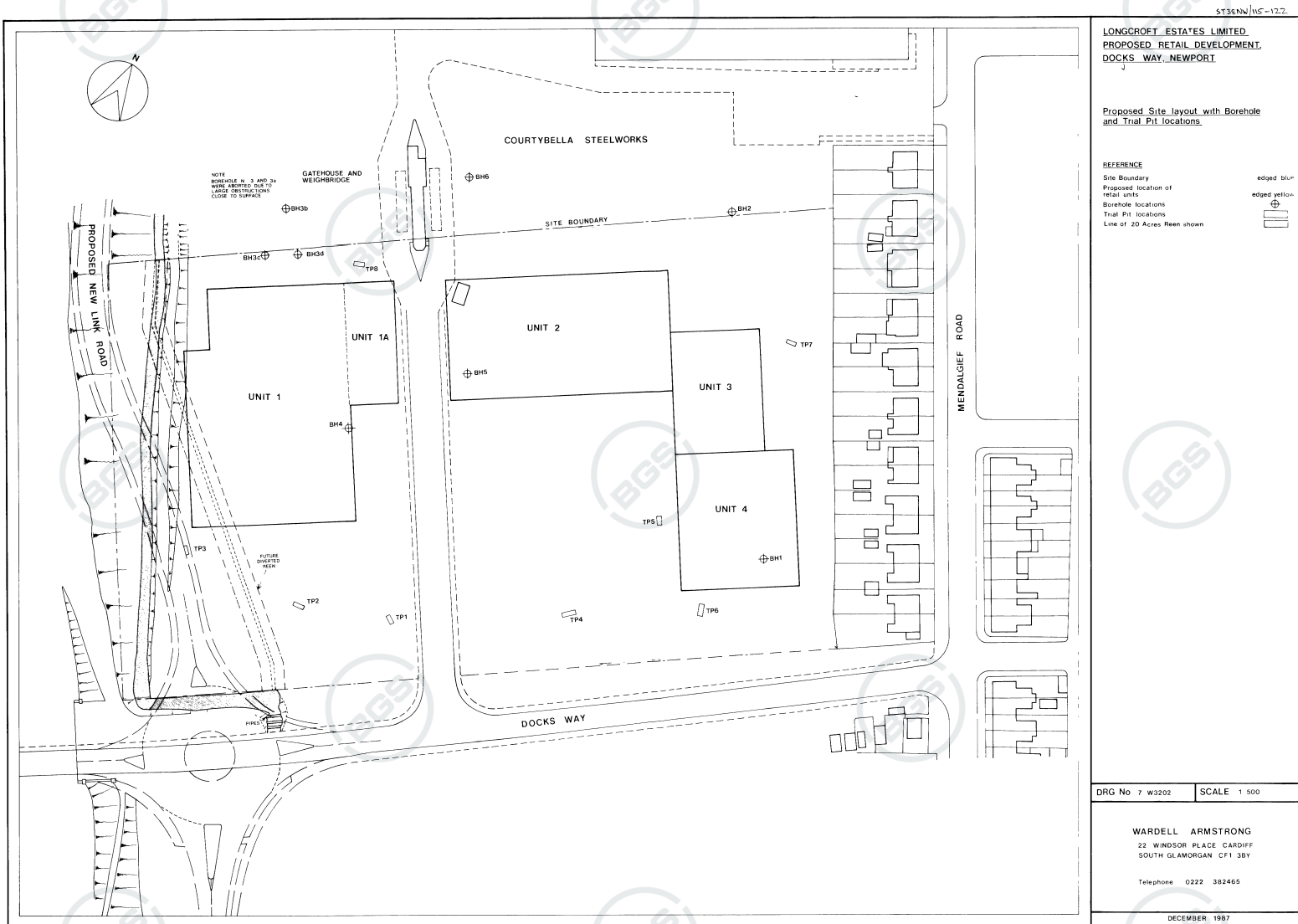
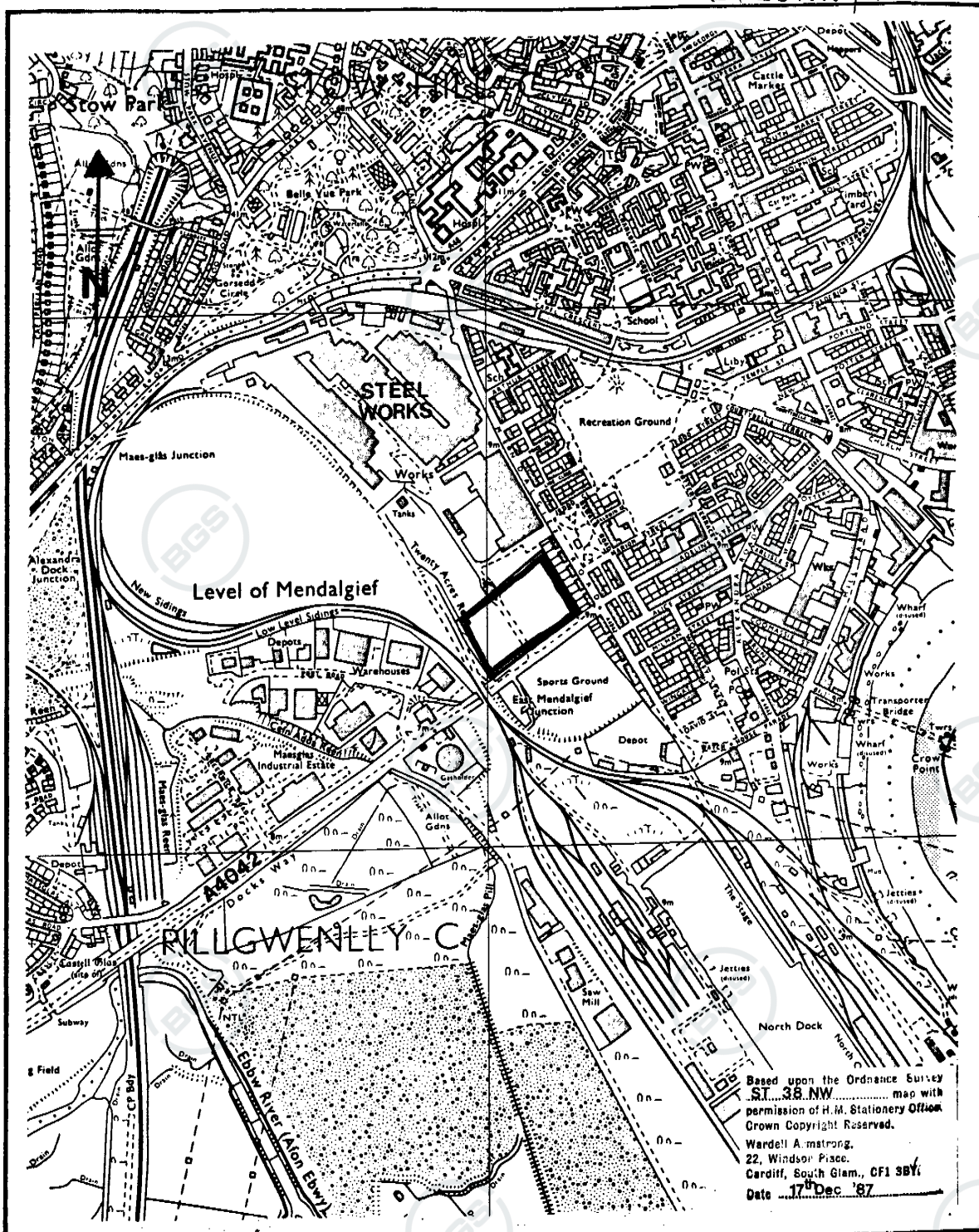




ST 38 NW / 115 - 122



**LONGCROFT ESTATES LIMITED,
PROPOSED RETAIL DEVELOPMENT,
DOCKS WAY, NEWPORT.**

Site Location Plan

REFERENCE

Site Area.....edged blue

WARDELL ARMSTRONG

DRG. NO.1/W3202

SCALE:-1:10,000

CONTRACTOR RITCHIES EQUIPMENT		DATE OF DRILLING 20-11-87 to 23-11-87		DRILLING METHOD SHELL AND AUGER		BOREHOLE No. 6 ST 38 NW / 122	
GROUND LEVEL 8.49 m A.O.D.		ORIENTATION VERTICAL		SITE DOCKSWAY, NEWPORT Adjacent to Security hut inside fence (near weighbridge) on east side NGR. 3101 8651			PAGE 1 OF 4
WATER LEVEL	DEPTH	LOG	STRATA DESCRIPTION	SAMPLE / TEST			
	metres b.g.l.			TYPE	No.	REMARKS	
STANDING	0-00		MADEGROUND : Rubble, coal fragments, sand, soil, brick, marl lumps	B.S. [0-0-1-2]	①		
	1-00						
	1-20			S.P.T	②	3,3,3, 5 N = 15 Min N = 12	
	1-70						
	1-80			B.S. [1-7-2-0]	③		
	2-00						
	2-15			U.D	④	50 Blows	
	2-50		X	B.S.	⑤		
			X	B.S. [2-5-3-0]	⑥		
	3-00						
			X	U.D	⑦	50 Blows	
	3-50	X	B.S.	⑧			
		X					
	4-00	X	B.S. [3-50-4-50]	⑨			
		X					
	4-50	X	U.D	⑩	36 Blows		
		X					
	5-00	X	B.S.	⑪			

