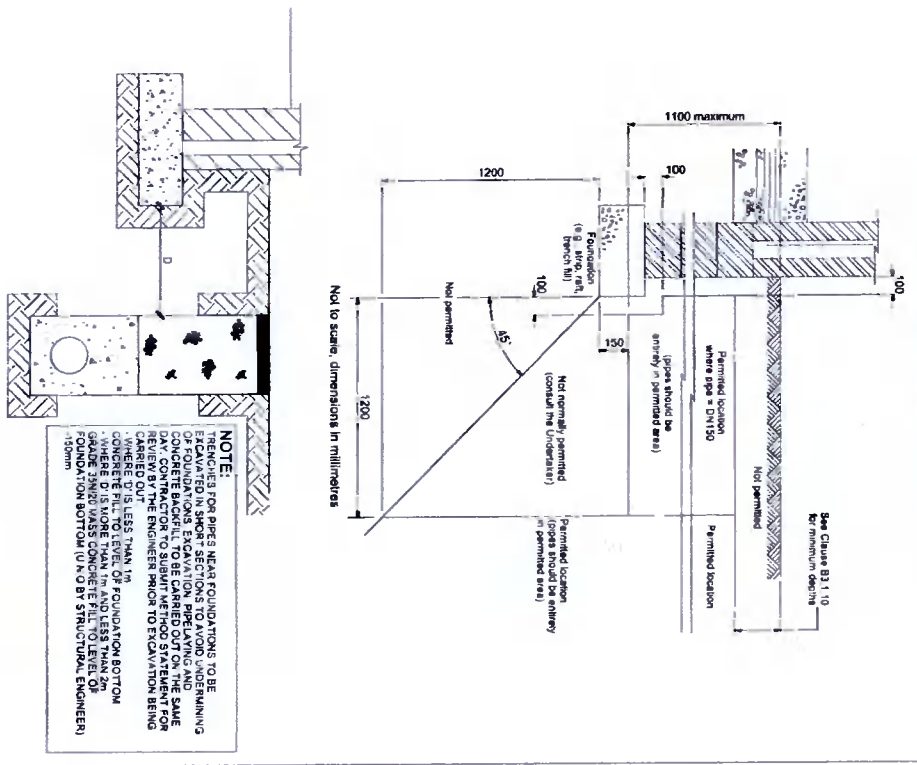
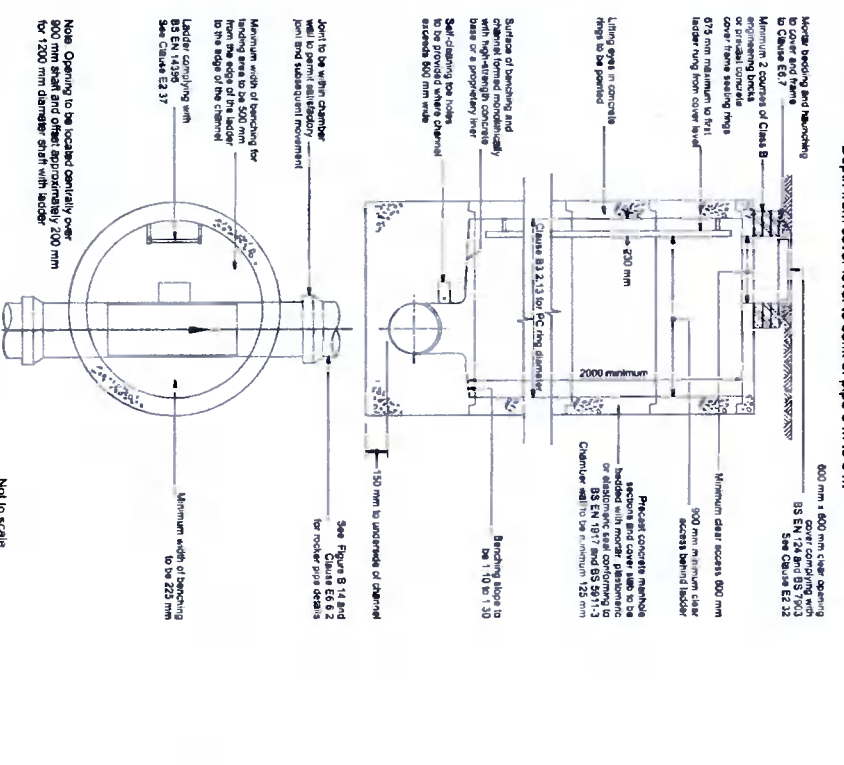


