

Wellington Retail Park

Drainage Technical Note

Project	Wellington Retail Park	Project No	13563-17
Subject	Drainage Technical Note	Date	23 July 2026
File Ref	13563-17-CRH-XX-XX-TN-C-0001-P02 - Drainage Technical Note.docx	Pages	2

1.0 INTRODUCTION

- 1.1.1 CampbellReith have been instructed by British Land to produce structural and civil engineering designs to facilitate new signage and frontages at Wellington Retail Park, Waterlooville, PO7 7FG.
- 1.1.2 To facilitate the proposed signage, new foundations are to be installed within the existing footway in front of the building, with existing private surface water infrastructure adjusted to suit. The footway width is also to be increased by 0.6m.
- 1.1.3 Existing drainage locations were established by a South West Water asset records plan dated April 2021, and a Below Ground Utility Survey undertaken by Murphy Geospatial in January 2024.

2.0 SURFACE WATER DRAINAGE

- 2.1.1 The existing surface water drainage comprises a single private 150mm diameter surface water sewer, located within the existing footway at depths of 0.6m to 1.0m.
- 2.1.2 The sewer receives flows from 5 existing rainwater downpipes on the eastern frontage of the building, and 4 gullies within the carpark carriageway. The sewer discharges flows to a private main surface water sewer at Manhole 05 on the southern boundary of the site.
- 2.1.3 To facilitate construction of the new signage foundations, the existing private sewer is to be abandoned and a new sewer constructed in a like-for-like arrangement. The new sewer is 150mm diameter, located within the car park carriageway, centreline 1m offset from the proposed realigned kerb edge. In order to re-use the existing downstream connection it is to be laid approximately 0.75m deep in concrete encasement, at gradients no flatter than 1:150. The new sewer is to connect to the existing sewer via a new chamber.
- 2.1.4 New below-ground connections shall be laid from the existing rainwater pipes into the new surface water sewer. Existing surface water gullies shall be relocated or replaced with new gullies to suit the realigned kerb.
- 2.1.5 Refer to CampbellReith drawing 13563-CRH-XX-XX-DR-C-5050 for the proposed drainage layout.

3.0 FOUL WATER DRAINAGE

- 3.1.1 The Southern Water asset records (attached) indicate an adopted 225mm diameter foul water sewer passes diagonally across the site, from south-west to north-east.
- 3.1.2 The below-ground utility survey undertaken in January 2024 (attached) found it to be approximately 1.6m deep.

- 3.1.3 The relationship between the existing adopted foul sewers and the new foundations is represented on drawing 13563-05-CRH-XX-XX-DR-S-2001-S2-P01 attached. In the majority of instances, the sewer is further away from the new foundations than Southern Water's standard minimum stand-off distance of 3m. In one instance only the new foundation is within the standard stand-off distance as noted in Cross Section A of the drawing. Regardless, in all instances however, the sewer invert is above the 45° foundation influence line from the edge of the relevant bases.
- 3.1.4 In all cases, but particularly where anticipated that the new foundations are to be constructed within the 3m minimum stand-off zone, the Contractors will prepare and submit method statements for investigating and confirming sewer depth and location and subsequently undertaking the works so as not to disturb the sewer. These method statements and RAMS will be reviewed by the Engineer and submitted for review and agreement with Southern Water as required.
- 3.1.5 Southern Water asset records also indicate a sewer to be present adjacent the southeastern corner of the building to a manhole 9606. However, a below-ground utilities survey conducted by Murphy Geospatial in January 2024 could not locate this manhole. It is derived that the records show a remnant of the original route, which is assumed to have been historically diverted, likely at the time of construction of the building.
- 3.1.6 No new foul water sewers, or any changes to the existing foul water sewerage, are proposed as part of the works.
- 3.1.7 The new private surface water sewer must cross the existing foul water sewer. The proposed surface water sewer is to be laid at depths of approximately 0.8m, whilst the existing foul sewer is approximately 1.6m deep, therefore it is anticipated there is 600mm of clearance between the two sewers. The existing sewer depth should be confirmed by the contractor prior to works on site.

