Designers Risk Assessment

(Version 3, 2022)

Project Name:	Kilnwood Vale – Neighbourhood Centre Vent Wells			Project Number:	11950
Date:	30 January 2026	Prepared By:	Antony Phin	Project Status:	Construction

Hazard	Consequences	Who is affected by consequence					Likelihood x Severity	Initial Risk Rating	Risk Control Measure	Likelihood x Severity	Residual Risk Rating
		CON	MAIN	PUB	VI	YP					
Contaminated Soil and Water	Acute health issues	☐	☐	☒	☒	☐	3 x 5	MEDIUM	Existing ground investigation and desk study data to be provided to the Contractor. Contractor required to prepare a Health and Safety Assessment and COSHH assessment for their works and adopt protective and welfare provisions for their works that are suitable and also provide pollution prevention controls. All their submissions should be forwarded to the Principal Designer for collation and review. Appropriate Personal Protective Equipment for working with potentially contaminated soil and water is to be worn. Methane monitoring during drilling and installation of vent wells to be	1 x 3	LOW

Who is Affected		Likelihood	Severity	Rating		
CON	= Contractors Staff	1 Very Rare	1 Negligible	1 - 7	=	LOW
MAIN	= Maintenance Staff	2 Remote	2 Minor			
PUB	= Public	3 Occasional	3 Notifiable	8 - 16	=	MEDIUM
VIS	= Visitors	4 Regular	4 Major			
YP	= Young People	5 Frequent	5 Fatality	18 - 36	=	HIGH
		6 Almost Certain	6 Multi-Fatal			

Designers Risk Assessment

(Version 3, 2022)

Hazard	Consequences	Who is affected by consequence					Likelihood x Severity	Initial Risk Rating	Risk Control Measure	Likelihood x Severity	Residual Risk Rating
		CON	MAIN	PUB	VI	YP					
									carried out and appropriate control measures employed. Specification of washing facilities for site personnel and clean working protocol and in relation to a BDA yellow site classification. Any materials or odours not characterised by existing investigation reports shall be drawn to the attention of the Engineer. On site washing facilities to be used and good hygiene practices to be adopted and no smoking on site. Surplus soil arisings are to be neatly stockpiled on site.		
Multiple Contractors working in vicinity on site	Conflict in working environment between different contractors working to different management schemes	☒	☐	☐	☐	☐	3 x 3	MEDIUM	New contractors to establish contact with existing contractors to ensure schedules and areas of work do not overlap or interefere.	2 x 2	LOW
Trip hazard from vent wells	Injury and death. Damage to vehicles.	☒	☒	☒	☒	☒	3 x 5	MEDIUM	Vent wells to be located outside of areas with high foot traffic and vehicular areas.	1 x 5	LOW

Who is Affected		Likelihood	Severity	Rating		
CON	= Contractors Staff	1 Very Rare	1 Negligible	1 - 7	=	LOW
MAIN	= Maintenance Staff	2 Remote	2 Minor			
PUB	= Public	3 Occasional	3 Notifiable	8 - 16	=	MEDIUM
VIS	= Visitors	4 Regular	4 Major			
YP	= Young People	5 Frequent	5 Fatality	18 - 36	=	HIGH
		6 Almost Certain	6 Multi-Fatal			

Designers Risk Assessment

(Version 3, 2022)

Hazard	Consequences	Who is affected by consequence					Likelihood x Severity	Initial Risk Rating	Risk Control Measure	Likelihood x Severity	Residual Risk Rating
		CON	MAIN	PUB	VI	YP					
Vent wells clashes with services and / or soft landscaping	Clashes with below-ground and above-ground services (e.g. drainage, utilities) and soft landscaping. Potential exists for damage to services due to proximity to vent wells and vice versa. In the long term, tree and shrub root growth may compromise vent wells, or access, reducing effectiveness and increasing maintenance or safety risk.	☒	☒	☒	☒	☒	3 x 4	MEDIUM	Early coordination and communication with all relevant designers (civil, utilities, landscape architect) to identify and avoid clashes. Maintain appropriate separation distances between vent wells, services, and soft landscaping. Clearly define vent well locations and protection zones on all relevant drawings. Specify landscaping restrictions (e.g. exclusion of deep-rooting trees and shrubs) within defined offsets from vent wells. Include notes within design and handover information highlighting long-term protection and access requirements for vent wells.	1 x 4	LOW

