City of Westminster

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1. Project & Site Details

Project / Site Name (including sub-catchment / stage / phase where appropriate)	Paddington Green Police Station
Address & post code	Paddington Green Police Station, Harrow Road, Paddington, London W2 1XJ
OS Grid ref. (Easting, Northing)	E 526935
	N 181739
LPA reference (if applicable)	
Brief description of proposed work	Demolition of the existing building and redevelopment of the site to provide three buildings of 39, 24 and 17 storeys in height, providing residential units, commercial uses, a community use
Total site Area	5000 m^2
Total existing impervious area	5000 m^2
Total proposed impervious area	3600 m^2
Is the site in a surface water flood risk catchment (ref. local Surface Water Management Plan)?	The site is not located within a Local Flood Risk Zone (WCC SWMP 2011)
Existing drainage connection type and location	150mm cw to Paddington Green sewer, 300mm cw to Newcastle Place sewer
Designer Name	Phoebe Tribe
Designer Position	Project Civil Engineer
Designer Company	Walsh Associates

2. Proposed Discharge Arrangements

2a. Infiltration Feasibility

Superficial geology classification	Langley Silt Member (Clay and Silt)
Bedrock geology classification	London Clay Formation (Clay, Silt and Sand)
Site infiltration rate	5x10(-6) m/s
Depth to groundwater level	9.8 m below ground level
Is infiltration feasible?	No

2b. Drainage Hierarchy

	Feasible (Y/N)	*Proposed (Y/N)*
1 store rainwater for later use	Y	Y
2 use infiltration techniques, such as porous surfaces in non-clay areas	N	N
3 attenuate rainwater in ponds or open water features for gradual release	N	N
4 attenuate rainwater by storing in tanks or sealed water features for gradual release	Y	Y
5 discharge rainwater direct to a watercourse	N	N
6 discharge rainwater to a surface water sewer/drain	N	N
7 discharge rainwater to the combined sewer.	Y	Y

2c. Proposed Discharge Details

Proposed discharge location	Public Surface Water Sewer
Has the owner/regulator of the discharge location been consulted?	Yes, Thames Water have been consulted

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3. Drainage Strategy

3a. Discharge Rates & Required Storage

	Greenfield (GF) runoff rate (l/s)	*Existing discharge rate (l/s)*	*Required storage for GF rate (m^3)*	*Proposed discharge rate (l/s)*
Qbar	1.52			
1 in 1	1.29	20.1	98	4.86
1 in 30	3.5	52.4	241	4.86
1 in 100	4.86	70.6	365	4.86
1 in 100 + CC			450	4.86
Climate change allowance used		40%		
3b. Principal Method of Flow Control		Pump, orifice for blue roofs		

3c. Proposed SuDS Measures

	Catchment area (m^2)	*Plan area (m^2)*	*Storage vol. (m^3)*
Rainwater harvesting	0		TBC
Infiltration systems	0		0
Green roofs	0	0	0
Blue roofs	0	0	TBC
Filter strips	0	0	0
Filter drains	0	0	0
Bioretention / tree pits	0	0	0
Pervious pavements	0	0	TBC
Swales	0	0	0
Basins/ponds	0	0	0
Attenuation tanks	0		450
Total	**0**	**0**	**450**

4. Supporting Information

4a. Discharge & Drainage Strategy	*Page/section of drainage report*
Infiltration feasibility (2a) – geotechnical factual and interpretive reports, including infiltration results	Section 6.1.1 & 6.3
Drainage hierarchy (2b)	Section 6.1
Proposed discharge details (2c) – utility plans, correspondence / approval from owner/regulator of discharge location	6.1.5, 6.2, 6.3, 8.1 Appendix C & D
Discharge rates & storage (3a) – detailed hydrologic and hydraulic calculations	Section 6.2 & Appendix F
Proposed SuDS measures & specifications (3b)	Section 6.1 & 6.3 & Appendix E
4b. Other Supporting Details	*Page/section of drainage report*
Detailed Development Layout	Appendix D
Detailed drainage design drawings, including exceedance flow routes	Appendix D
Detailed landscaping plans	Appendix E
Maintenance strategy	Appendix G
Demonstration of how the proposed SuDS measures improve:	
a) water quality of the runoff?	Section 6.6
b) biodiversity?	Section 6.6
c) amenity?	Section 6.6