4.0 PAVEMENT CONSTRUCTION

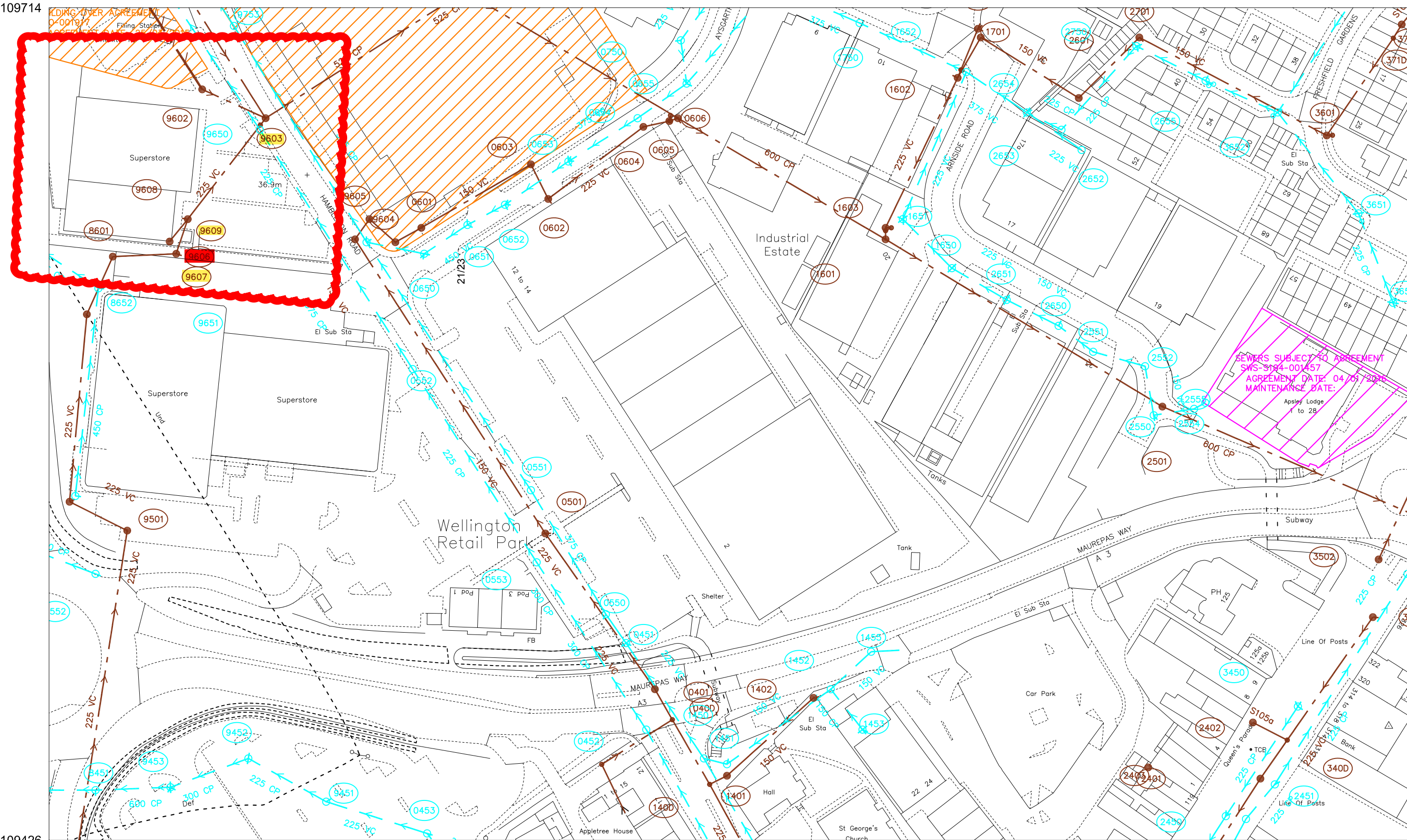
- 4.1.1 As part of the works, the existing footway is to be extended by 0.6m. Works shall also be required to reinstate surfaces disturbed by installation of the foundations and drainage works.
- 4.1.2 Refer to CampbellReith drawing 13563-CRH-XX-XX-DR-C-5001 for the proposed external works.