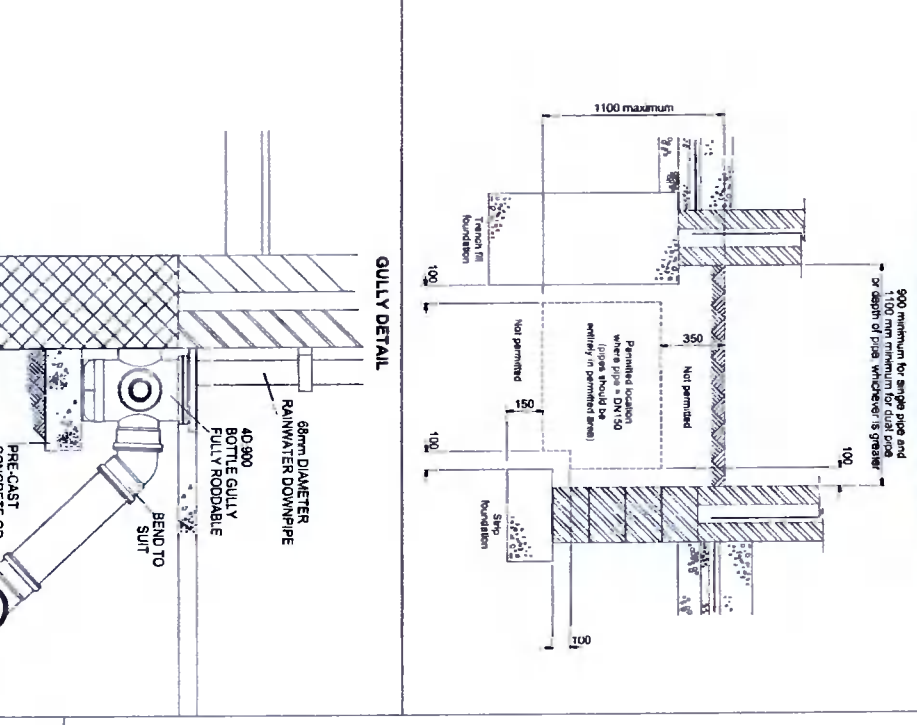
**PERMITTED LOCATION OF SEWERS AND LATERAL DRAINS IN PROXIMITY TO BUILDINGS**



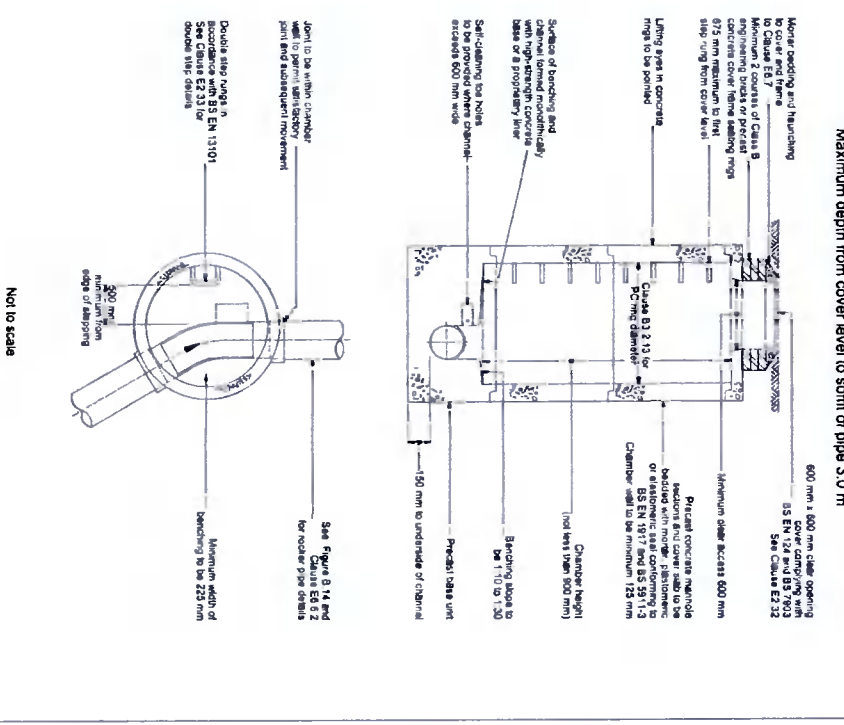
**TYPICAL MANHOLE DETAIL - TYPE 1B (Alternative construction detail)**  
Depth from cover level to soffit of pipe 3 m to 6 m