Who is Affected		Likelihood	Severity	Rating		
CON	= Contractors Staff	1 Very Rare	1 Negligible	1 - 7	=	LOW
MAIN	= Maintenance Staff	2 Remote	2 Minor			
PUB	= Public	3 Occasional	3 Notifiable	8 - 16	=	MEDIUM
VIS	= Visitors	4 Regular	4 Major			
YP	= Young People	5 Frequent	5 Fatality	18 - 36	=	HIGH
		6 Almost Certain	6 Multi-Fatal			

Designers Risk Assessment

(Version 3, 2022)

Hazard	Consequences	Who is affected by consequence					Likelihood x Severity	Initial Risk Rating	Risk Control Measure	Likelihood x Severity	Residual Risk Rating
		CON	MAIN	PUB	VI	YP					
Vent wells as source of methane	Ignition of methane, explosion	☒	☒	☒	☒	☒	2 x 4	MEDIUM	The vent wells will be monitored for methane during the first 12 months. No smoking is to take place on site. After this time, if the vent wells are incorporated into the permanent development, vent box covers are designed to allow venting to atmosphere and limit debris entering the pipe. Future monitoring and further risk assessment would eventually allow for the vent wells to be sealed in accordance with EA guidance.	1 x 4	LOW
		☐	☐	☐	☐	☐					
		☐	☐	☐	☐	☐					
		☐	☐	☐	☐	☐					
		☐	☐	☐	☐	☐					

Who is Affected		Likelihood	Severity	Rating		
CON	= Contractors Staff	1 Very Rare	1 Negligible	1 - 7	=	LOW
MAIN	= Maintenance Staff	2 Remote	2 Minor			
PUB	= Public	3 Occasional	3 Notifiable	8 - 16	=	MEDIUM
VIS	= Visitors	4 Regular	4 Major			
YP	= Young People	5 Frequent	5 Fatality	18 - 36	=	HIGH
		6 Almost Certain	6 Multi-Fatal			



Hole ID	Easting	Northing
VW01	523621.013	135022.005
VW02	523631.981	135022.684
VW03	523648.127	135018.434
VW04	523626.604	135014.018
VW05	523638.415	135012.876
VW06	523652.505	135011.417
VW07	523631.398	135005.523
VW08	523644.253	135000.302
VW09	523672.490	134996.878
VW10	523635.391	134997.243
VW11	523650.899	134997.810
VW12	523634.822	134986.549
VW13	523663.452	134990.029
VW14	523665.859	134979.898
VW15	523643.187	134967.126

