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Our Ref:

8064 - DOES ADAPT Lot 6.1 & 6.1 Clondalkin

03 September 2024

Mr. Patrick Fanning
Project Civil Engineer
TOBIN Consulting Engineers
Block 10-4
Blanchardstown Corporate Park
Dublin 15

D15X98N

RE: - Compliance with Conditions of Planning SD22A/0352 - Condition 16

Dear Sir/ Madam

Please see responses to planning condition 16 of planning permission SD22A/0352 below.

Condition 16

"...Sustainable Urban Drainage Systems (SUDS)

Prior to the commencement of development the applicant/developer shall submit, for the written agreement of the Planning Authority, a full set of revised landscaping and drainage information, plans and drawings that demonstrate the following:

- a) The areas (m2) of the different surface types such as building, roads paths, permeable paving, grass and their respective run off coefficients broken down and provided.:
- b) Adequate attenuation volumes.
- c) A report and drawing showing a flow route analysis for the site. It shall be clear which roofs and hardstanding areas drain where.
- d) Detail on the slopes of the proposed swales/detention basins.
- e) A revised design for the Wetland/Detention Basin in Northeast corner of the site, including revising the location of the manholes and detail on how the petrol interceptor would work.
- f) It demonstrated that the SUDS scheme and measures have been incorporated into the landscape plan(s) and provide for amenity and biodiversity.

REASON: To ensure that the development complies with the policies and guidelines as outlined in South Dublin County Council's Development Plan/SuDs Explanatory Design and Evaluation Guide..."

Directors: M. Shelly (Chairman) C. McGovern (Managing Director) E. Connaughton (Company Secretary)

B. Downes D. Grehan M. McDonnell J. McGrath

B. Carroll S. Tinnelly J. O'Flaherty

Technical Directors: B. Gallagher B. Heaney C. Kelly T. Mackey D. Meade O. Fitzpatrick P. Cloonan P. Cunningham

Associate Directors: M. Casey E. Fenton L. Kennedy P. O'Connor B. Rudden M. Geraghty S. Ryan R. Murtagh K. Gallagher

Please see accompanying drawings 8064-2106_P01, 8064-2107_P01, 8064-2110_P02, 8064-2143_P01, 8064-2146_P01 & 8064-2147_P01 for information.

a) The total site area, including the existing School equates to 4.9ha. The drainage area relating to this Planning Application is 3.03ha, due to the proposal to leave the existing School's Drainage infrastructure insitu. Please see areas in below table relating to the drainage area of 3.03ha.

SURFACE TYPE	RUNOFF CO- EFFICIENT	GROSS AREA (m²)	GROSS AREA (ha)	TOTAL IMPERMEABLE AREA (ha)
Footways & Play Areas	0.90	6080	0.608	0.547
Roof Area	0.95	3566	0.356	0.338
Permeable Paving	0.60	727	0.073	0.044
Road	0.90	2820	0.282	0.254
Permeable Ballcourt	0.60	2340	0.234	0.140
Open space landscaping	0.00	14,767	1.477	0.000
Total		30,300	3.030	1.323

b) Please see attenuation system and their storage breakdown in table below:

ATTENUATION TYPE	AREA (sq.m)	Depth (m)	Porosity (%)	Volume with Perforated Pipe (cu.m)
Swale 01	324	0.50	35	60
Detention Basin 01	156	2.60	35	142
Swale 02	108	0.50	35	35
Detention Basin 02	72	1.4	35	35
Detention Bain 03	779	3.96	35	1080
Tree Pits	123	0.50	35	21
Rainwater Harvesting Tank				10
Total				1,383

- c) Please see accompanying drawings 8064-2106_P01 & 8064-2107_P01 demonstrating existing and proposed surface water flows.
- d) Swales are detailed on drawing 8064-2143_P01 and the slopes are detailed as 1:3. Detention basin is detailed on drawing 8064-2146_P01 and slopes are 1:3.
- e) Please see updated drawing 8064-2110_P02 for layout and 8064-2143_P01 for detail. Petrol interceptor is provided Downstream of Discharge manhole.
- f) Please see updated Landscaping drawing #### accompanying submission, detailing SuDs measures a spart of landscape plan.

Yours sincerely

Patrick Fanning

Project Civil Engineer

For and on behalf of TOBIN

patrick.fanning@tobin.ie

cc: kevin.higgins@tobin.ie

Encl: Drawings:

- 8064-2106_P01 Existing Flow Analysis
- 8064-2107_P01 Proposed Development Overland Flow
- 8064-2110_P02Proposed Drainage Layout
- 8064-2143_P01 Proposed SuDS Details
- 8064-2146_P01 Proposed Detention Basin Detail
- 8064-2147_P01 Draining Areas
- 16-444-PD-01 Landscape Plan