KEY

B.S. - Bulk Sample

U.D. - Undisturbed Sample

S.P.T. - Std. Penetration Test

REMARKS

LOGGED BY
T.J.J. LUXON

SCALE
1:25

CLIENT
LONGCROFT ESTATES LIMITED

JOB No.
W3202

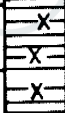
WARDELL ARMSTRONG

CONTRACTOR		DATE OF DRILLING		DRILLING METHOD		BOREHOLE No. 6 ST 38 NW 122	
GROUND LEVEL		ORIENTATION		SITE		PAGE 2 OF 4	
WATER LEVEL	DEPTH metres b.g.l.	LOG	STRATA DESCRIPTION	SAMPLE / TEST			
				TYPE	No.	REMARKS	
	5.00	X					
	5.50	X	Soft blue/grey silty CLAY with traces of peat	B.S. (5.5-5.8)	(12)		
	5.80	X	Peat	B.S. (5.8-6.1)	(13)		
	6.00	X		UD	(14)	50	Blows
	6.10	X		B.S.	(15)		
	6.70	X	Soft to firm grey silty CLAY with traces of peat, becoming softer with depth				
	7.00	X	(Soft)	B.S. (7-7.5)	(16)		
	7.50	X		UD	(17)	20	Blows
	8.00	X		B.S.	(18)		
	8.10	X					
	9.00	X	Very soft grey sandy clayey SILT with traces of peat	B.S. (9-9.7)	(19)		
	9.70	X	(No peat)	UD	(20)	10	Blows
	10.00	X					
KEY			REMARKS				
See Page 1			(5 - 12.5m Drillers log only)				
LOGGED BY			SCALE				
WARDELL ARMSTRONG			CLIENT LONGCROFT ESTATES LIMITED			JOB No. W3202	



CONTRACTOR		DATE OF DRILLING		DRILLING METHOD		BOREHOLE No. 6 ST38NW122	
GROUND LEVEL		ORIENTATION		SITE		PAGE 3 OF 4	
WATER LEVEL	DEPTH metres b.g.l.	LOG	STRATA DESCRIPTION	SAMPLE / TEST			
				TYPE	No.	REMARKS	
	10-00	X X X	Very soft, grey sandy clayey SILT.	U.D cont			
	10-50	X X X	Slightly decomposed, brown wood PEAT.	B.S (10-5-109)	(21)		
	10-90	X X X	Firm, grey, silty, sandy CLAY with peat deposit.	U.D (11m) B.S	(22)	45	
	11-00	X X X			(23)	Blows	
	11-25	X X X					
	11-50	X X X	Firm, grey, silty CLAY, mixed with sand, gravel and sandy marl fragments.	B.S (11-5-12)	(24)		
	12-00	X X X		S.P.T	(25)	4, 8, 8, 10, 10 N = 36 Min N = 32	
	12-50	X X X	Medium to densely pacted, red/brown medium and coarse grained SAND with fine to medium grained gravel and some red/brown silt.	B.S (12-5-13)	(26)		
	13-00	X X X		S.P.T	(27)	4, 4, 7, 13, 8 N = 32 Min N = 16	
	13-50	X X X					
	14-00	X X X		B.S (35-44)	(28)		
	14-40	X X X	Compact red/brown, fine to medium grained SAND with some silt.	S.P.T	(29)	4, 2, 3, 6, 14 N = 25 Min N = 8	
	15-00	X X X					
KEY			REMARKS				
S3ee5Page 1							
LOGGED BY			SCALE				
			1:25				
WARDELL ARMSTRONG			CLIENT LONGCROFT ESTATES LIMITED			JOB No. W3202	



CONTRACTOR		DATE OF DRILLING		DRILLING METHOD		BOREHOLE No. 6 ST38NW122	
GROUND LEVEL		ORIENTATION		SITE		PAGE 4 OF 4	
WATER LEVEL	DEPTH metres b.g.l.	LOG	STRATA DESCRIPTION	SAMPLE / TEST			
				TYPE	No.	REMARKS	
	15.00		Densely packed red brown medium grained SAND with some gravel with a few cobbles	BS	(30)		
	15.60			S.P.T	(31)	15,6,6 15,15 N = 42 Min N = 24	
	16.00		Angular fragments of red brown MARL Within sand				
	16.10		Stiff red brown MARL in angular fragment with green/grey spotting. Silt between fragments	BS	(32)		
	16.20			UD	(33)	120 Blows	
	16.60			BS	(34)		
	17.00			S.P.T (17m)	(35)	22,10, 14,16, 18 N = 58 Min N = 40	
	17.50		END OF HOLE AT 17.50m				
KEY			REMARKS				
As Page 1							
LOGGED BY			SCALE				
WARDELL ARMSTRONG			CLIENT LONGCROFT ESTATES LIMITED		JOB No. W3202		



Appendix G Welsh Water Pre-Planning Enquiry Response

Mr Sam Smickersgill
JPG Leeds
5 John Charles Way
Leeds
West Yorkshire
LS12 6QA

Date: 25/06/2024
Our Ref: PPA0008778

Dear Mr Smickersgill,

Grid Ref: 330924 186932
Site Address: Mendalgief Road, Newport
Development: Proposed Carehome Development

I refer to your pre-planning enquiry received relating to the above site, seeking our views on the capacity of our network of assets and infrastructure to accommodate your proposed development. Having reviewed the details submitted I can provide the following comments which should be taken into account within any future planning application for the development.

APPRAISAL

Firstly, we note that the proposal relates to Proposed 66 bed care home at Mendalgief Road, Newport and acknowledge that the site is allocated Ref: H1(51) within the Local Development Plan (LDP). In reference to our representations during the LDP consultation process, we can confirm that an assessment has been undertaken of the public sewerage and watermains systems to accommodate 560 units for the development site as a whole and informs our appraisal as follows.

Please note, however, this proposal comprises an increase to the allocation and the following assessment takes account of an additional 35 units.

PUBLIC SEWERAGE NETWORK

The proposed development site is located in the immediate vicinity of a predominantly combined public sewerage system which drains to Nash Wastewater Treatment Works (WwTW) via Pill South Sewerage Pumping Station (SPS).

You are also advised that some public sewers and lateral drains may not be recorded on our maps of public sewers because they were originally privately owned and were transferred into public ownership by nature of the Water Industry (Schemes for Adoption of Private Sewers) Regulations 2011. The presence of such assets may affect the proposal. In order to assist you may contact Dwr Cymru Welsh Water on 0800 085 3968 to establish the location and status of the apparatus in and around your site. Please be mindful that under the Water Industry Act 1991 Dwr Cymru Welsh Water has rights of access to its apparatus at all times.

SURFACE WATER DRAINAGE

As of 7th January 2019, this proposed development is subject to Schedule 3 of the Flood and Water Management Act 2010. The development therefore requires approval of Sustainable Drainage Systems (SuDS) features, in accordance with the 'Statutory standards for sustainable drainage systems – designing, constructing, operating and maintaining surface water drainage systems'. As highlighted in these standards, the developer is required to explore and fully exhaust all surface water drainage options in accordance with a hierarchy which states that discharge to a combined sewer shall only be made as a last resort. Disposal should be made through the hierarchical approach, preferring infiltration and, where infiltration is not possible, disposal to a surface water drainage body in liaison with the Land Drainage Authority and/or Natural Resources Wales.

It is therefore recommended that the developer consult with Newport Council, as the determining SuDS Approval Body (SAB), in relation to their proposals for SuDS features. Please note, DCWW is a statutory consultee to the SAB application process and will provide comments to any SuDS proposals by response to SAB consultation. Please refer to further detailed advice relating to surface water management included in our attached Advice & Guidance note and our Developer Services website at <https://developers.dwrcymru.com/en/help-advice/regulation-to-be-aware-of/sustainable-drainage-systems>.