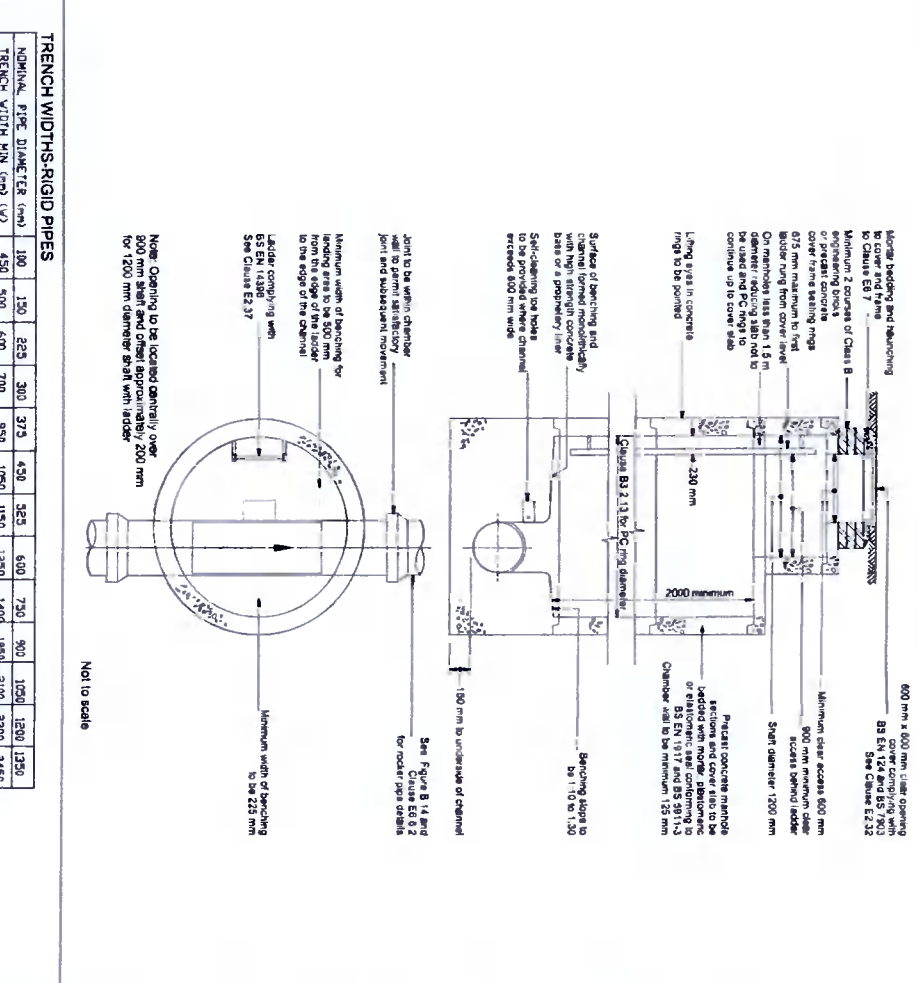
**AND LATERAL DRAINS BETWEEN BUILDINGS (where Figure B.1 is not applicable only)**



**TYPICAL MANHOLE DETAIL - TYPE 2 (Alternative construction detail)**  
Maximum depth from cover level to soffit of pipe 3.0 m



