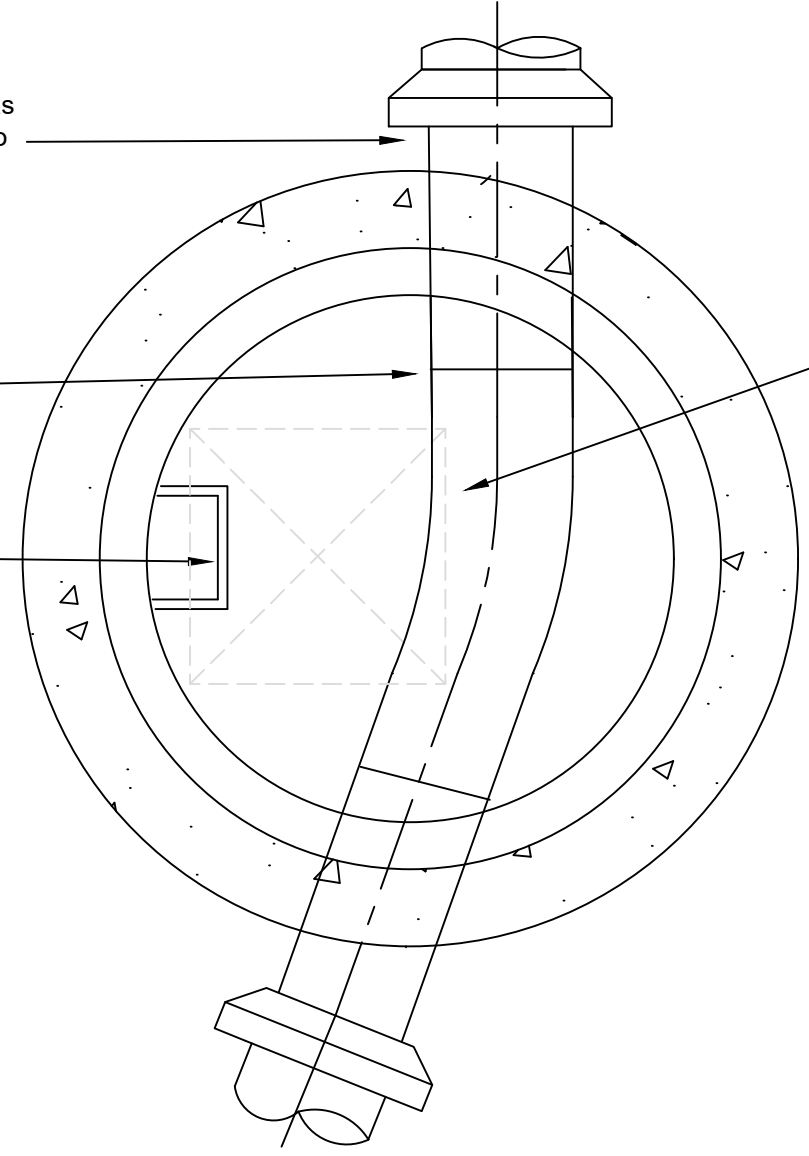