In addition, please note that no highway or land drainage run-off will be permitted to discharge directly or indirectly into the public sewerage system.

FOUL WATER DRAINAGE – SEWERAGE NETWORK

We have considered the impact of foul flows generated by the proposed development and concluded that flows can be accommodated within the public sewerage system which is consistent with our representations to the forward planning consultation process. We advise that the flows should be connected to the combined sewer at or downstream of manhole ST31860902 located in Bellevue Terrace to the east.



Welsh Water is owned by Glas Cymru – a 'not-for-profit' company.
Mae Dŵr Cymru yn eiddo i Glas Cymru – cwmni 'nid-er-elw'.

We welcome correspondence in
Welsh and English

Dŵr Cymru Cyf, a limited company registered in
Wales no 2366777. Registered office: Pentwyn Road,
Nelson, Treharris, Mid Glamorgan CF46 6LY

Rydym yn croesawu gohebiaeth yn y
Gymraeg neu yn Saesneg

Dŵr Cymru Cyf, cwmni cyfyngedig wedi'i gofrestru yng
Nghymru rhif 2366777. Swyddfa gofrestredig: Heol Pentwyn
Nelson, Treharris, Morgannwg Ganol CF46 6LY.

Should a planning application be submitted for this development we will seek to control these points of communication via appropriate planning conditions and therefore recommend that any drainage layout or strategy submitted as part of your application takes this into account. However, should you wish for an alternative connection point to be considered please provide further information to us in the form of a drainage strategy, preferably in advance of a planning application being submitted.

You may need to apply to Dwr Cymru Welsh Water for any connection to the public sewer under Section 106 of the Water industry Act 1991. However, if the connection to the public sewer network is either via a lateral drain (i.e. a drain which extends beyond the connecting property boundary) or via a new sewer (i.e. serves more than one property), it is now a mandatory requirement to first enter into a Section 104 Adoption Agreement (Water Industry Act 1991). The design of the sewers and lateral drains must also conform to the Welsh Ministers Standards for Foul Sewers and Lateral Drains, and conform with the publication "Sewers for Adoption"- 7th Edition. Further information can be obtained via the Developer Services pages of www.dwrcymru.com.

FOUL WATER DRAINAGE – SEWAGE TREATMENT

No problems are envisaged with the Waste Water Treatment Works for the treatment of domestic discharges from this site.

POTABLE WATER SUPPLY

We anticipate this development will require the installation of a new single water connection to serve the new premise. The provisions of Section 45 of the Water industry Act 1991 apply. We therefore rely on the Local Planning Authority to control the delivery of any required reinforcement or offsite works by way of planning condition at planning application stage.

The water supply system in the immediate vicinity has insufficient capacity to serve the development and will also cause detriment to existing customers' water supply. A hydraulic modelling assessment is required to establish the scope of any reinforcement works to be completed in advance of making the connection. As part of the formal planning consultation process, we will seek to ensure that the assessment (and any associated reinforcement works) is completed in advance of the determination of the application or controlled by way of planning condition.

I trust the above information is helpful and will assist you in forming water and drainage strategies that should accompany any future planning application. I also attach copies of our water and sewer extract plans for the area, and a copy of our Planning Guidance Note which provides further information on our approach to the planning process, making connections to our systems and ensuring any existing public assets or infrastructure located within new development sites are protected.

Please note that our response is based on the information provided in your enquiry and should the information change we reserve the right to make a new representation. Should you have any queries or wish to discuss any aspect of our response please do not hesitate to contact our dedicated team of planning officers, either on 0800 917 2652 or via email at developer.services@dwrcymru.com



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Mae Dwr Cymru yn eiddo i Glas Cymru – cwmni 'nid-er-elw'.

We welcome correspondence in
Welsh and English

Dŵr Cymru Cyf, a limited company registered in
Wales no 2366777. Registered office: Pentwyn Road,
Nelson, Treharris, Mid Glamorgan CF46 6LY

Rydym yn croesawu gohebiaeth yn y
Gymraeg neu yn Saesneg

Dŵr Cymru Cyf, cwmni cyfyngedig wedi'i gofrestru yng
Nghymru rhif 2366777. Swyddfa gofrestredig: Heol Pentwyn
Nelson, Treharris, Morgannwg Ganol CF46 6LY.

Please quote our reference number in all communications and correspondence.

Yours faithfully,



Owain George
Planning Liaison Manager
Developer Services

Please Note that demands upon the water and sewerage systems change continually; consequently the information given above should be regarded as reliable for a maximum period of 12 months from the date of this letter.



Welsh Water is owned by Glas Cymru – a 'not-for-profit' company.
Mae Dŵr Cymru yn eiddo i Glas Cymru – cwmni 'nid-er-elw'.

We welcome correspondence in
Welsh and English

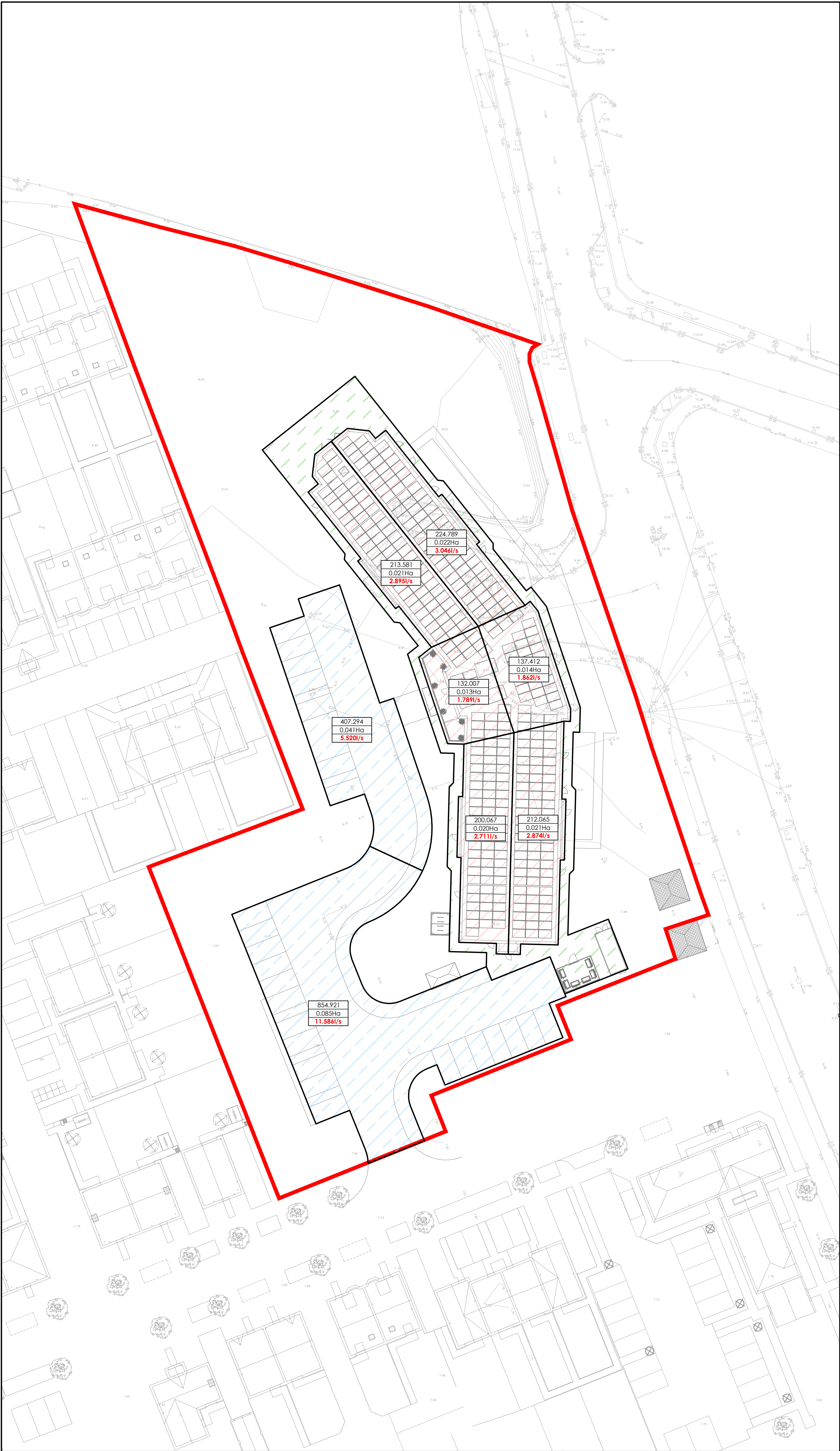
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Rydym yn croesawu gohebiaeth yn y
Gymraeg neu yn Saesneg

Dŵr Cymru Cyf, cwmni cyfyngedig wedi'i gofrestru yng
Nghymru rhif 2366777. Swyddfa gofrestredig: Heol Pentwyn
Nelson, Treharris, Morgannwg Ganol CF46 6LY.