**Depth from cover level to soffit of pipe 3 m to 6 m**

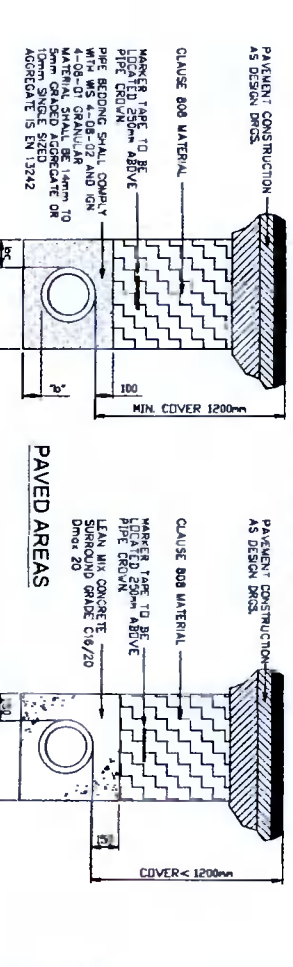
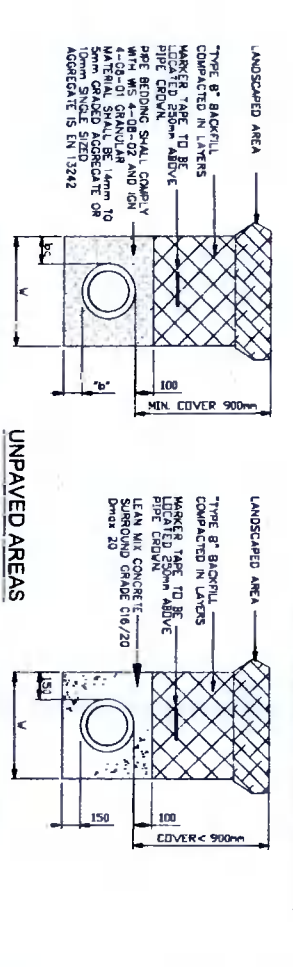
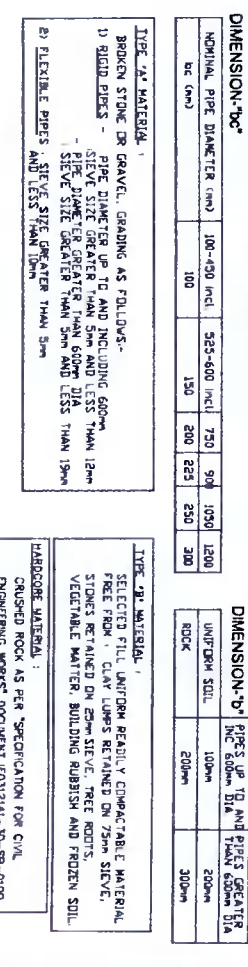


**TRENCH WIDTHS-RIGID PIPES**

NOMINAL PIPE DIAMETER (mm)	100	150	225	300	375	450	600	750	900	1050	1200
TRENCH WIDTH MIN (mm)	450	500	600	700	950	1050	1150	1400	1450	1600	2300
TRENCH WIDTH MAX (mm)	650	700	800	900	1150	1250	1450	1600	1750	2300	2850

**DIMENSION-B'**

PIPE SIZE TO AND PILES GREATER THAN 600mm DIA	100mm	200mm	300mm
ROCK	100mm	200mm	300mm



- All dimensions to be checked on site. Engineer to be informed immediately if any discrepancies arise with project.
- Existing boundaries are subject to this condition.
- All structural sections to be to the S305 U.K.C. and shall comply with the requirements of Eurocode 3.
- The contractor shall ensure that the location of all manhole cover joints is confirmed by the architect and the engineer prior to commencement of the work.
- All locations to be shown solid black with a minimum compressive strength of 35N/mm<sup>2</sup> and shall comply with the requirements of Eurocode 2.
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**P1 - Suitable for Planning**  
Peter Thornberry  
Civil Engineer

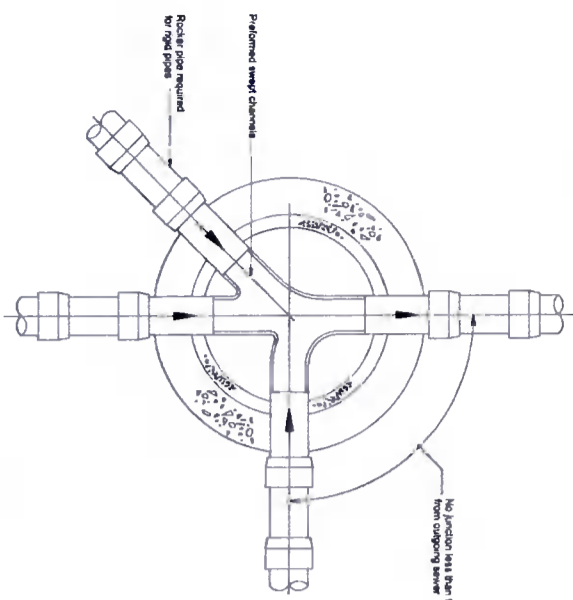
**SHD Consulting Engineers**  
Structural/Civil Project Management  
Nulgrove Enterprise Park, Rotherham, South Yorkshire, S60 14  
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Checked by:	Checked by:	Scale:	Sheet:
SOS	SK	N/A	A3

21A404-SHD-00-00-DR-C-0003  
Rev: A



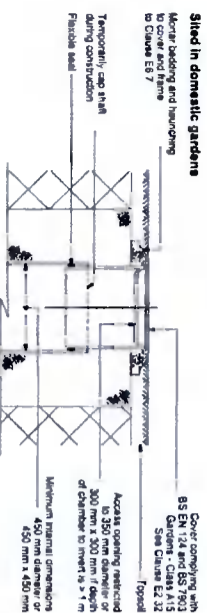
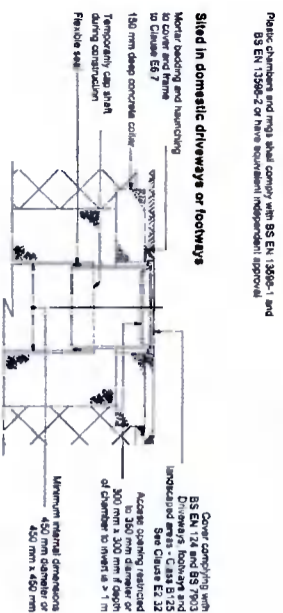
**TYPICAL ARRANGEMENT OF PIPE JUNCTIONS WITHIN MANHOLES**



Nominal diameter (mm)	Maximum effective length (m)
150 - 500	0.8
301 - 750	1.00
Over 750	1.25

All pipes entering the bottom of the manhole to have soffit level.

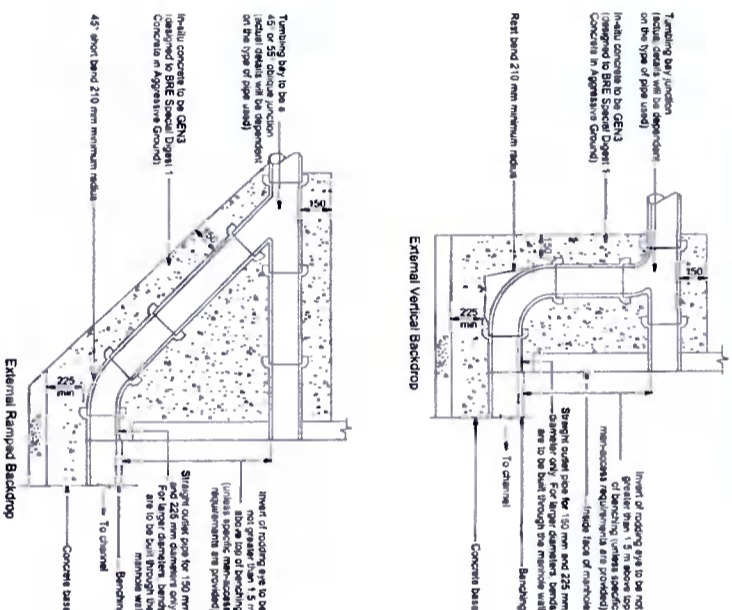
**ALTERNATIVE TOP DETAILS FOR LIGHT VEHICLE LOADING AND LANDSCAPED AREAS - TYPE 3**



Note: Where the access chamber is in the highway the Highway Authority can have specific requirements. Not to scale.

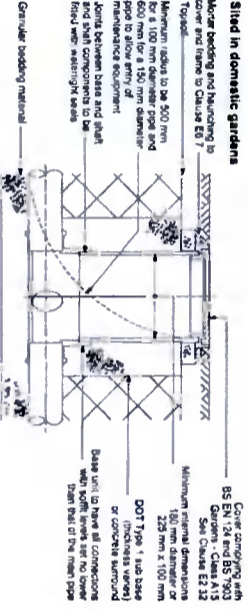
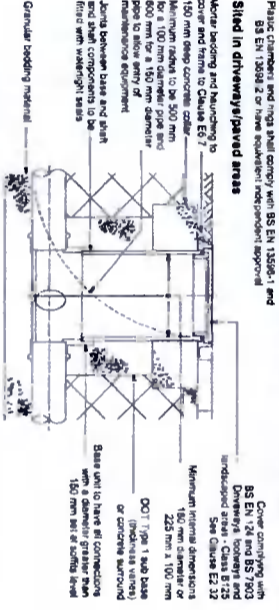
**TYPICAL VERTICAL AND RAMPED BACKDROP DETAIL**

Note: Steeper gradients are preferred to the use of backdrops. Type of backdrop to be used to be agreed with Undertaker.



Not to scale dimensions in millimeters

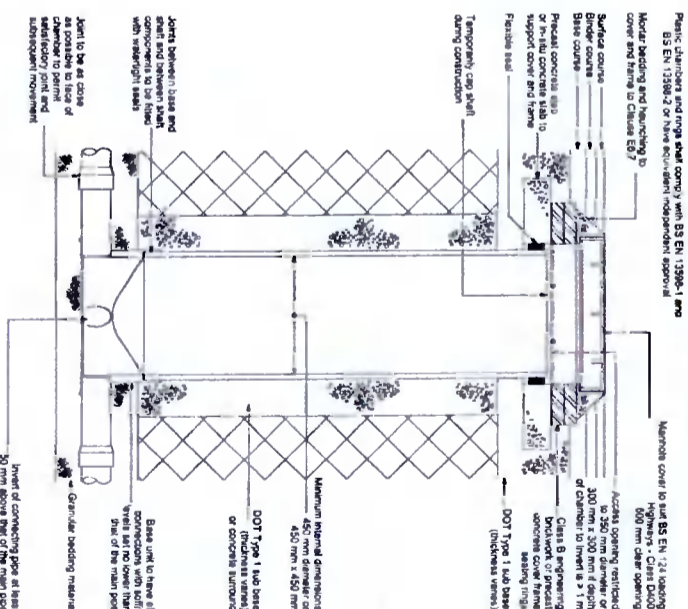
**TYPICAL INSPECTION CHAMBER DETAIL - TYPE 4 (Flexible material detail)**



Note: Where the access chamber is in the highway the Highway Authority can have specific requirements. Not to scale.

**TYPICAL INSPECTION CHAMBER DETAIL - TYPE 3 (Flexible material detail)**

Maximum depth from cover level to soffit of pipe in areas subject to vehicle loading 3 m, non-entry



Note: Where the access chamber is in the highway the Highway Authority can have specific requirements. Not to scale.

**NOTES:**

- All dimensions to be checked on site. Engineer to be informed immediately of any discrepancies when work proceeds.
- Existing backdrops are subject to use in location.
- All structure materials to be tested to BS 5895 U.N.D. and shall comply with the requirements of Eurocode 3.
- The contractor shall ensure that the location of all manhole covers is confirmed by the Undertaker and the Engineer prior to commencement of the work.
- All backdrops to be shown and bedded with a minimum compressive strength of 30 MPa and shall comply with the requirements of Eurocode 3.
- All backdrops to be shown and bedded with a minimum compressive strength of 30 MPa and shall comply with the requirements of Eurocode 3.
- All backdrops to be shown and bedded with a minimum compressive strength of 30 MPa and shall comply with the requirements of Eurocode 3.
- Unless noted otherwise all joints between 215 solid backdrops and 150 hollow backdrops to be provided with 150 long stainless steel bars at 90 degrees to the joint. All bars shall be minimum grade C16 (UNO) and shall comply with BS 5895 U.N.D. and shall comply with the requirements of Eurocode 3.
- Unless noted otherwise all joints between 215 solid backdrops and 150 hollow backdrops to be provided with 150 long stainless steel bars at 90 degrees to the joint. All bars shall be minimum grade C16 (UNO) and shall comply with BS 5895 U.N.D. and shall comply with the requirements of Eurocode 3.
- All backdrops to be placed on minimum 50mm max. bedding (UNO).
- For details of underground drainage services refer to architect and engineer. Services shall be laid in accordance with the requirements of Eurocode 3 and shall be shown on the site plan.
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Client:	Peter Thornberry
Job title:	147 MONALEA GROVE
Address:	DUBLIN 24
Drawing Title:	Proposed Drainage Details
Sheet:	Sheet 2 of 2
Original:	Drawn by: SCS
Checked by:	ML
Date:	14.11.21
Scale:	A3
Drawn No:	21A404-SHD-00-00-DR-C-0002
Rev:	A

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