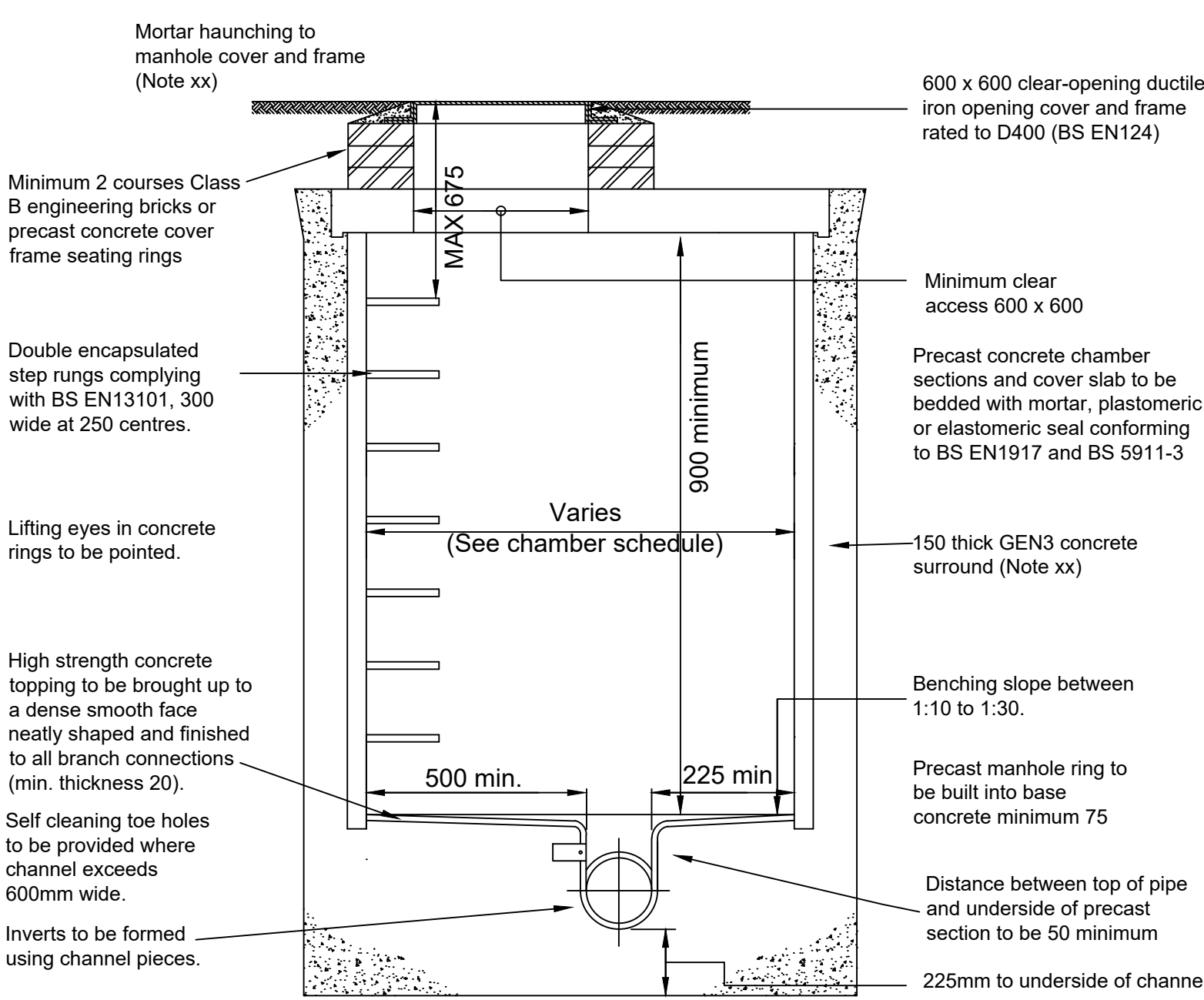
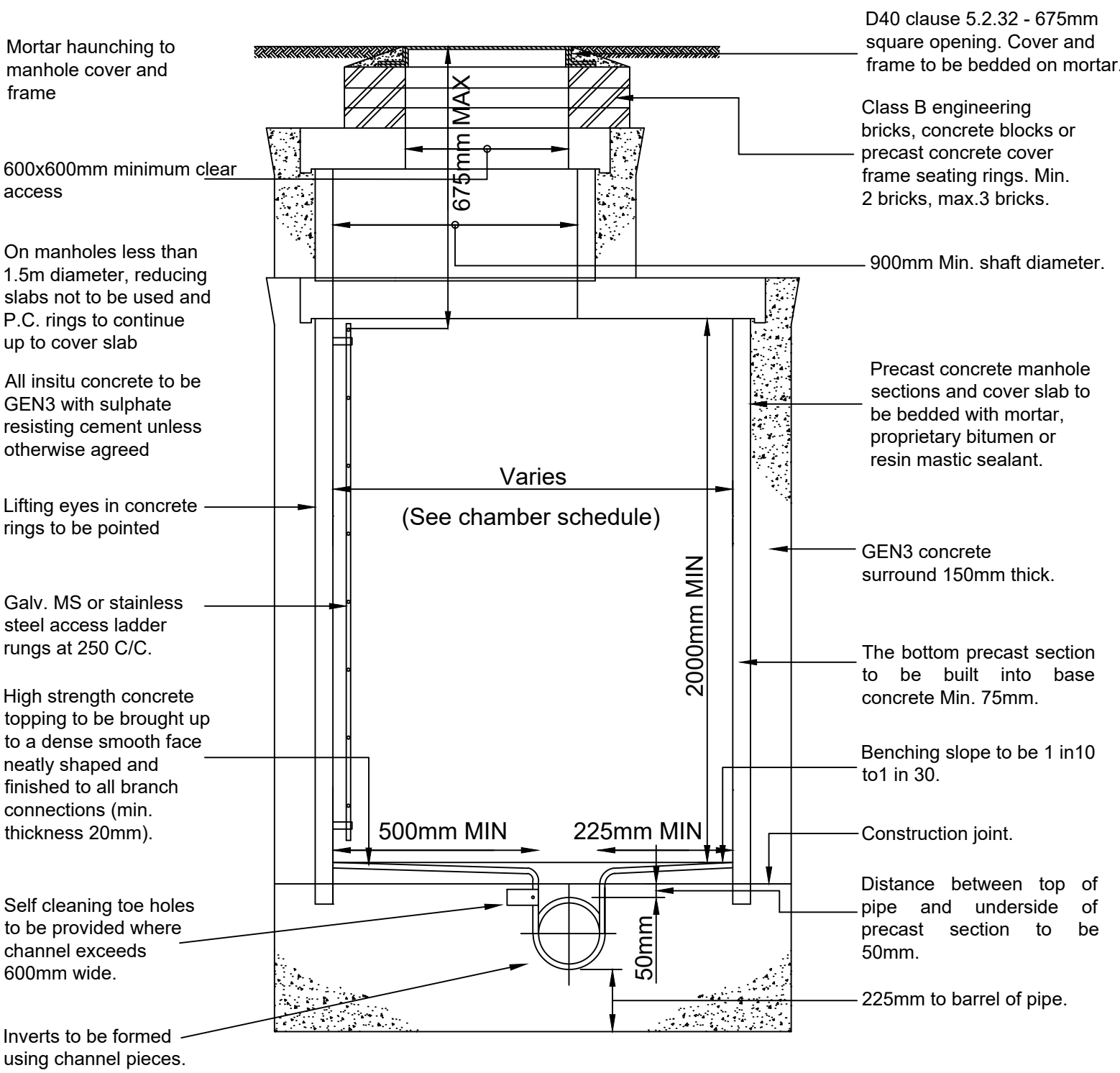