Appendix H Proposed Impermeable Area Plan



IMPERMEABLE AREA PLAN

SCALE 1:250

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DO NOT SCALE (A1)

NOTES

GENERAL NOTES

1. ALL MATERIALS AND WORKMANSHIP IS TO COMPLY WITH JPG CONSULTANTS STANDARD SPECIFICATION & ALL RELEVANT BRITISH & EUROPEAN STANDARDS.

2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, M & E CONSULTANTS AND JPG CONSULTANTS DRAWINGS.

3. ANY DISCREPANCIES SHOULD BE REPORTED TO THE ENGINEER IMMEDIATELY SO THAT CLARIFICATION CAN BE SOUGHT PRIOR TO COMMENCEMENT OF WORKS.

LEGEND

DENOTES PROPOSED BUILDINGS

DENOTES PROPOSED EXTERNALS

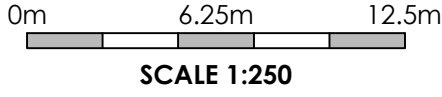
IMPERMEABLE AREAS

BUILDINGS = 1119.162m²/0.112Ha
EXTERNALS = 1262.215m²/0.126Ha
TOTAL = 2381.377m²/0.238Ha

TOTAL SITE SURFACE WATER RUN OFF

VOLUME RUN OFF (Cv)	0.750
ROUTING COEFFICIENT (Cr)	1.300
AVERAGE RAINFALL (I) IN mm/hr	50.000
AREA IN HECTARES (A)	0.238
FLOW RATE (Q) = 2.78 x Cv x Cr x I x A	32.255l/s

Rough Flow Rate Calc = Area in Hectares x (140 for 50mm/hr) / (210 for 75mm/hr)



P02	UPDATED TO SUIT NEW ARRANGEMENT	13.05.25		SMS
P01	FIRST ISSUE	31.07.24	JDM	SMS
REV	DESCRIPTION	DATE	CHK	BY

Project
MANDALGIEF ROAD
NEWPORT

Drawing Title
IMPERMEABLE AREA PLAN

INFORMATION

JPG

www.jpg.group
E admin@jpg.group | T +44 (0)113 263 1155

6375-JPG-ZZ-ZZ-DR-D-1450

S2

P02



Appendix I Surface Water Drainage Strategy



Appendix J SW Drainage Hydraulic Calculations

Project: Mendalgief Road Newport	Date: 09/05/2025		
	Designed by: SMS	Checked by:	Approved By:
Report Details: Type: Junctions Storm Phase: Phase	Company Address: JPG Group 5 John Charles Way, Leeds LS12 6QA		

JPG

Outlets			
Junction	Outlet Name	Outgoing Connection	Outlet Type
004	Outlet	2.000	Free Discharge
005	Outlet	2.001	Free Discharge
006	Outlet	2.002	Free Discharge
007	Outlet	2.003	Free Discharge
008	Outlet	2.004	Free Discharge
009	Outlet	1.003	Free Discharge
011	Outlet	1.004	Free Discharge
001	Outlet	1.000	Free Discharge
002	Outlet	1.001	Free Discharge
003	Outlet	1.002	Free Discharge
010	Outlet	3.001	Free Discharge
014	Outlet	1.006	Free Discharge
012	Outlet	1.005	Free Discharge
013-SPS	Outlet	Rising Main	Pump
	Invert Level (m)	7.625	
	Depth (m)	Outflow (L/s)	
	0.100	3.5	
	0.200	3.5	
	0.300	3.5	
	0.400	3.5	
	0.500	3.5	
	0.600	3.5	
	0.700	3.5	
	0.800	3.5	
	0.900	3.5	
	1.000	3.5	
	1.100	3.5	
	1.200	3.5	
	1.300	3.5	
	1.400	3.5	
	1.500	3.5	
	1.600	3.5	
	1.700	3.5	
	1.800	3.5	
	1.900	3.5	
	2.000	3.5	
	2.100	3.5	
	2.200	3.5	
	2.300	3.5	
	2.400	3.5	
	2.500	3.5	
	2.600	3.5	
	2.700	3.5	
	2.800	3.5	
	2.900	3.5	
	3.000	3.5	
	3.100	3.5	
	3.200	3.5	
	3.300	3.5	
	3.400	3.5	
	3.500	3.5	
	3.600	3.5	
	3.700	3.5	
	3.800	3.5	
	3.900	3.5	
	4.000	3.5	
	4.100	3.5	
	4.200	3.5	
	4.300	3.5	
	4.400	3.5	
	4.500	3.5	
	4.600	3.5	
	4.700	3.5	
	4.800	3.5	
	4.900	3.5	
	5.000	3.5	
	5.100	3.5	
	5.200	3.5	
	5.300	3.5	
	5.400	3.5	
	5.500	3.5	
	5.600	3.5	
	5.700	3.5	
	5.800	3.5	
	5.900	3.5	
	6.000	3.5	
	6.100	3.5	
	6.200	3.5	

Project: Mendalgief Road Newport	Date: 09/05/2025		
	Designed by: SMS	Checked by:	Approved By:
Report Details: Type: Junctions Storm Phase: Phase	Company Address: JPG Group 5 John Charles Way, Leeds LS12 6QA		



Junction	Outlet Name	Outgoing Connection	Outlet Type
	6.300	3.5	
	6.400	3.5	
	6.500	3.5	
	6.600	3.5	
	6.700	3.5	
	6.800	3.5	
	6.900	3.5	
	7.000	3.5	
	7.100	3.5	
	7.200	3.5	
	7.300	3.5	
	7.400	3.5	
	7.500	3.5	
	7.600	3.5	
	7.700	3.5	
	7.800	3.5	
	7.900	3.5	
	8.000	3.5	
	8.100	3.5	
	8.200	3.5	
	8.300	3.5	
	8.400	3.5	
	8.500	3.5	
	8.600	3.5	
	8.700	3.5	
	8.800	3.5	
	8.900	3.5	
	9.000	3.5	
	9.100	3.5	
	9.200	3.5	
	9.300	3.5	
	9.400	3.5	
	9.500	3.5	
	9.600	3.5	
	9.700	3.5	
	9.800	3.5	
	9.900	3.5	
	10.000	3.5	
Simple Junction	Outlet	3.000	Free Discharge
Simple Junction (1)	Outlet	4.000	Free Discharge
Simple Junction (2)	Outlet	5.000	Free Discharge

Project: Mendalgief Road Newport	Date: 09/05/2025		
	Designed by: SMS	Checked by:	Approved By:
Report Details: Type: Stormwater Controls Storm Phase: Phase	Company Address: JPG Group 5 John Charles Way, Leeds LS12 6QA		



Tank

Type : Tank

Dimensions

Exceedance Level (m)	8.265
Depth (m)	2.160
Base Level (m)	6.105
Freeboard (mm)	0
Initial Depth (m)	0.000
Porosity (%)	95
Average Slope (1:X)	0.00
Total Volume (m³)	234.148

Depth (m)	Area (m²)	Volume (m³)
0.000	245.25	73.000
1.000	245.25	73.000

Advanced

Perimeter	Circular
Length (m)	25.870
Friction Scheme	Colebrook-White Roughness
Roughness (mm)	0.6

Project: Mendalgief Road Newport	Date: 09/05/2025		
	Designed by: SMS	Checked by:	Approved By:
Report Details: Type: Network Design Criteria Storm Phase: Phase	Company Address: JPG Group 5 John Charles Way, Leeds LS12 6QA		



Flow Options

Peak Flow Calculation	(UK) Modified Rational Method
Min. Time of Entry (mins)	5
Max. Travel Time (mins)	30

Pipe Options

Lock Slope Options	None
Design Options	Minimise Excavation
Design Level	Level Soffits
Min. Cover Depth (m)	1.200
Min. Slope (1:X)	500.00
Max. Slope (1:X)	40.00
Min. Velocity (m/s)	1.0
Max. Velocity (m/s)	3.0
Use Flow Restriction	☐
Reduce Channel Depths	☐

Manhole Options

Apply Offset	☐
--------------	--------------------------

Project: Mendalgief Road Newport	Date: 09/05/2025			
	Designed by:	Checked by:	Approved By:	
	SMS			
Report Details: Type: Outfall Details Storm Phase: Phase	Company Address: JPG Group 5 John Charles Way, Leeds LS12 6QA			

