

1. Project & Site Details	Project / Site Name (including sub-catchment / stage / phase where appropriate)	British Museum, Energy Centre Programme
	Address & post code	Great Russell Street, London, WC1B 3DG
	OS Grid ref. (Easting, Northing)	E 530020 N 181635
	LPA reference (if applicable)	
	Brief description of proposed work	The British Museum is progressing with its strategy for transitioning to sustainable, low-carbon infrastructure. 2 new infrastructure buildings, the South West Energy Centre (SWEC) and a new Intake Substation (ISS), are proposed.
	Total site Area	530 m ²
	Total existing impervious area	530 m ²
	Total proposed impervious area	530 m ²
	Is the site in a surface water flood risk catchment (ref. local Surface Water Management Plan)?	The site is within Critical Drainage Area Group 3_005.
	Existing drainage connection type and location	Into existing combined drainage run on Museum site.
	Designer Name	Cara Malcolm
	Designer Position	Engineer
	Designer Company	Alan Baxter Ltd

2. Proposed Discharge Arrangements	2a. Infiltration Feasibility		
	Superficial geology classification	River Terrace sands & gravels	
	Bedrock geology classification	London Clay	
	Site infiltration rate	N/A	m/s
	Depth to groundwater level	3.85 - 3.96 m below ground level	
	Is infiltration feasible?	No	
	2b. Drainage Hierarchy		
		<i>Feasible (Y/N)</i>	<i>Proposed (Y/N)</i>
	1 store rainwater for later use	N	N
	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	Existing combined drainage run on site.	
Has the owner/regulator of the discharge location been consulted?	Yes - owned by applicant.		

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)
Q _{bar}	0.08	 	 	
1 in 1	0.1	n/a	23	2
1 in 30	0.2	n/a	23	2
1 in 100	0.3	n/a	23	2
1 in 100 + CC	 	 	23	2
Climate change allowance used		40%		
3b. Principal Method of Flow Control		Vortex flow control device		
3c. Proposed SuDS Measures				
	Catchment area (m ²)	Plan area (m ²)	Storage vol. (m ³)	
Rainwater harvesting	0	 	0	
Infiltration systems	0	 	0	
Green roofs	0	0	0	
Blue roofs	0	0	0	
Filter strips	0	0	0	
Filter drains	0	0	0	
Bioretention / tree pits	0	0	0	
Pervious pavements	0	0	0	
Swales	0	0	0	
Basins/ponds	0	0	0	
Attenuation tanks	530	 	24	
Total	530	0	24	

4a. Discharge & Drainage Strategy		Page/section of drainage report
Infiltration feasibility (2a) – geotechnical factual and interpretive reports, including infiltration results		Pages 3-4 of 'Civil engineering notes on below-ground drainage and SuDS for planning submission', Feb 2024
Drainage hierarchy (2b)		on below-ground drainage and SuD
Proposed discharge details (2c) – utility plans, correspondence / approval from owner/regulator of discharge location		on below-ground drainage and SuD
Discharge rates & storage (3a) – detailed hydrologic and hydraulic calculations		Appendix D
Proposed SuDS measures & specifications (3b)		Refer to planning report Appendices
4b. Other Supporting Details		Page/section of drainage report
Detailed Development Layout		Appendix E
Detailed drainage design drawings, including exceedance flow routes		Appendices A & B
Detailed landscaping plans		Appendix C
Maintenance strategy		Page 06
Demonstration of how the proposed SuDS measures improve:		
a) water quality of the runoff?		N/A
b) biodiversity?		N/A
c) amenity?		N/A