Scale 1/200

Existing gully to be abandoned and existing connection capped off

Drainage channel (CS1 Kerb) laid on back to be removed

Existing gully to be abandoned and existing connection capped off

Drainage channel (CS1 Kerb) laid on back to be removed

Proposed linear channel to connect to existing gully connection a sump

Drainage channel (CS1 Kerb) laid on back to be removed

Existing gully to be abandoned and existing connection to be reused

Drainage channel (CS1 Kerb) laid on back to be removed

Existing gully to be abandoned and existing connection to be reused

Existing gully to be abandoned and existing connection to be reused

Proposed highway gullies positioned either side of the new entrance. Proposed gullies to connect to existing gully lateral. Existing connection to be investigated onsite.

Drainage channel (CS1 Kerb) laid on back to be removed

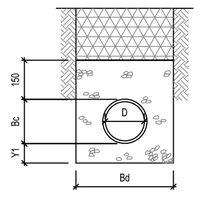
Existing gully to be abandoned and existing connection capped off

Drainage channel (CS1 Kerb) laid on back to be removed

Existing gully to be abandoned and existing connection to be reused

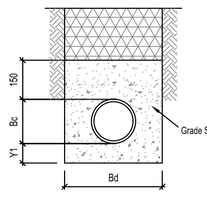
Proposed linear channel to connect to existing gully connection a sump

Proposed highway gullies positioned either side of the new entrance. Proposed gullies to connect to existing gully lateral. Existing connection to be investigated onsite.



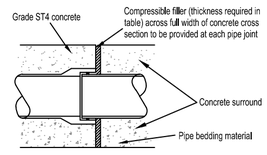
B.S.410 Test sieve	%Passing Type A20
63mm	–
37.5mm	100
20mm	85-100
14mm	–
10mm	0-25
5mm	0-5
2.36mm	–

PIPE BEDDING MATERIAL



Main backfill — Selected excavated material, compacted in layers not exceeding 225mm in cohesive soils, trenches under roads and hardstandings shall be backfilled with imported fill type 6F1

Pipe bedding — Pipe bedding material shall consist of free draining clean, chemically stable gravel, crushed stone or crushed slag in accordance with the table, the material shall have a compaction fraction value not exceeding 0.2



PIPE BEDDING CLASS S

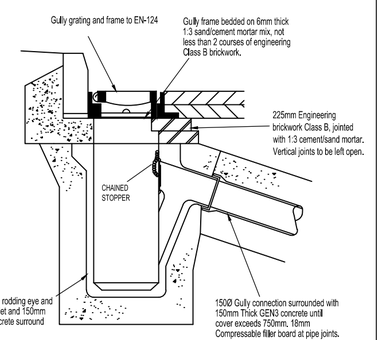
PIPE BEDDING CLASS Z

Nominal internal pipe diameter	Dimension Y1, even trench bottom (min)	Dimension Y2, rock or uneven trench bottom (min)	Granular bedding surround type single sized	Maximum permitted trench width	Thickness of compressible filler
150	100	200	A 10	750	18
225	100	200	A 10	825	18
300	100	200	A 14	925	18
375	100	200	A 14	1050	18
450	150	200	A 14	1150	36
525	150	250	A 14	1200	36
600	150	250	A 20	1350	36
675	150	250	A 20	1450	36
750	225	300	A 20	1500	36
825	225	300	A 20	1600	36
900	225	300	A 20	1900	36
975	225	300	A 20	2000	36
1050	225	300	A 20	2100	36
1125	225	300	A 20	2200	36
1200	250	350	A 20	2300	36
1350	375	450	A 20	2500	54
1500	375	450	A 20	2700	54
1650	375	450	A 20	2800	54
1800	375	500	A 40	3100	54
1950	400	500	A 40	3200	54
2100	425	650	A 40	3400	54
2400	450	675	A 40	3700	54

Trench Table

Notes

1. All trench excavations to be undertaken to narrow trench conditions
2. Y1 shall be used on all occasions except where Y2 is specified by the engineer
3. Dimension Y shall be increased by 40 for each additional 1000 cover in excess of 5000.
4. Dimension Y2 to be used in lieu of y1 where excavation is in rock or mixed soils
5. Limestone pipe bedding will not be permitted in acidic ground water conditions refer to contract specification for specific details.