Outfalls

Outfall	Outfall Type	Fixed Surcharged Level (m)	Level Curve
Outfall	Free Discharge		

Project: Mendalgief Road Newport	Date: 09/05/2025		
	Designed by: SMS	Checked by:	Approved By:
Report Title: Rainfall Analysis Criteria	Company Address: JPG Group 5 John Charles Way, Leeds LS12 6QA		



Runoff Type	Dynamic
Output Interval (mins)	5
Time Step	Default
Urban Creep	Apply Global Value
Urban Creep Global Value (%)	10
Junction Flood Risk Margin (mm)	300
Prefill Manhole Sumps	☐
Perform No Discharge Analysis	☐

Project: Mendalgief Road Newport	Date: 09/05/2025		
	Designed by: SMS	Checked by:	Approved By:
Report Details: Type: Inflows Summary Storm Phase: Phase	Company Address: JPG Group 5 John Charles Way, Leeds LS12 6QA		



1:2+00CC: 2 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Inflow

Inflow	Storm Event	Inflow Area (ha)	Max. Inflow (L/s)	Total Inflow Volume (m³)
Catchment Area	1:2+00CC: 2 years: +0 %: 15 mins: Winter	0.09	15.8	7.257
Carpark 1	1:2+00CC: 2 years: +0 %: 15 mins: Winter	0.04	7.5	3.455
Building 6	1:2+00CC: 2 years: +0 %: 15 mins: Winter	0.02	3.9	1.805
Building 1	1:2+00CC: 2 years: +0 %: 15 mins: Winter	0.02	4.2	1.906
Building 2	1:2+00CC: 2 years: +0 %: 15 mins: Winter	0.01	2.5	1.162
Building 5	1:2+00CC: 2 years: +0 %: 15 mins: Winter	0.01	2.4	1.120
Building 4	1:2+00CC: 2 years: +0 %: 15 mins: Winter	0.02	3.7	1.698
Building 3	1:2+00CC: 2 years: +0 %: 15 mins: Winter	0.02	3.9	1.802

Project: Mendalgief Road Newport	Date: 09/05/2025		
	Designed by: SMS	Checked by:	Approved By:
Report Details: Type: Junctions Summary Storm Phase: Phase	Company Address: JPG Group 5 John Charles Way, Leeds LS12 6QA		



1:2+00CC: 2 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Depth

Junction	Storm Event	Cover Level (m)	Invert Level (m)	Max. Level (m)	Max. Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Status
004	1:2+00CC: 2 years: +0 %: 15 mins: Summer	8.714	7.950	7.950	0.000	0.0	0.000	0.000	0.0	0.000	OK
005	1:2+00CC: 2 years: +0 %: 15 mins: Winter	8.709	7.560	7.906	0.346	4.2	0.055	0.000	3.9	1.515	OK
006	1:2+00CC: 2 years: +0 %: 15 mins: Winter	8.709	7.395	7.755	0.360	6.5	0.057	0.000	6.1	2.335	OK
007	1:2+00CC: 2 years: +0 %: 15 mins: Winter	8.843	7.035	7.413	0.378	10.1	0.060	0.000	9.5	3.789	OK
008	1:2+00CC: 2 years: +0 %: 15 mins: Winter	8.734	6.915	7.279	0.364	9.5	0.058	0.000	9.4	3.442	OK
009	1:2+00CC: 2 years: +0 %: 15 mins: Winter	8.654	6.630	6.999	0.369	19.1	0.059	0.000	18.9	6.904	OK
011	1:2+00CC: 2 years: +0 %: 10080 mins: Winter	8.524	5.880	6.871	0.991	0.5	1.121	0.000	0.5	120.929	Surcharged
001	1:2+00CC: 2 years: +0 %: 15 mins: Summer	8.722	7.960	7.960	0.000	0.0	0.000	0.000	0.0	0.000	OK
002	1:2+00CC: 2 years: +0 %: 15 mins: Winter	8.701	7.575	7.916	0.341	3.9	0.054	0.000	3.8	1.405	OK
003	1:2+00CC: 2 years: +0 %: 15 mins: Winter	8.559	7.205	7.552	0.347	6.2	0.055	0.000	6.0	2.157	OK
010	1:2+00CC: 2 years: +0 %: 15 mins: Winter	8.005	6.330	6.895	0.565	7.5	0.639	0.000	6.8	2.826	OK
014	1:2+00CC: 2 years: +0 %: 15 mins: Summer	8.559	7.055	7.055	0.000	0.0	0.000	0.000	0.0	0.000	OK
Outfall	1:2+00CC: 2 years: +0 %: 15 mins: Summer		6.940	6.940	0.000	0.0			0.0	0.000	OK
012	1:2+00CC: 2 years: +0 %: 10080 mins: Winter	7.912	5.985	6.872	0.887	0.3	1.003	0.000	0.3	74.935	Surcharged
013-SPS	1:2+00CC: 2 years: +0 %: 10080 mins: Winter	8.525	5.585	6.871	1.286	0.1	3.274	0.000	0.0	3.242	OK
Simple Junction	1:2+00CC: 2 years: +0 %: 15 mins: Summer		7.105	7.105	0.000	0.0			0.0	0.000	OK
Simple Junction (1)	1:2+00CC: 2 years: +0 %: 10080 mins: Winter		6.770	6.872	0.102	0.0			0.0	2.797	OK
Simple Junction (2)	1:2+00CC: 2 years: +0 %: 10080 mins: Winter		6.656	6.872	0.216	0.0			0.0	2.156	Surcharged

Project: Mendalgief Road Newport	Date: 09/05/2025			
	Designed by: SMS	Checked by:	Approved By:	
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase	Company Address: JPG Group 5 John Charles Way, Leeds LS12 6QA			



1:2+00CC: 2 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Avg. Depth

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. Avg. Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Total Lost Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Percentage Available (%)
Tank	1:2+00CC: 2 years: +0 %: 10080 mins: Winter	6.871	6.871	6.871	0.766	0.766	0.8	178.563	0.000	0.000	0.1	12.840	23.739

Project: Mendalgief Road Newport	Date: 09/05/2025			
	Designed by:	Checked by:	Approved By:	
	SMS			
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase	Company Address: JPG Group 5 John Charles Way, Leeds LS12 6QA			

Status

OK

Project: Mendalgief Road Newport	Date: 09/05/2025		
	Designed by: SMS	Checked by:	Approved By:
Report Details: Type: Connections Summary Storm Phase: Phase	Company Address: JPG Group 5 John Charles Way, Leeds LS12 6QA		



1:2+00CC: 2 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Flow

Connection	Storm Event	Connection Type	From	To	Upstream Cover Level (m)	Max. US Water Level (m)	Max. Flow Depth (m)	Discharge Volume (m³)	Max. Velocity (m/s)	Flow / Capacity	Max. Flow (L/s)	Status
2.000	1:2+00CC: 2 years: +0 %: 15 mins: Summer	Pipe	004	005	8.714	7.950	0.022	0.000	0.0	0	0.0	OK
2.001	1:2+00CC: 2 years: +0 %: 15 mins: Winter	Pipe	005	006	8.709	7.906	0.053	1.515	0.7	0.2	3.9	OK
2.002	1:2+00CC: 2 years: +0 %: 15 mins: Winter	Pipe	006	007	8.709	7.755	0.069	2.335	0.8	0.33	6.1	OK
2.003	1:2+00CC: 2 years: +0 %: 15 mins: Winter	Pipe	007	008	8.843	7.413	0.075	3.789	1.1	0.46	9.5	OK
2.004	1:2+00CC: 2 years: +0 %: 15 mins: Winter	Pipe	008	009	8.734	7.279	0.066	3.442	1.2	0.35	9.4	OK
1.003	1:2+00CC: 2 years: +0 %: 15 mins: Winter	Pipe	009	011	8.654	6.999	0.064	6.904	2.6	0.33	18.9	OK
1.000	1:2+00CC: 2 years: +0 %: 15 mins: Summer	Pipe	001	002	8.722	7.960	0.020	0.000	0.0	0	0.0	OK
1.001	1:2+00CC: 2 years: +0 %: 15 mins: Winter	Pipe	002	003	8.701	7.916	0.044	1.405	0.9	0.16	3.8	OK
1.002	1:2+00CC: 2 years: +0 %: 15 mins: Winter	Pipe	003	009	8.559	7.552	0.058	2.157	1.0	0.21	6.0	OK
3.001	1:2+00CC: 2 years: +0 %: 15 mins: Winter	Pipe	010	011	8.005	6.895	0.063	2.826	1.0	0.36	6.8	OK
1.006	1:2+00CC: 2 years: +0 %: 15 mins: Summer	Pipe	014	Outfall	8.559	7.055	0.000	0.000	0.0	0	0.0	OK
1.004	1:2+00CC: 2 years: +0 %: 15 mins: Winter	Pipe	011	Tank	8.524	6.460	0.080	9.130	1.7	0.16	25.2	OK
1.005	1:2+00CC: 2 years: +0 %: 15 mins: Winter	Pipe	012	Tank	7.912	6.374	0.089	6.884	0.9	0.19	15.1	OK
1.005 (1)	1:2+00CC: 2 years: +0 %: 60 mins: Summer	Pipe	Tank	013-SPS	8.265	6.217	0.122	1.639	0.8	0.07	6.9	OK
Rising Main	1:2+00CC: 2 years: +0 %: 15 mins: Summer	Pipe	013-SPS	014	8.525	6.159	0.000	0.000	0.0	0	0.0	OK
4.000	1:2+00CC: 2 years: +0 %: 8640 mins: Winter	Pipe	Simple Junction (1)	012	6.920	6.837	0.150	0.000	0.0	0	0.0	OK
5.000	1:2+00CC: 2 years: +0 %: 10080 mins: Summer	Pipe	Simple Junction (2)	012	6.806	6.801	0.150	0.000	0.0	0	0.0	OK
3.000	1:2+00CC: 2 years: +0 %: 15 mins: Summer	Pipe	Simple Junction	010	7.225	7.105	0.031	0.000	0.0	0	0.0	OK

