

RESIDENTIAL DEVELOPMENT AT
LINN STREET, CRUMPSALL
SUSTAINABLE DRAINAGE SCHEME VERIFICATION REPORT

Client:

Wiggett Construction Ltd.
Viking House
449 Middleton Road
Chadderton
Oldham
OL9 9LB

Consultant:

Build Vision Ltd
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Middle Cottage
Ben Kaye Row
Holmfirth
HD9 1EF

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APPENDIX A: SUSTAINABLE DRAINAGE SCHEME VERIFICATION

1. INTRODUCTION

- 1.1.1. The Build Vision Revised Drainage Strategy Ref:1284, dated 19th January 2021 should be referred to for further information.

2. SUSTAINABLE DRAINAGE SCHEME VERIFICATION

2.1. Drainage Strategy

- 2.1.1. The drainage was designed in accordance with the drainage strategy and proposals submitted previously. As the site investigation confirmed that the site was not suitable for soakaways and there are no watercourses or surface water sewers in proximity of the site, the foul and surface water were designed as separate systems discharging to the public combined sewer system. Permeable pavements SUDs have been incorporated into the drainage design for private parking areas and piped drainage systems for roof water with flows restricted by flow control device to the minimum flow of 5 l/s from a minimum 100mm size flow control to prevent blockages and attenuation provided within the drainage system, permeable rain gardens and permeable pavements for storms up to 30 years in accordance with United Utilities requirements and within the site for storms up to 100 year plus a 40% allowance for climate change in accordance with planning policy guidance.

- 2.1.2. A sewer connection application was submitted to United Utilities for the connection to the public combined sewer and consent was provided.

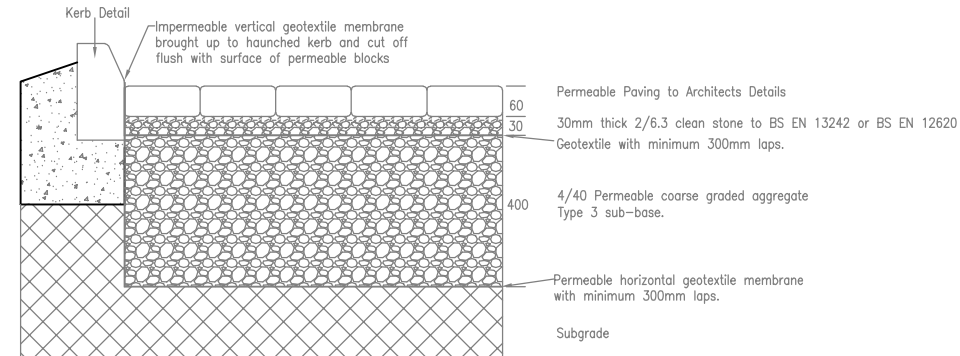
2.2. Drainage Verification

- 2.2.1. GNL and Wiggett Construction Ltd. have confirmed that the drainage has been installed as shown on the as built drawings and photos enclosed in Appendix A and the sustainable drainage scheme is complete and considered suitable for use.

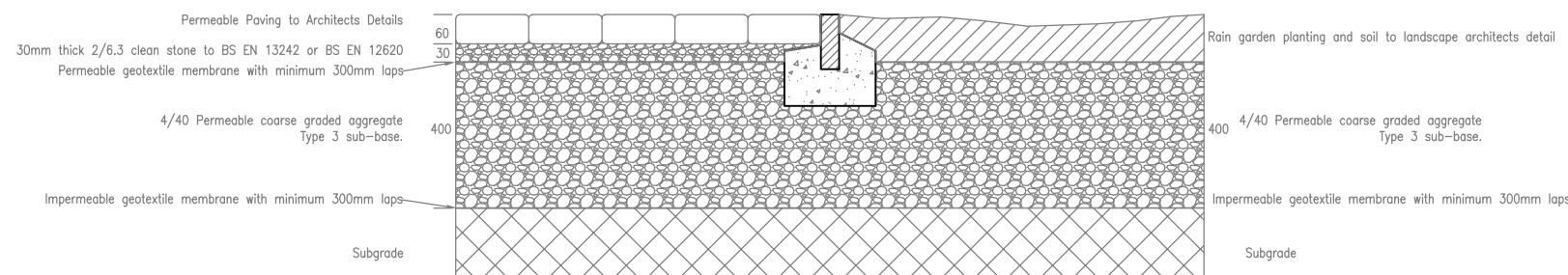
APPENDIX A

SUSTAINABLE DRAINAGE SCHEME VERIFICATION

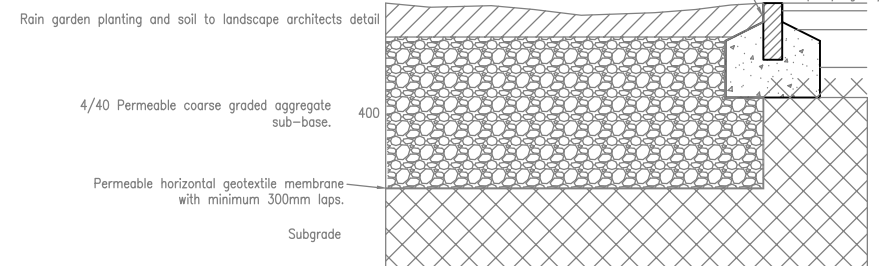
- § As Built Drainage Layout
- § Cellular Storage Photos
- § Hydro Brake Photos
- § Permeable Pavement and Rain Garden Photos



PERMEABLE BLOCK PAVING FOR PEDESTRIAN AND DRIVE AREAS



PERMEABLE BLOCK PAVING SUDS FOR DRIVE AREAS AND RAIN GARDEN SUDS FOR LANDSCAPED AREAS



RAIN GARDEN SUDS FOR LANDSCAPED AREAS

SURFACE WATER MANHOLE SCHEDULE										
MH	COVER LEVEL	INVERT LEVEL	DEPTH	>Ø	PIPE	MH TYPE	MH Ø	COVER/FRAME	ACCESS	
S1	77.250	76.650	0.600	150Ø	PPIC	475Ø		B125	440Ø	
S2	77.010	76.010	1.000	150Ø	PPIC	475Ø		B125	440Ø	
S3	76.550	75.950	0.600	150Ø	PPIC	475Ø		B125	440Ø	
S4	76.450	75.650	0.800	150Ø	PPIC	475Ø		B125	440Ø	
S5	76.850	76.050	0.800	150Ø	PPIC	475Ø		B125	440Ø	
S6	76.625	75.625	1.000	150Ø	PPIC	475Ø		B125	440Ø	
S7	76.000	75.400	0.600	150Ø	PPIC	475Ø		B125	440Ø	
S8	76.000	775.250	0.750	150Ø	PPIC	475Ø		B125	440Ø	
S9	76.000	74.510	1.490	225Ø	CONTROL	1500Ø		D400	1200x675	

FOUL WATER MANHOLE SCHEDULE										
MH	COVER LEVEL	INVERT LEVEL	DEPTH	>Ø	PIPE	MH TYPE	MH Ø	COVER/FRAME	ACCESS	
F1	77.400	76.725	0.675	100Ø	PPIC	475Ø		B125	440Ø	
F2	77.050	76.000	1.050	150Ø	PPIC	475Ø		B125	440Ø	
F3	76.750	75.600	1.150	150Ø	PPIC	475Ø		B125	440Ø	
F4	76.800	76.120	0.680	150Ø	PPIC	475Ø		B125	440Ø	
F5	76.800	76.050	0.750	150Ø	PPIC	475Ø		B125	440Ø	
F6	76.250	75.250	1.000	150Ø	PPIC	475Ø		B125	440Ø	
F7	76.000	75.000	1.000	150Ø	PPIC	475Ø		B125	440Ø	

NOTES

- Do not scale from this drawing.
- This drawing is to be read in conjunction with all relevant Architects and Engineers drawings and specifications.
- All works and materials to be in accordance with current British Standards and Building Regulations.
- The Architects site plan has been used as a base for this drawing. Please refer to the latest site plan.
- Pipes with <300mm cover under non-vehicle areas and <300mm cover under vehicle areas are to be encased in concrete as shown on the pipe bedding drawing. A protection slab may be required for shallower pipes and will be indicated on the drawing. Please refer to manufacturers details for pipe material specific requirements. Adoptable sewers will require a minimum of 1200mm cover in accordance with sewerage undertakers requirements.
- For any works on Public Sewers refer to Statutory Undertakers Drawings.
- For drainage details refer to Build Vision 900 Series drawings.
- All exg drains indicated ~~~~~ to be removed or grouted with PFA/Cement:Grout minimum ratio of 12:1.
- RWP, SVP & Syphonic locations and sizes to be confirmed by the Architect.
- Foul air traps to be provided on all gullies and aco channels.
- Access fittings to be provided on all internal drainage.

Drain Connection	Access Fitting
0-12m	Type 1 (min 150x100mm)
12-22m (Junction)	Type 2 (min 225x100mm)
12-45m (Into Manhole)	Type 2 (min 225x100mm)
- All below ground slab foul drainage to be minimum 100mm diameter unless otherwise noted.
- MOC indicates 300Ø mini access chamber.
- PPIC indicates 475Ø Polypropylene Inspection Chamber.
- All sewers to have concrete or class 'S' bed and surround in accordance with pipe bedding details drawing.
- All pipes to WIS 4-35-01 and to be kate marked structural walled plastic, clay or concrete pipes suitable for use in Highways

ALL OUTLETS AND FITTINGS TO BE RODDABLE IN ACCORDANCE WITH BUILDING REGULATIONS

EXISTING DRAINAGE ON SITE TO BE INVESTIGATED/SURVEYED

AS BUILT.

AS-BUILT RECORD DRAWING:
This drawing is based on the latest issue construction drawings modified as necessary from information supplied by the contractor. This information has not been verified by Build Vision Consulting Engineers and cannot be guaranteed correct. Build Vision Consulting Engineers do not accept any responsibility for As Built information provided that does not comply with current design guides

Rev	Date	By	Checked	Remarks
A	03.03.22	SJC		As Built
P3	01.12.20	SJC		permeable pavements & rain garden SUDs
P2	08.09.20	SJC		Revised site plan, aco's
P1	27.08.20	SJC		Preliminary Issue

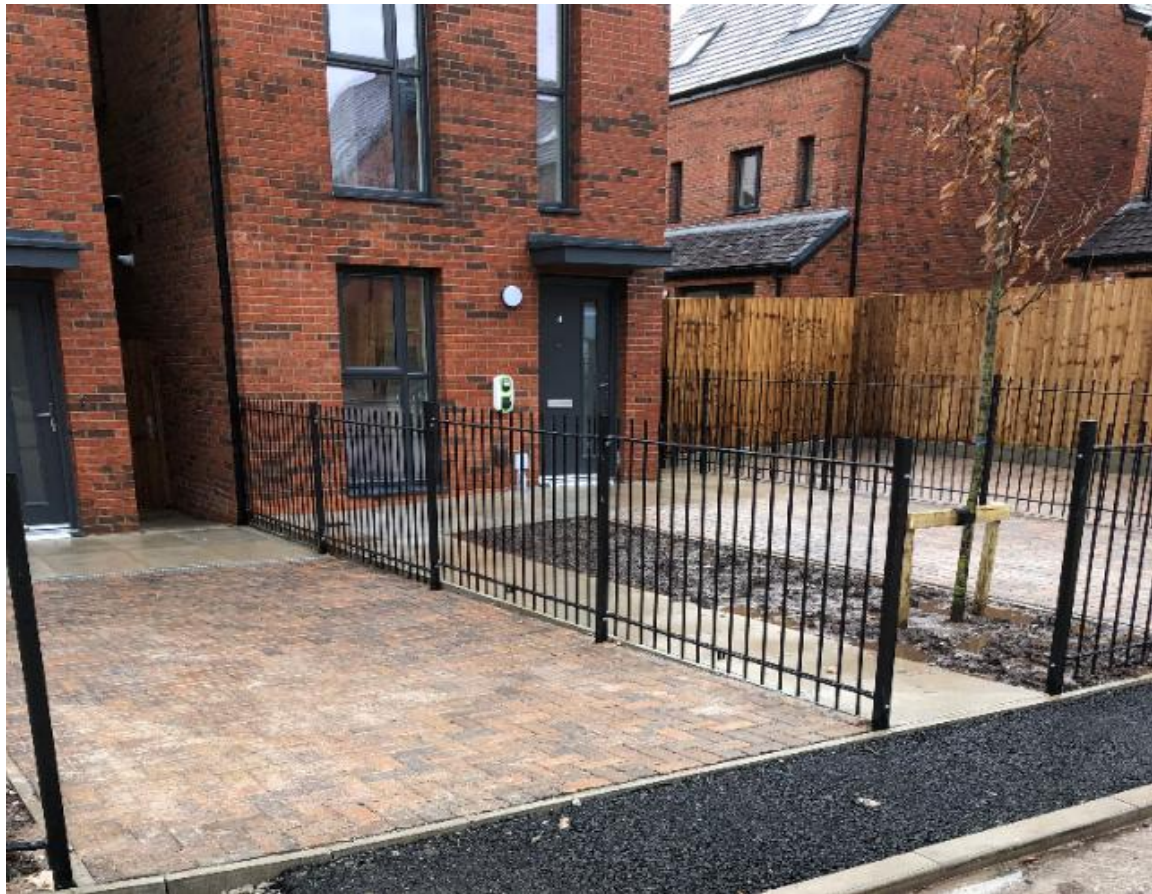
Project		Linn Street Crumpsall Manchester	
Client		Wiggett Construction Ltd.	
Drawing		Drainage Layout	
Number		1284-900	Rev A
Scale	1:200@A1	Drawn	SJC
Checked		Date	Aug 2020

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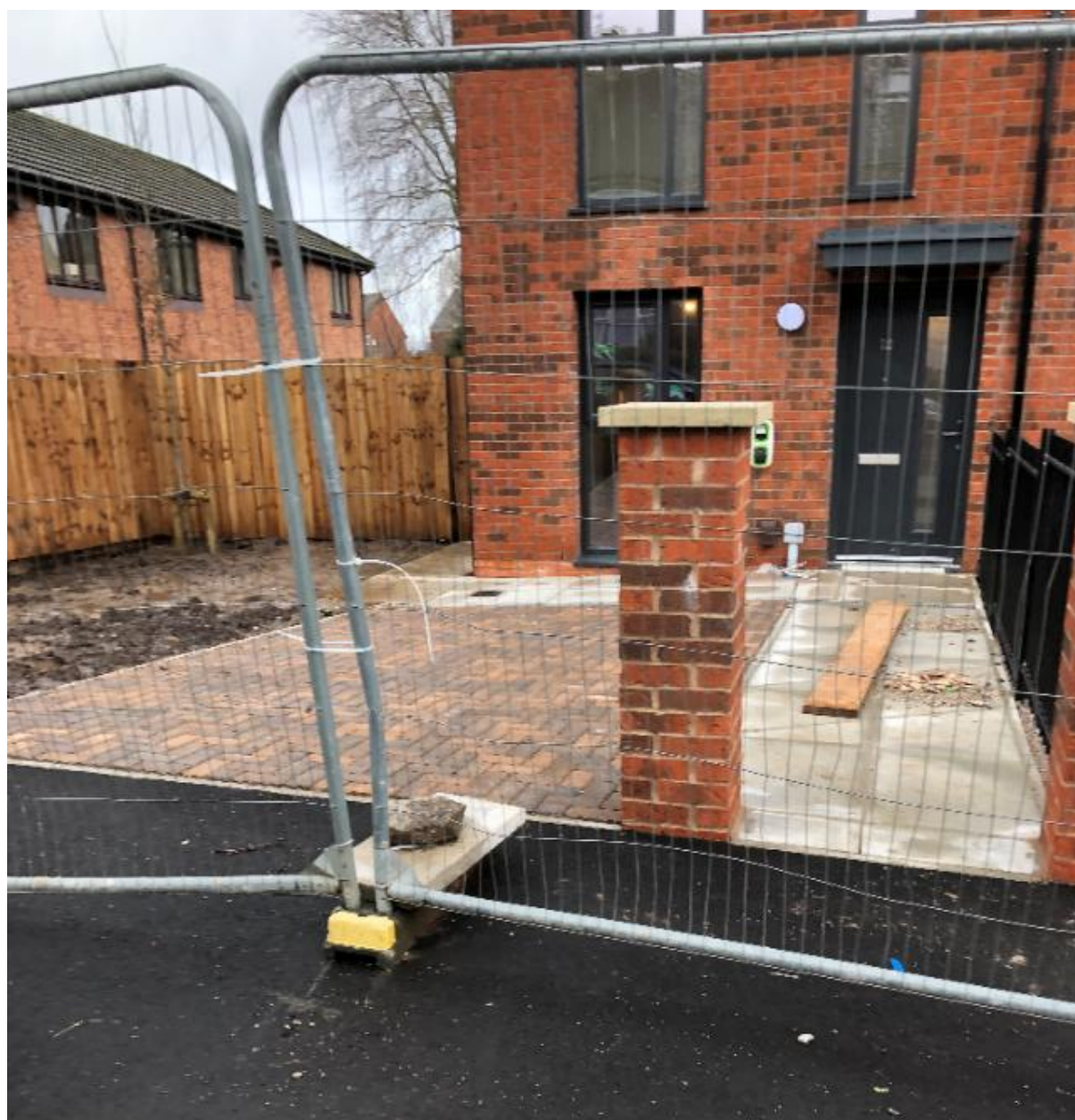




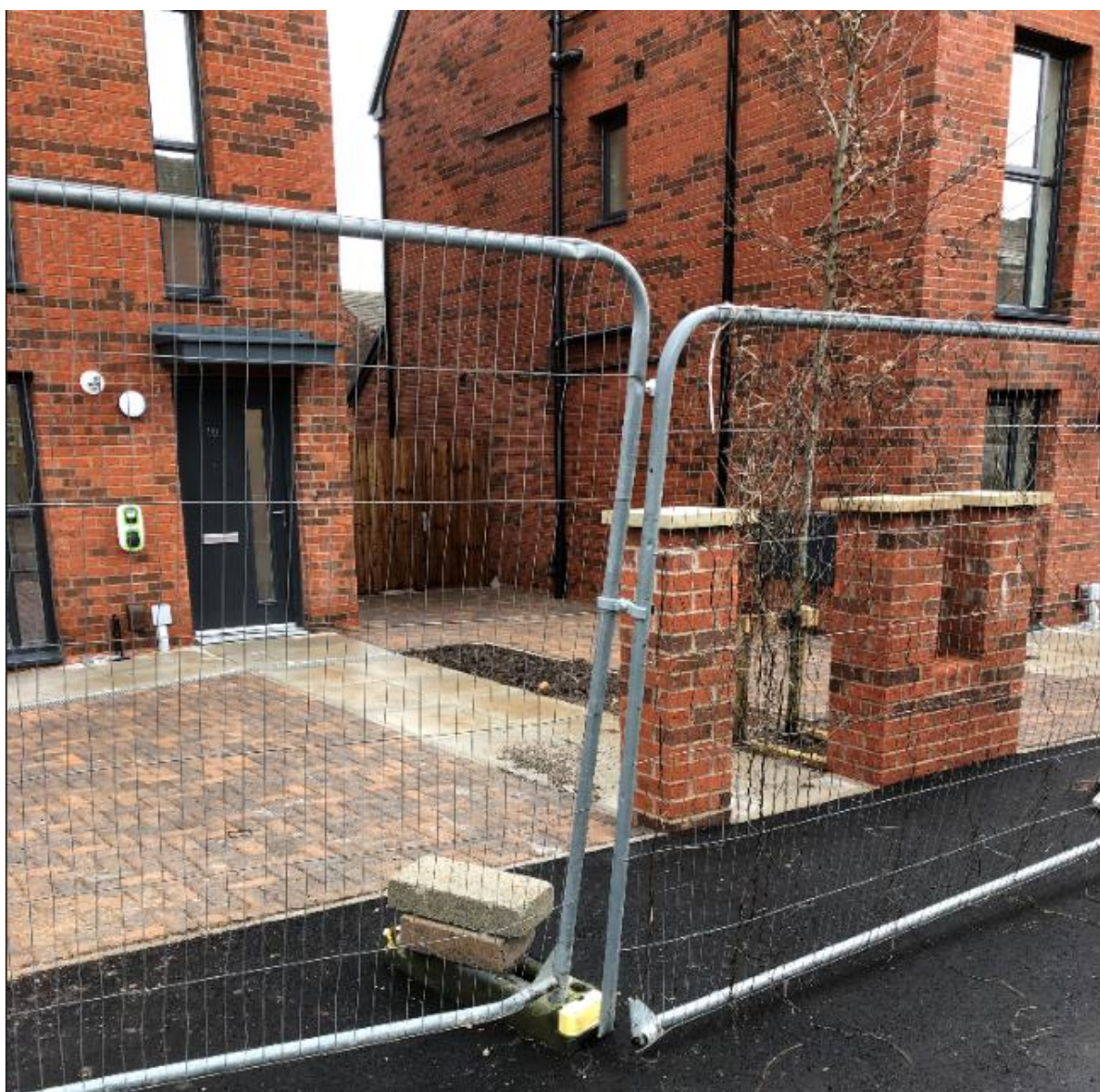
Plots 9 and 10



Plots 4 and 5



Plot 1



Plots 2 and 3



Plots 12 and 13



Plot 14



Plot 8



Plot 7



Plot 11



Plot 6