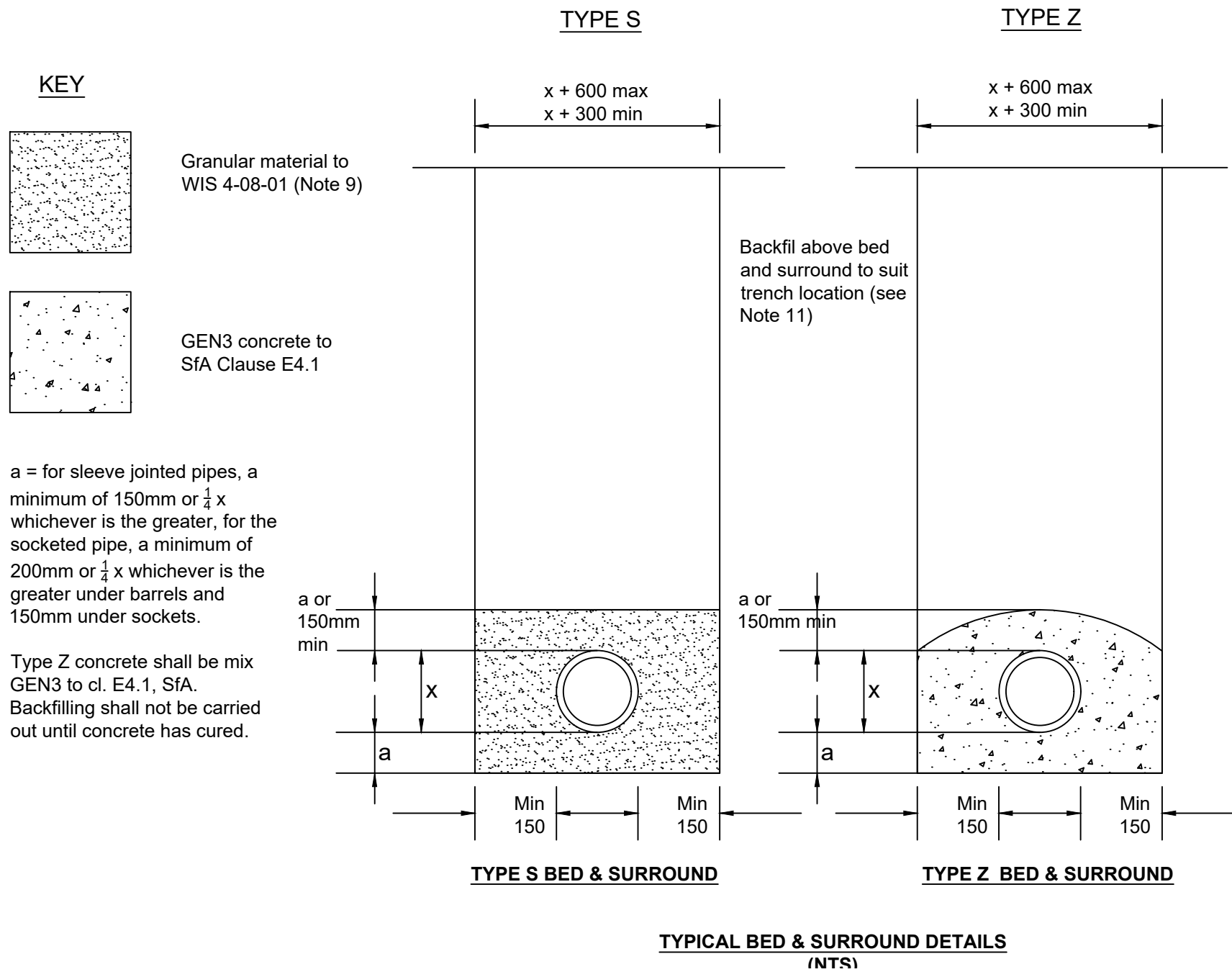




