

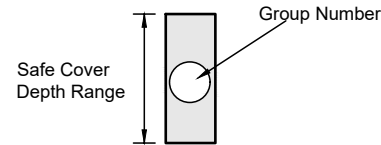
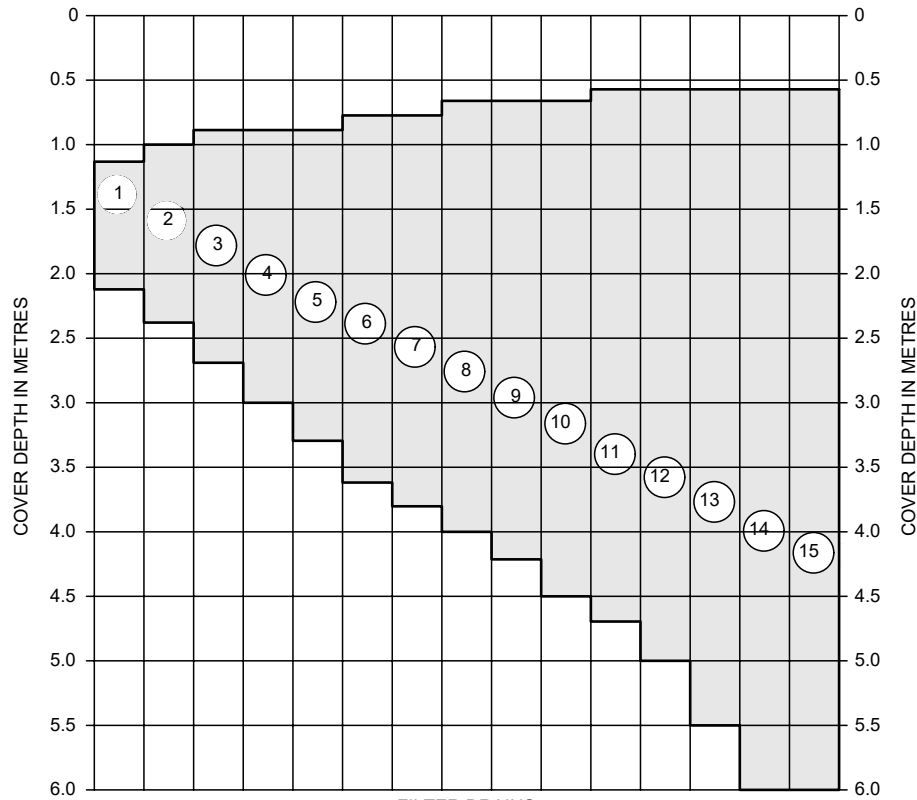
TYPES OF PIPE TO WHICH CHARTS ARE APPLICABLE

The charts are applicable to the following types of pipe:

- Vitrified Clay pipes to BS 65: 1988 to Classes S Standard Strength; ES Extra Strength and SS Super Strength.
- Precast Concrete pipes Classes L, M and H to the following Standards:

BS 5911: Part 1: 1981; AMD 4035
BS 5911-1
- Unplasticised PVC pipes with an SDR of 41 (or less for the smallest sizes) to the following standards:

BS 4660: (size 110mm & 160mm diameter)
BS EN 1401-1
BS EN 1452-1, BS EN 1452-2 & BS EN 1452-3
- Concrete porous pipes, Standard and Extra Strength to BS 5911-114 for filter drains only.
- Flat invert corrugated unplasticised PVC pipes to Clause 501.7 of the SHW in nominal diameters of 150mm and 250mm.
- The types of pipe bedding that are covered are those shown in the Highway Construction Details drawing F1 and F2.
- Bedding strength provided by all filter drain types shown in the H.C.D. are acceptable, design is a check on the suitability of the pipe for the given loading.



Unplasticised PVC pipe to be used only at cover depth 0.9m

same hydraulic capacity less than 95% of concrete pipe of

NOMINAL INTERNAL DIAMETER (mm)	VITRIFIED CLAY			PRECAST CONCRETE				UNPLASTICISED PVC+		NOMINAL INTERNAL DIAMETER (mm)
	S	ES	SS	S/L	ES	M	H	CORRUGATED	SDR = 41	
100	15	15	15					14		100
150	14	14	15	15		15		12	15	150
200	9	13						14		200
225	6	11	13	10		12				225
250	6	12						12	14	250
300	4	8	12	5		8		14		300
375	4	8		2		10		14		375
400	9	11	13	8		12		14		400
450	4	9		8		8		14		450
500	5	8	13							500
525										525
600	2	8	13							600
675										675
700			13							700

Filter Drains - Group numbers for determining allowable pipes

This is a typical detail and may require conversion to a full scheme specific drawing.

NOT TO SCALE
(all units in millimetres)

Disclaimer : Before making use of this detail, any designer or third party must ensure that it satisfies all requirements of the scheme to which it is being applied. Lincolnshire County Council accept no responsibility for third party use of this Standard Detail.

Rev: AMENDMENT DETAILS Date: Description: Approved by:

Lincolnshire
COUNTY COUNCIL
Working for a better future

Checked by: GP Approved by: SB

ISSUED 12/05/17

Filter Drains - Permitted Pipe Types
& Bedding / Backfill Details

SD/5/18
Standard Detail Number

Revision Number