Project: Mendalgief Road Newport	Date: 09/05/2025		
	Designed by: SMS	Checked by:	Approved By:
	Report Details: Type: Junctions Storm Phase: Phase		
Company Address: JPG Group 5 John Charles Way, Leeds LS12 6QA			

Outlets

Junction	Outlet Name	Outgoing Connection	Outlet Type
004	Outlet	2.000	Free Discharge
005	Outlet	2.001	Free Discharge
006	Outlet	2.002	Free Discharge
007	Outlet	2.003	Free Discharge
008	Outlet	2.004	Free Discharge
009	Outlet	1.003	Free Discharge
011	Outlet	1.004	Free Discharge
001	Outlet	1.000	Free Discharge
002	Outlet	1.001	Free Discharge
003	Outlet	1.002	Free Discharge
010	Outlet	3.001	Free Discharge
014	Outlet	1.006	Free Discharge
012	Outlet	1.005	Free Discharge
013-SPS	Outlet	Rising Main	Pump
	Invert Level (m)	7.625	
	Depth (m)	Outflow (L/s)	
	0.100	3.5	
	0.200	3.5	
	0.300	3.5	
	0.400	3.5	
	0.500	3.5	
	0.600	3.5	
	0.700	3.5	
	0.800	3.5	
	0.900	3.5	
	1.000	3.5	
	1.100	3.5	
	1.200	3.5	
	1.300	3.5	
	1.400	3.5	
	1.500	3.5	
	1.600	3.5	
	1.700	3.5	
	1.800	3.5	
	1.900	3.5	
	2.000	3.5	
	2.100	3.5	
	2.200	3.5	
	2.300	3.5	
	2.400	3.5	
	2.500	3.5	
	2.600	3.5	
	2.700	3.5	
	2.800	3.5	
	2.900	3.5	
	3.000	3.5	
	3.100	3.5	
	3.200	3.5	
	3.300	3.5	
	3.400	3.5	
	3.500	3.5	
	3.600	3.5	
	3.700	3.5	
	3.800	3.5	
	3.900	3.5	
	4.000	3.5	
	4.100	3.5	
	4.200	3.5	
	4.300	3.5	
	4.400	3.5	
	4.500	3.5	
	4.600	3.5	
	4.700	3.5	
	4.800	3.5	
	4.900	3.5	
	5.000	3.5	
	5.100	3.5	
	5.200	3.5	
	5.300	3.5	
	5.400	3.5	
	5.500	3.5	
	5.600	3.5	
	5.700	3.5	
	5.800	3.5	
	5.900	3.5	
	6.000	3.5	
	6.100	3.5	
	6.200	3.5	

Project: Mendalgief Road Newport	Date: 09/05/2025		
	Designed by: SMS	Checked by:	Approved By:
Report Details: Type: Junctions Storm Phase: Phase	Company Address: JPG Group 5 John Charles Way, Leeds LS12 6QA		



Junction	Outlet Name	Outgoing Connection	Outlet Type
	6.300	3.5	
	6.400	3.5	
	6.500	3.5	
	6.600	3.5	
	6.700	3.5	
	6.800	3.5	
	6.900	3.5	
	7.000	3.5	
	7.100	3.5	
	7.200	3.5	
	7.300	3.5	
	7.400	3.5	
	7.500	3.5	
	7.600	3.5	
	7.700	3.5	
	7.800	3.5	
	7.900	3.5	
	8.000	3.5	
	8.100	3.5	
	8.200	3.5	
	8.300	3.5	
	8.400	3.5	
	8.500	3.5	
	8.600	3.5	
	8.700	3.5	
	8.800	3.5	
	8.900	3.5	
	9.000	3.5	
	9.100	3.5	
	9.200	3.5	
	9.300	3.5	
	9.400	3.5	
	9.500	3.5	
	9.600	3.5	
	9.700	3.5	
	9.800	3.5	
	9.900	3.5	
	10.000	3.5	
Simple Junction	Outlet	3.000	Free Discharge
Simple Junction (1)	Outlet	4.000	Free Discharge
Simple Junction (2)	Outlet	5.000	Free Discharge

Project: Mendalgief Road Newport	Date: 09/05/2025		
	Designed by: SMS	Checked by:	Approved By:
Report Details: Type: Stormwater Controls Storm Phase: Phase	Company Address: JPG Group 5 John Charles Way, Leeds LS12 6QA		



Tank

Type : Tank

Dimensions

Exceedance Level (m)	8.265
Depth (m)	2.160
Base Level (m)	6.105
Freeboard (mm)	0
Initial Depth (m)	0.000
Porosity (%)	95
Average Slope (1:X)	0.00
Total Volume (m³)	234.148

Depth (m)	Area (m²)	Volume (m³)
0.000	245.25	73.000
1.000	245.25	73.000

Advanced

Perimeter	Circular
Length (m)	25.870
Friction Scheme	Colebrook-White Roughness
Roughness (mm)	0.6

Project: Mendalgief Road Newport	Date: 09/05/2025		
	Designed by: SMS	Checked by:	Approved By:
Report Details: Type: Network Design Criteria Storm Phase: Phase	Company Address: JPG Group 5 John Charles Way, Leeds LS12 6QA		



Flow Options

Peak Flow Calculation	(UK) Modified Rational Method
Min. Time of Entry (mins)	5
Max. Travel Time (mins)	30

Pipe Options

Lock Slope Options	None
Design Options	Minimise Excavation
Design Level	Level Soffits
Min. Cover Depth (m)	1.200
Min. Slope (1:X)	500.00
Max. Slope (1:X)	40.00
Min. Velocity (m/s)	1.0
Max. Velocity (m/s)	3.0
Use Flow Restriction	☐
Reduce Channel Depths	☐

Manhole Options

Apply Offset	☐
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Project: Mendalgief Road Newport	Date: 09/05/2025			
	Designed by:	Checked by:	Approved By:	
	SMS			
Report Details: Type: Outfall Details Storm Phase: Phase	Company Address: JPG Group 5 John Charles Way, Leeds LS12 6QA			

Outfalls

Outfall	Outfall Type	Fixed Surcharged Level (m)	Level Curve
Outfall	Free Discharge		

Project: Mendalgief Road Newport	Date: 09/05/2025		
	Designed by: SMS	Checked by:	Approved By:
Report Title: Rainfall Analysis Criteria	Company Address: JPG Group 5 John Charles Way, Leeds LS12 6QA		



Runoff Type	Dynamic
Output Interval (mins)	5
Time Step	Default
Urban Creep	Apply Global Value
Urban Creep Global Value (%)	10
Junction Flood Risk Margin (mm)	300
Prefill Manhole Sumps	☐
Perform No Discharge Analysis	☐

Project: Mendalgief Road Newport	Date: 09/05/2025		
	Designed by: SMS	Checked by:	Approved By:
Report Details: Type: Inflows Summary Storm Phase: Phase	Company Address: JPG Group 5 John Charles Way, Leeds LS12 6QA		