DRAFT

Kilnwood Vale

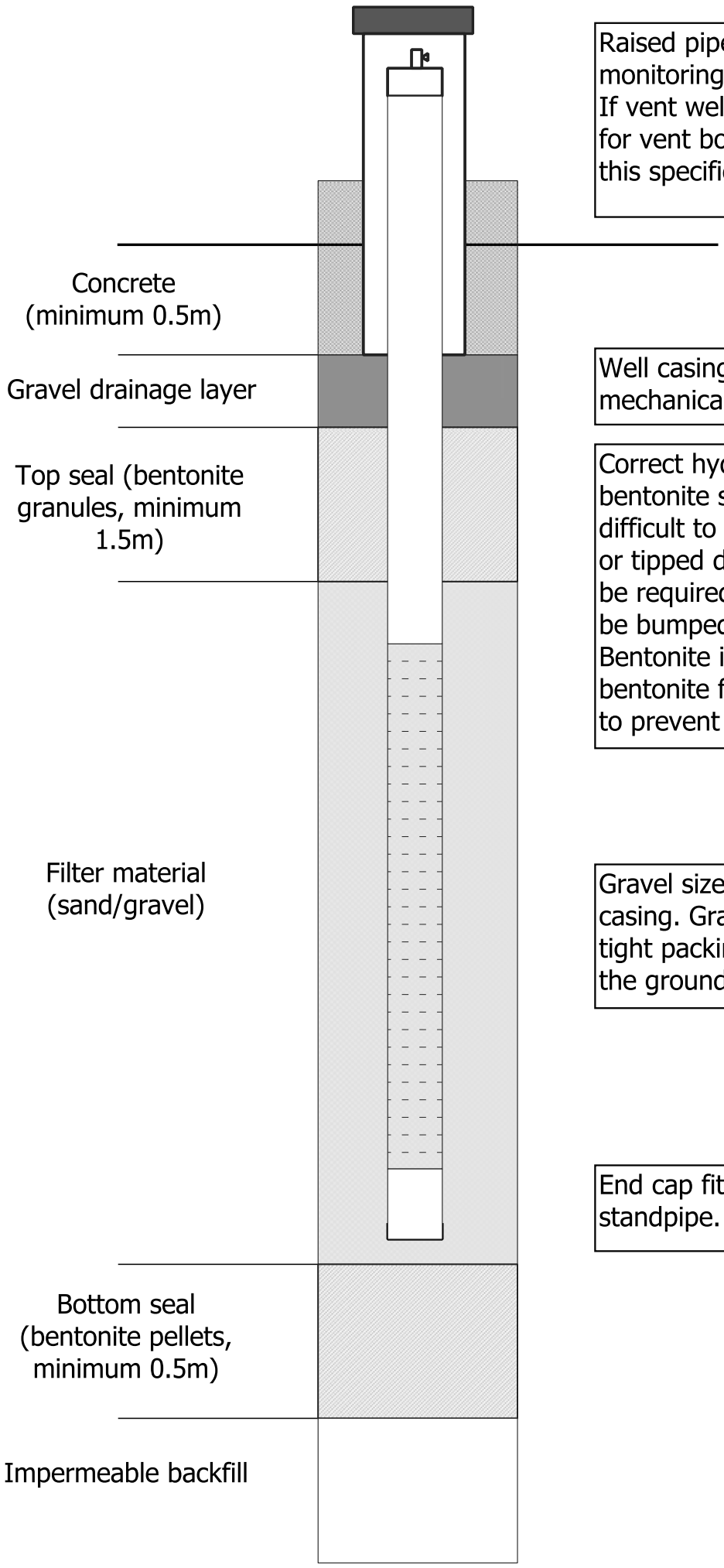
Client: Crest Nicholson

Figure 4:
Proposed Development and Vent Well Locations

Scale: 1:750@A3
CampbellReith OS Copyright: © Crown copyright. All rights reserved. Licence number AC0000812907
David Jarvis Associates - Landscape Masterplan: 3163-5-1-DR-5000-S0-P7 (Dec 2024)
Job Number: 11950
Drawn by - Checked by: RLF - AP
Drg No - Status/Revision: GIS716 - B
File location: N:\11750 - 11999\11950 L - Kilnwood Vale QGIS\Project_Workspaces\Neighbourhood Centre Gas Vent Wells Specification (pdf in Outputs)
Date (Revision History): 15/12/2025 (A, First Issue, 13/08/25, RLF; B, Vent Locations, 15/12/25, RLF)

© Campbell Reith Hill LLP 2025

CampbellReith
consulting engineers
LONDON 020 7340 1700 ■ □ MANCHESTER 0161 819 3060
BRISTOL 0117 916 1066 □ □ BIRMINGHAM 01675 467 484
www.campbellreith.com



Raised pipe fitted with rotating cowl that can be removed for monitoring.
If vent wells remain into the final development detailed design for vent boxes is to be determined – currently outside scope of this specification.

Well casing to be 100mm, HDPE, SDR11 for sufficient mechanical strength.

Correct hydration of the bentonite seal is essential. The bentonite should be granules rather than pellets, as pellets are difficult to hydrate properly. The bentonite should be pre-mixed or tipped directly into standing water. Regular rehydration may be required, especially in the drier months. Bentonite slurry can be bumped in under pressure using special equipment. Bentonite is best poured one dry bag at a time and the poured bentonite fully hydrated before the next bag is used. This helps to prevent bridging.

Gravel size to be large enough not to fall through holes in casing. Gravel should be rounded rather than angular to prevent tight packing, and free of calcareous stone as this can react with the ground gas and bind the gravel pack.