G - Typical Gully Detail at Kerb

Gully chambers to be P.C.C. to BS5911, 450Ø x 900 DEEP

Gully gratings to be cast iron to EN124.

Proposed drainage works

Proposed Drainage Channel with 150Ø Sump Outlet ACO Multidrain M100D 20.0

Proposed highway gully

Drainage notes

1. This drainage drawing is to be read in conjunction with all relevant Architect's, Engineer's drawings and specifications.
2. Do not scale this drawing. Any ambiguities, omissions and errors on the drawings shall be brought to the Engineer's attention immediately. All dimensions must be checked and verified on-site before construction commences.
3. All external underground drainage works are to be constructed in accordance with the Civil Engineering Specification for the Water Industry 7th Edition (CESWI). Sewers for Adoption 7th Edition (SFA) and any site-specific details provided on the contract drawings.
4. All internal underground drainage works are to be constructed in accordance with the Building Regulations Approved Document H (2015 Edition) and any site-specific details provided on the contract drawings.
5. The contractor must survey any retained drainage on-site and report the line, level and condition of the existing drainage to the engineer. We would recommend that the existing drainage is cleansed before any surveying and that these works are undertaken before the contractor commences on-site.
6. Any redundant manholes are to be broken out to at least 600mm below formation level and backfilled with an approved compacted granular material.
7. Any redundant pipes up to and including 300mm diameter are to be filled with a 10:1 PFA/cement mix or broken out and backfilled with an approved compacted granular material. Any redundant pipes over 300mm diameter are to be broken out and backfilled with an approved compacted granular material.
8. Highway Drainage Pipes to be HAPAS approved Twinwall pipes. Pipes to be submitted for approval before works commence onsite.
9. All new lateral/branch connections are to be formed using oblique junction pieces to ensure a rigid watertight connection. The use of saddle branch connections onto new laid pipes will not be permitted without approval. Saddle branch connections onto an existing private pipes will be permitted if specified on the drawing.
10. All concrete manholes are to be in accordance with BS EN 1917. All plastic inspection chambers are to be in accordance with BS EN 13598.
11. All pipes laid within vehicle trafficked areas with less than 900mm of cover shall be surrounded in Class Z bedding. All pipes less than 300mm below the underside of a ground floor slab shall be surrounded in Class Z bedding. Where Class Z bedding is used as a surround a compressible material must be placed at every pipe joint to provide flexibility. All other pipes are to be laid in a Class S bedding.
12. All underground drainage must be protected during the construction phase where intermediate cover is less than 900mm.

Rev.	Description	By	Date
P02	SITE PLAN UPDATED	DOR	16.07.2026
P01	FIRST ISSUE / SUBMISSION	DOR	28.04.2026

Shepherd Gilmour Consulting Engineers
Phoenix House, 45 Cross Street, Manchester, M2 4JF
t: 0161 837 1500 w: www.sgiconsulting.co.uk

Client
Mosscare St Vincents Housing Group

Project
Land at Barnhill Street / Raby Street Moss Side, Manchester

Title
S278 Works
Proposed Drainage Plan

Date	28.04.2026	Drawn By	DOR
Size	A1	Checked By	DOR
Scale	As Shown	Approved By	DOR

SGi Proj No.	RIBA	Status	Status
C1876	3	S1	PRELIMINARY

Proj No.	Orig	Vol.	Level	Type	Role	Dwg No.	Rev
C1876	SGI	ZZ	00	DR	C	278106	P02