5.0 CONCLUSION AND RECOMMENDATIONS

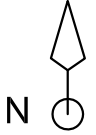
- 5.1.1 All works have been designed to mitigate impact on and to protect all adopted public sewers.
- 5.1.2 All works will generally be outside of the minimum stand-off distance from the public sewers, but otherwise the Contractors will prepare and submit method statements for investigating and confirming sewer depth and location and subsequently undertaking the works so as not to disturb the sewer.

SEWER RECORDS PAGE 1 OF 2

109714



109426

O.S. REF. SU6809NW	Drawn by: rohandas	The positions of pipes shown on this plan are believed to be correct, but Southern Water Services Ltd accept no responsibility in the event of inaccuracy. The actual positions should be determined on site. <small>WARNING: BAC pipes are constructed of Bonded Asbestos Cement WARNING: Unknown (UNK) materials may include Bonded Asbestos Cement</small>	 
	Scale: 1:1250		
Title: Unit 4 Wellington Retail Park	Date: 06/04/2021	Based upon Ordnance Survey Digital Data with the permission of the controller of H.M.S.O. Crown Copyright Reserved Licence No. WU 298530.	

467874

468345

SEWER RECORDS PAGE 2 OF 2

Node	Cover	Invert	Size	Material	Shape	Node	Cover	Invert	Size	Material	Shape	Node	Cover	Invert	Size	Material	Shape	Node	Cover	Invert	Size	Material	Shape
0401X	44.83	42.63	225	VC	CIRC	3550X	53.01	52.02	225	CP	CIRC												
040DX			225	VC	CIRC	3601X	48.51	45.46	150	VC	CIRC												
041DX			UNK	UNK	CIRC	3650X	54.13	52.55	225	CP	CIRC												
0451X	41.73	40.03	300	CP	CIRC	3651X	51.09	47.19	225	CP	CIRC												
0452X	44.62	43.75	300	CP	CIRC	3652X	47.51	45.22	225	CP	CIRC												
0453X	40.78	39.78	225	VC	CIRC	3703X			UNK	UNK	CIRC												
0501X	38.63	37.51	150	VC	CIRC	371DX			UNK	UNK	CIRC												
0550X	40.26	39.35	375	CP	CIRC	8451X	38.68	36.73	600	CP	CIRC												
0551X	38.2	37.22	375	CP	CIRC	8501X	36.36	35	225	VC	CIRC												
0552X	37.3	36.46	225	CP	CIRC	8551X	36.38	34.99	450	CP	CIRC												
0553X	38.77	38.11	225	CP	CIRC	8552X	37.91	36.15	450	CP	CIRC												
0601X	37.14		150	VC	CIRC	8601X	36.23	34.26	225	VC	CIRC												
0602X	37.43	34.52	225	VC	CIRC	8602X	36.38	34.34	225	VC	CIRC												
0603X	37.28		150	VC	CIRC	8652X	36.36	34.62	525	CP	CIRC												
0604X	37.59	34.08	225	VC	CIRC	9451X	40.5	39.45	225	CP	CIRC												
0605X	37.89	33.87	225	VC	CIRC	9452X	39.49	38.12	300	CP	CIRC												
0606X	37.93	29.97	600	CP	CIRC	9453X	39.06	37.23	600	CP	CIRC												