End cap fitted prior to installation to prevent debris entering standpipe.

Kilnwood Vale

Client: Crest Nicholson

Proposed Temporary Vent Well Design

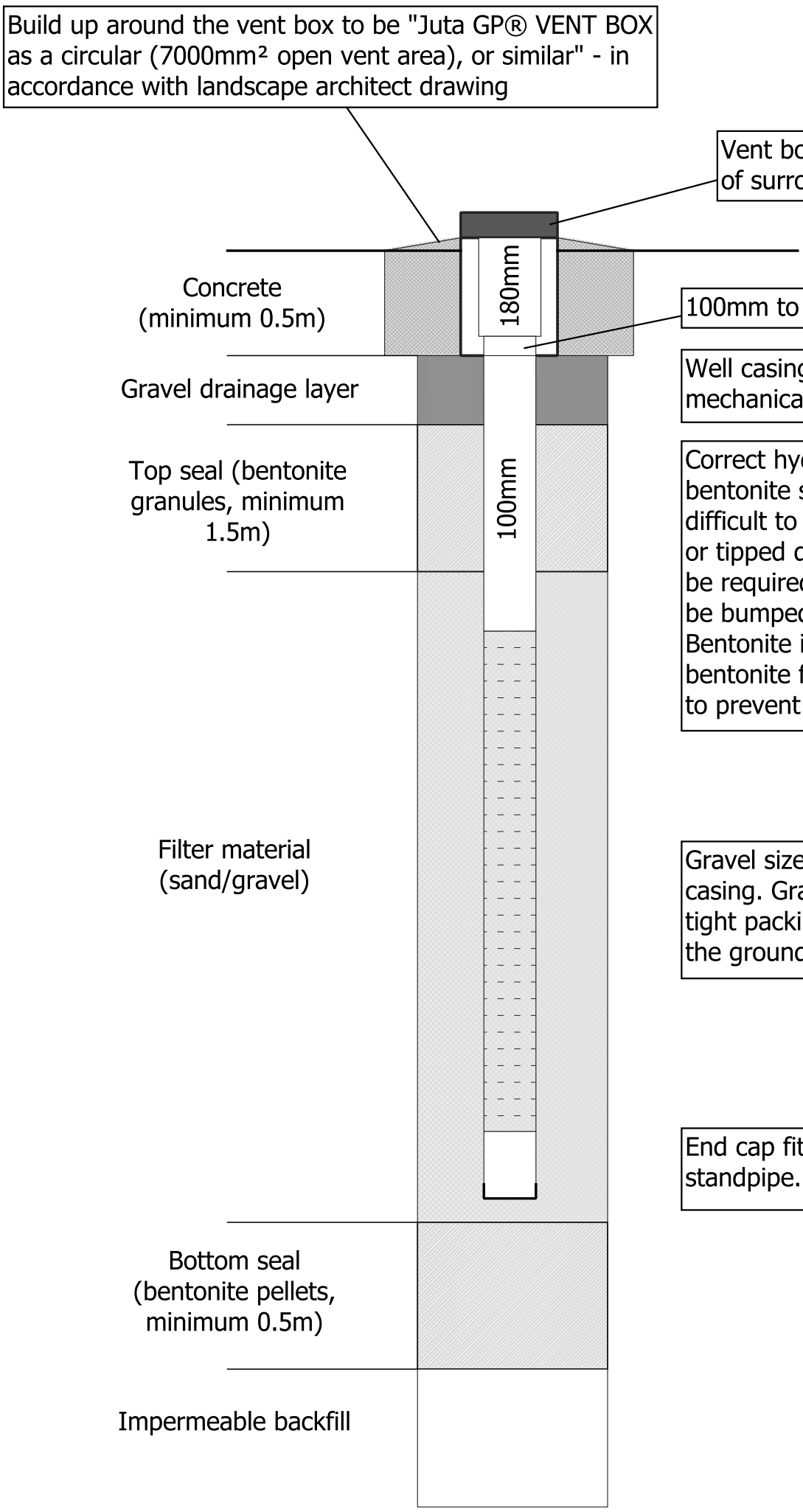
Scale: NTS@A3

CampbellReith OS Copyright: © Crown copyright. All rights reserved. Licence number AC0000812907

Job Number: 11950
Drawn by - Checked by: RLF - AP
Drg No - Status/Revision: GIS724 - A
File location: N:\11750 - 11999\11950 L - Kilnwood Vale QGIS\Project_Workspaces\Neighbourhood Centre Gas Vent Wells Specification (pdf in Outputs)
Date (Revision History): 16/01/2026 (A, First Issue, 16/01/26, RLF)

CampbellReith consulting engineers
LONDON 020 7340 1700 ■ □ MANCHESTER 0161 819 3060
BRISTOL 0117 916 1066 □ □ BIRMINGHAM 01675 467 484
www.campbellreith.com

© Campbell Reith Hill LLP 2026



Kilnwood Vale

Client: Crest Nicholson

Proposed Permanent Vent Well Design

Scale: NTS@A3

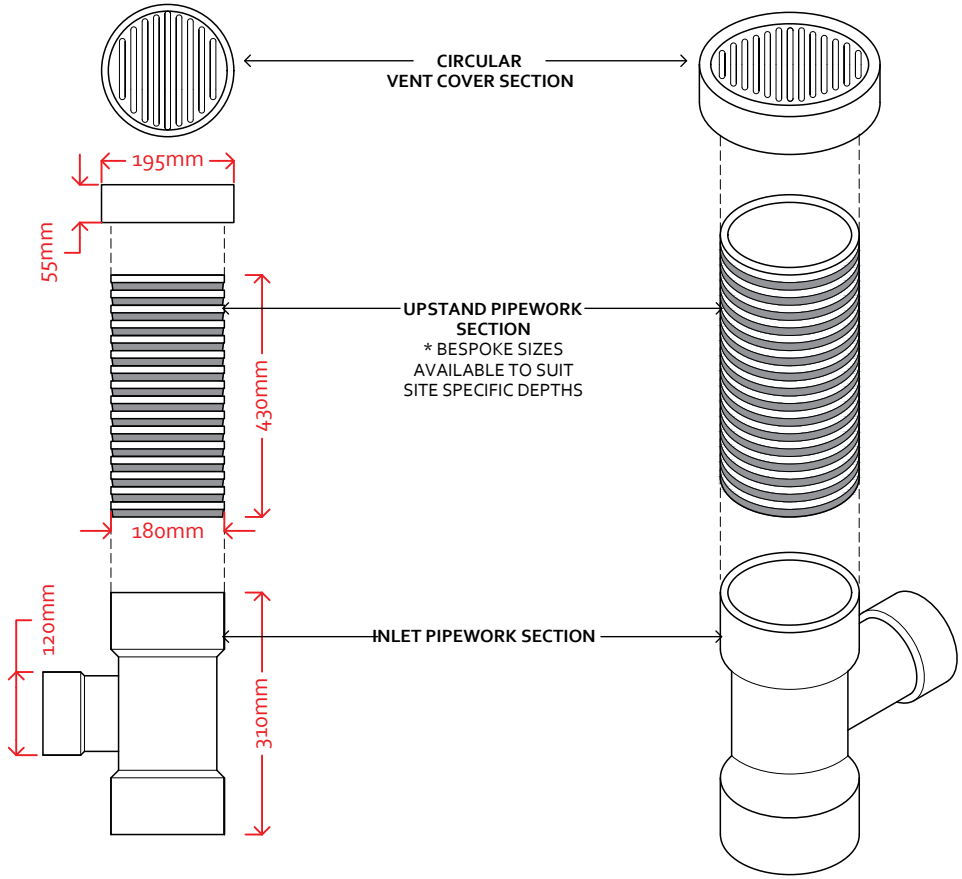
CampbellReith OS Copyright: © Crown copyright. All rights reserved. Licence number AC0000812907

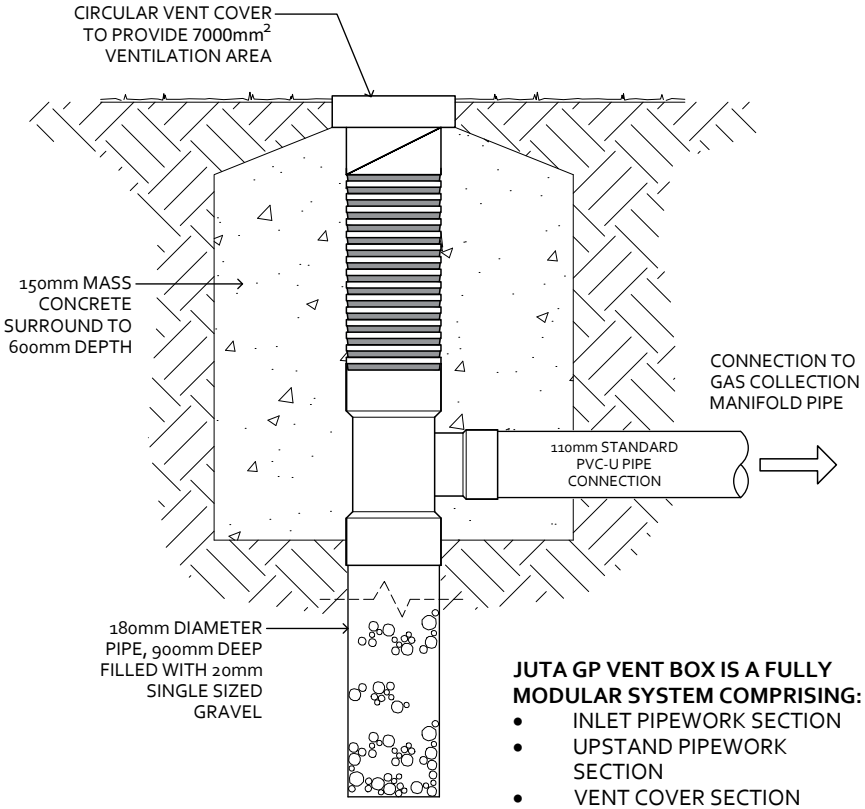
Job Number: 11950
Drawn by - Checked by: RLF - AP
Drg No - Status/Revision: GIS723 - A
File location: N:\11750 - 11999\11950 L - Kilnwood Vale QGIS\Project_Workspaces\Neighbourhood Centre Gas Vent Wells Specification (pdf in Outputs)
Date (Revision History): 30/01/2026 (A, First Issue, 30/01/26, RLF)

CampbellReith consulting engineers
LONDON 020 7340 1700 ■ □ MANCHESTER 0161 819 3060
BRISTOL 0117 916 1066 □ □ BIRMINGHAM 01675 467 484
www.campbellreith.com

© Campbell Reith Hill LLP 2026

PRODUCT CODE: GP0429





JUTA GP VENT BOX IS A FULLY MODULAR SYSTEM COMPRISING:

- INLET PIPEWORK SECTION
- UPSTAND PIPEWORK SECTION
- VENT COVER SECTION

PART REF	QUANTITY
GP0429	

CLIENT
JUTA UK LTD

PROJECT
GP Void Vent Box & Accessories - Standard Details

JUTA

NOTES

- Detail is Generic to Application so should be used as a guide not a specific installation detail.
- Gas venting design should be carried out by a suitably qualified person specific to the actual site risks.
- Ground Vent Boxes are designed for use with pedestrian traffic only.
- Regular maintenance is required to ensure that the units are free from debris to maintain performance of the units.
- Gas protection should be independently verified in line with BS8485: 2015 +A1: 2019 and CIRIA C735: 2014
- All design decisions made by others that might have an impact on the gas and waterproof design performance should be brought to the attention of the design team and Juta UK Ltd. Final decisions and/or any recommendations should be approved by the design team and Juta UK Ltd.
- Dimensions are not to be scaled from this drawing. All written measurements are to be checked on site by the contractor
- All rights described in chapter IV of the copyright, design and patents act 1988 have been generally asserted

DRAWING TITLE
JUTA GP® VOID VENT
STANDARD VENT BOX + CIRCULAR COVER

DRAWING NUMBER
JUTA.GP-VV.002

DRAWN BY	CHECKED BY	SCALE	DATE
PD	PF	Not to Scale	Aug. 2020

MELTON GROVE WORKS
BLACKPOOL ROAD
LYTHAM
FY8 5PL

Tel: 01772 754177