1:30+0cc: 30 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Inflow

Inflow	Storm Event	Inflow Area (ha)	Max. Inflow (L/s)	Total Inflow Volume (m³)
Catchment Area	1:30+0cc: 30 years: +0 %: 15 mins: Winter	0.09	29.9	13.783
Carpark 1	1:30+0cc: 30 years: +0 %: 15 mins: Winter	0.04	14.3	6.565
Building 6	1:30+0cc: 30 years: +0 %: 15 mins: Winter	0.02	7.4	3.429
Building 1	1:30+0cc: 30 years: +0 %: 15 mins: Winter	0.02	7.9	3.620
Building 2	1:30+0cc: 30 years: +0 %: 15 mins: Winter	0.01	4.8	2.216
Building 5	1:30+0cc: 30 years: +0 %: 15 mins: Winter	0.01	4.6	2.129
Building 4	1:30+0cc: 30 years: +0 %: 15 mins: Winter	0.02	7.0	3.226
Building 3	1:30+0cc: 30 years: +0 %: 15 mins: Winter	0.02	7.4	3.417

Project: Mendalgief Road Newport	Date: 09/05/2025		
	Designed by: SMS	Checked by:	Approved By:
Report Details: Type: Junctions Summary Storm Phase: Phase	Company Address: JPG Group 5 John Charles Way, Leeds LS12 6QA		



1:30+0cc: 30 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Depth

Junction	Storm Event	Cover Level (m)	Invert Level (m)	Max. Level (m)	Max. Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Status
004	1:30+0cc: 30 years: +0 %: 15 mins: Summer	8.714	7.950	7.950	0.000	0.0	0.000	0.000	0.0	0.000	OK
005	1:30+0cc: 30 years: +0 %: 15 mins: Winter	8.709	7.560	7.927	0.367	7.9	0.058	0.000	7.5	3.222	OK
006	1:30+0cc: 30 years: +0 %: 15 mins: Winter	8.709	7.395	7.782	0.387	12.3	0.062	0.000	11.8	5.097	OK
007	1:30+0cc: 30 years: +0 %: 10080 mins: Winter	8.843	7.035	7.635	0.600	0.3	0.095	0.000	0.3	68.453	Surcharged
008	1:30+0cc: 30 years: +0 %: 10080 mins: Winter	8.734	6.915	7.634	0.719	0.3	0.114	0.000	0.3	69.789	Surcharged
009	1:30+0cc: 30 years: +0 %: 10080 mins: Winter	8.654	6.630	7.634	1.004	0.6	0.160	0.000	0.6	135.188	Surcharged
011	1:30+0cc: 30 years: +0 %: 10080 mins: Winter	8.524	5.880	7.635	1.755	0.8	1.984	0.000	0.8	179.819	Surcharged
001	1:30+0cc: 30 years: +0 %: 15 mins: Summer	8.722	7.960	7.960	0.000	0.0	0.000	0.000	0.0	0.000	OK
002	1:30+0cc: 30 years: +0 %: 15 mins: Winter	8.701	7.575	7.933	0.358	7.4	0.057	0.000	7.2	3.025	OK
003	1:30+0cc: 30 years: +0 %: 10080 mins: Winter	8.559	7.205	7.634	0.429	0.2	0.068	0.000	0.2	41.626	OK
010	1:30+0cc: 30 years: +0 %: 10080 mins: Winter	8.005	6.330	7.634	1.304	0.2	1.475	0.000	0.2	50.533	Surcharged
014	1:30+0cc: 30 years: +0 %: 10080 mins: Winter	8.559	7.055	7.070	0.015	0.3	0.017	0.000	0.3	30.561	OK
Outfall	1:30+0cc: 30 years: +0 %: 10080 mins: Winter		6.940	6.954	0.014	0.3			0.3	30.561	OK
012	1:30+0cc: 30 years: +0 %: 10080 mins: Winter	7.912	5.985	7.635	1.650	0.4	1.866	0.000	0.4	107.452	Flood Risk
013-SPS	1:30+0cc: 30 years: +0 %: 10080 mins: Winter	8.525	5.585	7.634	2.049	0.5	5.215	0.000	0.3	35.389	Surcharged
Simple Junction	1:30+0cc: 30 years: +0 %: 10080 mins: Winter		7.105	7.634	0.529	0.1			0.0	1.742	Surcharged
Simple Junction (1)	1:30+0cc: 30 years: +0 %: 10080 mins: Winter		6.770	7.634	0.864	0.1			0.0	2.012	Surcharged
Simple Junction (2)	1:30+0cc: 30 years: +0 %: 10080 mins: Winter		6.656	7.634	0.978	0.1			0.1	3.616	Surcharged

Project: Mendalgief Road Newport	Date: 09/05/2025		
	Designed by: SMS	Checked by:	Approved By:
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase	Company Address: JPG Group 5 John Charles Way, Leeds LS12 6QA		



1:30+0cc: 30 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Avg. Depth

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. Avg. Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Total Lost Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Percentage Available (%)
Tank	1:30+0cc: 30 years: +0 %: 10080 mins: Winter	7.634	7.634	7.634	1.529	1.529	1.2	233.572	0.000	0.000	0.5	46.529	0.246

Project: Mendalgief Road Newport	Date: 09/05/2025			
	Designed by:	Checked by:	Approved By:	
	SMS			
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase	Company Address: JPG Group 5 John Charles Way, Leeds LS12 6QA			

Status

OK

Project: Mendalgief Road Newport	Date: 09/05/2025		
	Designed by: SMS	Checked by:	Approved By:
Report Details: Type: Connections Summary Storm Phase: Phase	Company Address: JPG Group 5 John Charles Way, Leeds LS12 6QA		



1:30+0cc: 30 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Flow

Connection	Storm Event	Connection Type	From	To	Upstream Cover Level (m)	Max. US Water Level (m)	Max. Flow Depth (m)	Discharge Volume (m³)	Max. Velocity (m/s)	Flow / Capacity	Max. Flow (L/s)	Status
2.000	1:30+0cc: 30 years: +0 %: 15 mins: Summer	Pipe	004	005	8.714	7.950	0.033	0.000	0.0	0	0.0	OK
2.001	1:30+0cc: 30 years: +0 %: 15 mins: Winter	Pipe	005	006	8.709	7.927	0.077	3.222	0.8	0.38	7.5	OK
2.002	1:30+0cc: 30 years: +0 %: 15 mins: Winter	Pipe	006	007	8.709	7.782	0.106	5.097	0.9	0.63	11.8	OK
2.003	1:30+0cc: 30 years: +0 %: 15 mins: Winter	Pipe	007	008	8.843	7.459	0.117	8.156	1.2	0.88	18.1	OK
2.004	1:30+0cc: 30 years: +0 %: 15 mins: Winter	Pipe	008	009	8.734	7.312	0.103	7.810	1.4	0.67	17.9	OK
1.003	1:30+0cc: 30 years: +0 %: 15 mins: Winter	Pipe	009	011	8.654	7.038	0.097	15.469	3.0	0.63	35.8	OK
1.000	1:30+0cc: 30 years: +0 %: 15 mins: Summer	Pipe	001	002	8.722	7.960	0.028	0.000	0.0	0	0.0	OK
1.001	1:30+0cc: 30 years: +0 %: 15 mins: Winter	Pipe	002	003	8.701	7.933	0.063	3.025	1.0	0.31	7.2	OK
1.002	1:30+0cc: 30 years: +0 %: 15 mins: Winter	Pipe	003	009	8.559	7.572	0.087	4.787	1.1	0.41	11.5	OK
3.001	1:30+0cc: 30 years: +0 %: 15 mins: Winter	Pipe	010	011	8.005	6.927	0.094	5.924	1.1	0.7	13.0	OK
1.006	1:30+0cc: 30 years: +0 %: 10080 mins: Winter	Pipe	014	Outfall	8.559	7.070	0.015	30.561	0.4	0.05	0.3	OK
1.004	1:30+0cc: 30 years: +0 %: 15 mins: Winter	Pipe	011	Tank	8.524	6.493	0.112	20.771	2.0	0.3	48.3	OK
1.005	1:30+0cc: 30 years: +0 %: 15 mins: Winter	Pipe	012	Tank	7.912	6.411	0.125	13.364	1.0	0.36	28.9	OK
1.005 (1)	1:30+0cc: 30 years: +0 %: 15 mins: Winter	Pipe	Tank	013-SPS	8.265	6.244	0.149	1.708	0.7	0.05	5.0	OK
Rising Main	1:30+0cc: 30 years: +0 %: 10080 mins: Winter	Pipe	013-SPS	014	8.525	7.634	0.004	30.562	0.0	0.02	0.3	Surchar ged
4.000	1:30+0cc: 30 years: +0 %: 8640 mins: Winter	Pipe	Simple Junction (1)	012	6.920	7.632	0.150	0.000	0.0	0	0.0	Surchar ged
5.000	1:30+0cc: 30 years: +0 %: 10080 mins: Winter	Pipe	Simple Junction (2)	012	6.806	7.634	0.150	0.000	0.0	0	0.1	Surchar ged
3.000	1:30+0cc: 30 years: +0 %: 10080 mins: Summer	Pipe	Simple Junction	010	7.225	7.543	0.150	0.000	0.0	0	0.0	Surchar ged

