

ROOF LEVEL DRAINAGE & SuDS PLAN

SCALE 1:200

BLUE/GREEN ROOF SCHEDULE

ROOF ZONE	ROOF AREA	GREEN ROOF %	BLUE ROOF %	DRAINAGE SHEET DEPTH	STORAGE MODULE DEPTH	MODULE VOIDS RATIO	ATTENUATION STORAGE VOLUME	INTERCEPTION STORAGE VOLUME
ROOF A1	385m²	85%	85%	20mm	100mm	0.9	29.430m³	5.850m³
ROOF B1	213m²	85%	85%	20mm	100mm	0.9	16.290m³	3.250m³
ROOF B2	217m²	85%	0%	20mm	0mm	N/A	0m³	3.320m³
ROOF C1	73m²	85%	0%	20mm	0mm	N/A	0m³	1.110m³
ROOF C2	79m²	85%	0%	20mm	0mm	N/A	0m³	1.195m³
ROOF C3	280m²	85%	85%	20mm	100mm	0.9	16.428m³	4.250m³
ROOF D1	25m²	85%	0%	20mm	0mm	N/A	0m³	0.380m³

SUSTAINABLE URBAN DRAINAGE SYSTEMS (SuDS)

ROOF LEVEL:

BLUE ROOF/GREEN ROOF:

IT IS PROPOSED TO INCORPORATE THE USE GREEN ROOFING SYSTEMS INTO ROOF DESIGNS IN ORDER TO PROVIDE SUFFICIENT ATTENUATION AND INTERCEPTION STORAGE TO MEET THE REQUIREMENTS OF THE GDSDS. THE GREEN ROOF SYSTEMS TO NON-ACCESSIBLE ROOF AREAS OF ALL BLOCKS SHALL BE AN EXTENSIVE GREEN ROOF, COMPOSED OF A VEGETATED BLANKET INCORPORATING A SPECIES MIX OF SEDUMS, MOSSES AND WILD CHIVE. THE MAJORITY OF ROOF AREAS SHALL INCORPORATE A 100mm VOID FORMER WITH 95% VOIDS RATIO TO RETAIN SUFFICIENT RAINWATER TO PROVIDE ATTENUATION AND INTERCEPTION STORAGE VOLUME AS REQUIRED BY GDSDS CRITERIA FOR THE 100 YEAR EVENT, INCLUDING ALLOWANCE FOR CLIMATE CHANGE AND URBAN EXPANSION.

STORMWATER VOLUME STORAGE SCHEDULE

SITE QBAR = 0.73 LITRES/SECOND
PROPOSED OUTFLOW RATE = 2.0 LITRES/SECOND
CLIMATE CHANGE AND URBAN CREEP FACTOR = 1.2
100 YEAR RETURN PERIOD UTILISED FOR ALL STORAGE VOLUME CALCULATIONS

- 100yr ATTENUATION STORAGE VOLUME REQUIRED = 158.63m³
- 100yr INTERCEPTION STORAGE VOLUME REQUIRED = 19.005m³
- 100yr LONG TERM STORAGE VOLUME REQUIRED = 24.7065m³

TOTAL STORMWATER STORAGE VOLUME REQUIRED = 201.71m³

TOTAL STORMWATER STORAGE VOLUME PROVIDED AS FOLLOWS:

- PERMEABLE PAVING SUB-BASES = 145.275m³
- BLUE ROOF STORAGE MODULES = 62.148m³
- TREE PIT BASES = 4.59m³
- RAIN GARDENS = 8.995m³
- GREEN ROOF DRAINAGE SHEET = 34.83m³

TOTAL STORMWATER STORAGE VOLUME PROVIDED = 255.838m³

SuDS LEGEND: ROOF LEVEL

FCO — EXTENSIVE SEDUM/MOSS GREEN ROOF WITH BLUE ROOF MODULES UNDERNEATH & RESTRICTED FLOW CONTROL OUTLETS (FCOs)

EXTENSIVE MULTISPECIES SEDUM GREEN ROOF

T/O — TELLTALE OVERFLOW, EMERGENCY OVERFLOW SIPHON TO COMMON AREA TO GIVE ALERT OF BLUE ROOF OUTLET BLOCKAGE

Rev	Date	Drn	Chk'd	Description
2	07/08/26	MD	AD	Revised for Planning Application Incorporating Additional Floors
1	11/06/25	KH	FW	Issued for Grant Condition 12e Planning Compliance

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Project:	Prussia Street LRD for Randalswood Construction Ltd
Drawing:	Roof Drainage & SuDS Plan
Model Reference:	2572-LDE-ZZ-ZZ-M2-C-0001
Drawing Reference:	2572-LDE-ZZ-ZZ-DR-C-1002

Project No.	2572
Drg. No.	1002
Scale	1:200@A1
Date	May '25
Drawn	KH
Rev.	2
Model Rev:	P01.03
Suitability:	S0