0650X	37.15	36.11	450	VC	CIRC	9501X	36.63	35.29	225	VC	CIRC												
0651X	37.24	36.18	450	VC	CIRC	9602X	36.24		300	VC	CIRC												
0652X	37.36	36.21	375	VC	CIRC	9603X	36.77	31.24	525	CP	CIRC												
0653X	37.49	36.25	375	VC	CIRC	9604X	37.12		150	VC	CIRC												
0654X	37.59	36.52	375	VC	CIRC	9605X	37.12		150	VC	CIRC												
0655X	37.97	36.83	375	VC	CIRC	9606X	36.93	35.95	150	VC	CIRC												
0750X	38.28	37.24	225	VC	CIRC	9607X	35.97	34.18	225	VC	CIRC												
1401X	46.72	45.81	150	VC	CIRC	9608X	35.473	34.242	UNK	UNK	CIRC												
1402X	47.66	46.44	150	VC	CIRC	9609X	35.77	34.13	225	VC	CIRC												
140DX			225	VC	CIRC	9650X	36.74	35.65	300	CP	CIRC												
1450X	46.13	45.18	225	VC	CIRC	9651X	37.12	35.97	375	CP	CIRC												
1451X	46.59	45.64	150	VC	CIRC	9753X	36.74	35.5	375	CP	CIRC												
1452X	47.91	46.65	150	VC	CIRC																		
1453X	48.21	47.37	150	CP	CIRC																		
1455X	48.44		150	VC	CIRC																		
1601X	39.93	29.37	600	CP	CIRC																		
1602X	40.41	36.93	225	VC	CIRC																		
1603X	40	36.27	225	VC	CIRC																		
1650X	41.76	40.05	225	VC	CIRC																		
1651X	40.34	38.46	225	VC	CIRC																		
1652X	40.56	37.98	375	VC	CIRC																		
1701X	40.58	39.64	150	VC	CIRC																		
1702X	40.57	39.11	150	VC	CIRC																		
1750X	39.48		375	VC	CIRC																		
2401X	52.98	50.63	225	VC	CIRC																		
2402X			UNK	UNK	CIRC																		
2450X	53.24	51.17	225	CP	CIRC																		
2451X	52.81	52.15	225	CP	CIRC																		
2456X	52.51		225	CP	CIRC																		
2501X	50.47	29.16	600	CP	CIRC																		
2550X	51.09	48.59	150	VC	CIRC																		
2551X	47.42		150	VC	CIRC																		
2552X	49	47.36	150	VC	CIRC																		
2554X	52.09	49.45	150	VC	UNK																		
2555X	54	52.45	150	VC	UNK																		
2601X			150	VC	CIRC																		
2650X	45.27	44.48	150	VC	CIRC																		
2651X	43.97	42.04	225	VC	CIRC																		
2652X			225	VC	CIRC																		
2653X			225	CP	CIRC																		
2654X	41.1	39.01	375	VC	CIRC																		
2655X	44.01	41.79	225	CP	CIRC																		
2701X	42.55	40.71	150	VC	CIRC																		
2750X	42.65	40.93	225	CP	CIRC																		
340DX			225	VC	CIRC																		
3450X	53.52	51.93	225	CP	CIRC																		
3502X	53.98		225	VC	CIRC																		
3503X	53.94	51.7	225	VC	CIRC																		