Project: Mendalgief Road Newport	Date: 09/05/2025		
	Designed by: SMS	Checked by:	Approved By:
	Report Details: Type: Junctions Storm Phase: Phase		
Company Address: JPG Group 5 John Charles Way, Leeds LS12 6QA			

Outlets			
Junction	Outlet Name	Outgoing Connection	Outlet Type
004	Outlet	2.000	Free Discharge
005	Outlet	2.001	Free Discharge
006	Outlet	2.002	Free Discharge
007	Outlet	2.003	Free Discharge
008	Outlet	2.004	Free Discharge
009	Outlet	1.003	Free Discharge
011	Outlet	1.004	Free Discharge
001	Outlet	1.000	Free Discharge
002	Outlet	1.001	Free Discharge
003	Outlet	1.002	Free Discharge
010	Outlet	3.001	Free Discharge
014	Outlet	1.006	Free Discharge
012	Outlet	1.005	Free Discharge
013-SPS	Outlet	Rising Main	Pump
	Invert Level (m)	7.625	
	Depth (m)	Outflow (L/s)	
	0.100	3.5	
	0.200	3.5	
	0.300	3.5	
	0.400	3.5	
	0.500	3.5	
	0.600	3.5	
	0.700	3.5	
	0.800	3.5	
	0.900	3.5	
	1.000	3.5	
	1.100	3.5	
	1.200	3.5	
	1.300	3.5	
	1.400	3.5	
	1.500	3.5	
	1.600	3.5	
	1.700	3.5	
	1.800	3.5	
	1.900	3.5	
	2.000	3.5	
	2.100	3.5	
	2.200	3.5	
	2.300	3.5	
	2.400	3.5	
	2.500	3.5	
	2.600	3.5	
	2.700	3.5	
	2.800	3.5	
	2.900	3.5	
	3.000	3.5	
	3.100	3.5	
	3.200	3.5	
	3.300	3.5	
	3.400	3.5	
	3.500	3.5	
	3.600	3.5	
	3.700	3.5	
	3.800	3.5	
	3.900	3.5	
	4.000	3.5	
	4.100	3.5	
	4.200	3.5	
	4.300	3.5	
	4.400	3.5	
	4.500	3.5	
	4.600	3.5	
	4.700	3.5	
	4.800	3.5	
	4.900	3.5	
	5.000	3.5	
	5.100	3.5	
	5.200	3.5	
	5.300	3.5	
	5.400	3.5	
	5.500	3.5	
	5.600	3.5	
	5.700	3.5	
	5.800	3.5	
	5.900	3.5	
	6.000	3.5	
	6.100	3.5	
	6.200	3.5	

Project: Mendalgief Road Newport	Date: 09/05/2025		
	Designed by: SMS	Checked by:	Approved By:
Report Details: Type: Junctions Storm Phase: Phase	Company Address: JPG Group 5 John Charles Way, Leeds LS12 6QA		



Junction	Outlet Name	Outgoing Connection	Outlet Type
	6.300	3.5	
	6.400	3.5	
	6.500	3.5	
	6.600	3.5	
	6.700	3.5	
	6.800	3.5	
	6.900	3.5	
	7.000	3.5	
	7.100	3.5	
	7.200	3.5	
	7.300	3.5	
	7.400	3.5	
	7.500	3.5	
	7.600	3.5	
	7.700	3.5	
	7.800	3.5	
	7.900	3.5	
	8.000	3.5	
	8.100	3.5	
	8.200	3.5	
	8.300	3.5	
	8.400	3.5	
	8.500	3.5	
	8.600	3.5	
	8.700	3.5	
	8.800	3.5	
	8.900	3.5	
	9.000	3.5	
	9.100	3.5	
	9.200	3.5	
	9.300	3.5	
	9.400	3.5	
	9.500	3.5	
	9.600	3.5	
	9.700	3.5	
	9.800	3.5	
	9.900	3.5	
	10.000	3.5	
Simple Junction	Outlet	3.000	Free Discharge
Simple Junction (1)	Outlet	4.000	Free Discharge
Simple Junction (2)	Outlet	5.000	Free Discharge

Project: Mendalgief Road Newport	Date: 09/05/2025		
	Designed by: SMS	Checked by:	Approved By:
Report Details: Type: Stormwater Controls Storm Phase: Phase	Company Address: JPG Group 5 John Charles Way, Leeds LS12 6QA		



Tank

Type : Tank

Dimensions

Exceedance Level (m)	8.265
Depth (m)	2.160
Base Level (m)	6.105
Freeboard (mm)	0
Initial Depth (m)	0.000
Porosity (%)	95
Average Slope (1:X)	0.00
Total Volume (m³)	234.148

Depth (m)	Area (m²)	Volume (m³)
0.000	245.25	73.000
1.000	245.25	73.000

Advanced

Perimeter	Circular
Length (m)	25.870
Friction Scheme	Colebrook-White Roughness
Roughness (mm)	0.6

Project: Mendalgief Road Newport	Date: 09/05/2025			
	Designed by: SMS	Checked by:	Approved By:	
Report Details: Type: Network Design Criteria Storm Phase: Phase	Company Address: JPG Group 5 John Charles Way, Leeds LS12 6QA			

Flow Options

Peak Flow Calculation	(UK) Modified Rational Method	
Min. Time of Entry (mins)		5
Max. Travel Time (mins)		30

Pipe Options

Lock Slope Options	None
Design Options	Minimise Excavation
Design Level	Level Soffits
Min. Cover Depth (m)	1.200
Min. Slope (1:X)	500.00
Max. Slope (1:X)	40.00
Min. Velocity (m/s)	1.0
Max. Velocity (m/s)	3.0
Use Flow Restriction	☐
Reduce Channel Depths	☐

Manhole Options

Apply Offset	☐
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Project: Mendalgief Road Newport	Date: 09/05/2025			
	Designed by:	Checked by:	Approved By:	
	SMS			
Report Details: Type: Outfall Details Storm Phase: Phase	Company Address: JPG Group 5 John Charles Way, Leeds LS12 6QA			

Outfalls

Outfall	Outfall Type	Fixed Surcharged Level (m)	Level Curve
Outfall	Free Discharge		

Project: Mendalgief Road Newport	Date: 09/05/2025		
	Designed by: SMS	Checked by:	Approved By:
Report Title: Rainfall Analysis Criteria	Company Address: JPG Group 5 John Charles Way, Leeds LS12 6QA		



Runoff Type	Dynamic
Output Interval (mins)	5
Time Step	Default
Urban Creep	Apply Global Value
Urban Creep Global Value (%)	10
Junction Flood Risk Margin (mm)	300
Prefill Manhole Sumps	☐
Perform No Discharge Analysis	☐

Project: Mendalgief Road Newport	Date: 09/05/2025		
	Designed by: SMS	Checked by:	Approved By:
Report Details: Type: Inflows Summary Storm Phase: Phase	Company Address: JPG Group 5 John Charles Way, Leeds LS12 6QA		



1:100+50CC: 100 years: Increase Rainfall (%): +50: Critical Storm Per Item: Rank By: Max. Inflow

Inflow	Storm Event	Inflow Area (ha)	Max. Inflow (L/s)	Total Inflow Volume (m³)
Catchment Area	1:100+50CC: 100 years: +50 %: 15 mins: Winter	0.09	58.0	26.814
Carpark 1	1:100+50CC: 100 years: +50 %: 15 mins: Winter	0.04	27.6	12.766
Building 6	1:100+50CC: 100 years: +50 %: 15 mins: Winter	0.02	14.4	6.673
Building 1	1:100+50CC: 100 years: +50 %: 15 mins: Winter	0.02	15.2	7.048
Building 2	1:100+50CC: 100 years: +50 %: 15 mins: Winter	0.01	9.3	4.308
Building 5	1:100+50CC: 100 years: +50 %: 15 mins: Winter	0.01	9.0	4.141
Building 4	1:100+50CC: 100 years: +50 %: 15 mins: Winter	0.02	13.6	6.275
Building 3	1:100+50CC: 100 years: +50 %: 15 mins: Winter	0.02	14.4	6.652