MANHOLE DETAIL TYPE 2 (Depth to soffit up to 3m)

Type 1 and Type 2 manholes may be formed of pre-cast base and thickened rings, omitting the in-situ concrete surround. Chamber walls to be min 125 thick



- NOTES:
- Do not scale from this drawing. If in doubt refer to the Engineer for clarification
 - All levels in mAO unless otherwise specified. All dimensions in metres unless otherwise specified.
 - Drainage works adoptable by Dwr Cymru shall comply with *The Welsh Ministers standards for new gravity foul sewers and lateral drains or Sewers for Adoption 7th Edition (SfA)* as appropriate.
 - Private drainage works shall comply with the *Building Standards part H*.
 - Highway drainage adoptable by Wrexham Council shall comply with *SHW* and with *WVC* requirements as appropriate.
 - Private drainage layouts are shown on dwgs 109540-521 - 52x. Drainage construction details are shown on dwgs 109540-510 - 513. Trunk-sewer long sections are shown on dwgs 106540-531 - 53x.
 - All mortar, in-situ or precast concrete must use sulphate-resisting Portland cement or alternative as per clause E2.9 (SfA). The BRE SD1 ratings are DS-1 and AC-1.
 - Manhole covers for adoptable manholes in estate roads to be rated at D400 (to BS EN124) and kite-marked. Covers to inspection chambers in driveways or other off-road areas to be rated at B125 and kite-marked.
 - All pre-cast concrete manholes to be to BS EN1916:2002 / BS 5911-1:2002 and kite-marked.
 - Manhole cover frames shall be seated on between 2-4 courses of Class B engineering brickwork or pre-cast concrete seating rings to regulate the height between the cover surface and the underside of the cover slab. Mortar to cover frames shall be a polyester resin mortar (d. E6.7, SfA) in all roads except residential cul-de-sacs, for which cement/sand (1:3) mortar may be used.
 - Manhole covers and access openings shall be orientated to ensure adequate chamber access in relation to the manhole's internal layout.
 - All vitrified clay pipes to be to BS EN 295 and kite-marked. VC pipe strength class to be minimum 34kN/m in accordance with Table 5, BS EN295-1 for pipes up to 150 dia.
 - All concrete pipes to be to BS EN1916 and BS5911-1 and kite-marked. Concrete pipe strength to be Class 120 in accordance with Table 8 BS5911-1.
 - All rockor pipes to be 0.6m long.
 - Bedding fill for Type S bed & surround to be graded gravel in accordance with WIS 4-08-01, sized as below:

Pipe Dia	Aggregate size
100	10mm (single-size)
150	5 - 14mm
225-300	5 - 14 / 20mm
 - Sewers beneath roads and communal parking areas to be backfilled above the bed & surround with Type 1 or Type 2 granular fill laid and compacted in layers not exceeding 0.3m thick up to the underside of the pavement construction. Sewer lengths beneath landscaped areas may be backfilled with selected excavated fill laid and compacted in layers to suit the material, subject to the Engineer's prior approval of the proposed backfill material.
 - A proprietary pre-formed concrete base may be used in lieu of an in-situ concrete base for chambers 1050 dia and above, subject to the Engineer's prior approval of the system proposed. Thickened pre-cast concrete rings may be used for the same chambers in lieu of pre-cast rings and in-situ surround, also subject to the Engineer's prior approval of the system proposed.
 - All mortar, in-situ or precast concrete shall use sulphate-resisting Portland cement to BS 4207. Site ground condition ratings under BRE SD1 are AC-1 and DS-1.

Rev.	Date	Revision details	Drawn	Checked	Approved

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Client
EDWARD HOMES LTD.

Project
PLAS COCH ROAD, WREXHAM

Title
**DRAINAGE CONSTRUCTION DETAILS
SHEET 1 OF 4
ADOPTABLE DRAINAGE - DWR CYMRU**

Drawn NJH	Checked TD	Approved TD
Original dwp. size A1	Date NOV '20	Scale NTS
Drawing Status APPROVAL	Drawing Number 109540 - 510	Rev. -

Not approved for construction