LINE STYLES / COLOURS	MATERIALS	LEGEND - SEWERS
Brown Foul Foul Syphon Sewer Foul Vacuum Main Foul Rising Main	AK Alkathene BAC Bonded Asbestos Cement BRC Brick (Common) BRE Brick (Engineering) CC Concrete Box Culvert CI Cast Iron CO Concrete (In-Situ) CP Concrete (Pre-Cast) CSB Concrete Segments (bolted) CSU Concrete Segments (unbolted) DI Ductile Iron GRC Glass Reinforced Concrete GRP Glass Reinforced Plastic MAC Masonry in regular Courses MAR Masonry in random Courses PE Polyethylene PF Pitch Fibre PP Polypropylene PVC Polyvinyl Chloride RPM Reinforced Plastic Matrix SI Spun Iron ST Steel VC Ventilated Clay XXX Other ZZZ Unknown	Manhole (SW) Manhole (F&C) Lamp hole (SW) Lamp hole (F&C) Pumping Station (SW) Pumping Station (F&C) Side entry manhole (SW) Side entry Manhole (F&C) Blind shaft (SW) Blind shaft (F&C) Ejector station (SW) Ejector station (F&C) Watertight door (SW) Watertight door (F&C) Flushing ch. Min-e (SW) Flushing ch. Min-e (SW) Flushing ch. No-e (SW) Flushing ch. No-e (F&C) Demarcation Chamber Washout (SW) Washout (F&C) Rodding Eye (SW) Rodding Eye (F&C) Gauging point (SW) Gauging point (F&C) Intercept chamber (SW) Intercept chamber (F&C) Storm Tank (SW) Storm Tank (F&C) Vortex chamber (SW) Vortex chamber (F&C) Label ellipse Dummy/S24 manhole Outfall Penstock chamber Damboards Storm Overflow Backdrop manhole Other (s) Other Change in sewer (s) Change in sewer Reflex valve Flap valve Cascade Anode Valve Closed Valve Air Valve Hatch box (SW) Hatch box (F&C) Direction arrow Emptying valve Catchpit Soakaway Inlet Balancing Pond Wastewater treatment works Marine treatment works Outfall headworks Vent Vent column Tidal storage tank Blank end Head of Public Sewer Micro Pumping Station
Orange Building Over Agreement Area Dark Blue Treated Effluent Purple Sludge Sewer Catchment Section 104 Area Light Blue Surface Water Surface Water Rising Main Yellow Private Green Access Shaft Decommissioned		SHAPES (S) A Arched B Barrel C Circular E Egg H Horseshoe R Rectangular S Square T Trapezoidal U U Shape X Other NODE REFERENCING SYSTEM 1st digit: hundred metre easting identifier 2nd digit: hundred metre northing identifier sewer type identifier 0-4 = Foul/Combined 5-9 = Surface Water 4th digit: next sequential node

Drawn by:	rohandas	
Title:	Unit 4 Wellington Retail Park	
Date:	06/04/2021	



MANHOLE SURVEY SHEET

Page 1



Job: 55784
Manhole no: MH02
Surveyor: Jimmy Anderton
Date: 2024-01-31 09:33:05

Location: 2 Hambledon Rd, Waterloooville, PO7 7FG
Coordinate: 467920.71,109642.58
Cover shape: Square
Cover type: Medium duty
Cover condition: OK
Manhole Type: Foul
Opening size: 660X660
Cover level: 35.80

Clockwise from A

Line	Dip level m.	Diam mm.	Invert	Material	Duct Contents	From	To	Same as
A	1.66	225	34.14	Vitrified Clay	Foul Water	N/a	Unknown	
B	1.64	225	34.16	Vitrified Clay	Foul Water	MH01	N/a	
C	1.50	100	34.30	Vitrified Clay	Foul Water	Building	N/a	
D								
E								
F								
G								
H								
I								
J								
K								
L								
M								
N								
O								
P								
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AG								
AH								
AI								

Manhole Location photo:



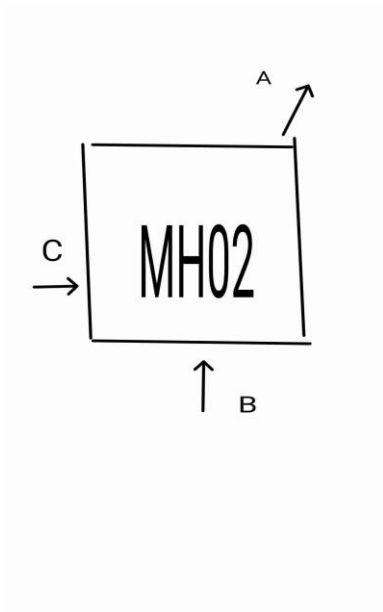
Manhole Open Photo:



Cover Replaced Photo:



Sketch:



Key Plan:

key plan sketch

Depth to bottom of chamber:

Depth to top of chamber:

Chamber dimension:

Additional notes:

