



Response to Engineering Items in An Bord Pleanála's Pre-Application Consultation Opinion

Residential Development at Broomfield SHD Lands, Malahide

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Quality Assurance – Approval Status

This document has been prepared and checked in accordance with Waterman Group's IMS (BS EN ISO 9001: 2015 and BS EN ISO 14001: 2015)

Issue	Date	Prepared by	Checked by	Approved by
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Comments

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1. Introduction

1.1 Background of Report

This document has been prepared by Waterman Moylan in response to the Engineering items raised in An Bord Pleanála's Pre-Application Consultation Opinion as part of the planning documentation for the proposed Broomfield SHD development, Malahide, Co. Dublin.

This report briefly addresses each engineering item and cross references to where the item is further addressed in detail within the accompanying SHD documentation. The purpose of the report is to clearly inform the reader of the proposed response to the various engineering items raised and to refer to which Report and Section in accompanying reports that the items are further detailed, for ease of reference to the reader.

The Engineering Items raised in An Bord Pleanála's Opinion report are set out below in Section 2 in ***bold italics*** with our response provided below each item.

2. Responses to Engineering Items Raised in An Bord Pleanála's Opinion Report

2.1 Item 1

A report, including CGIs, visualisations, and cross sections as necessary, which further elaborates upon the relationship of the proposed development with existing development in the area of the site, specifically within the area of the masterplan objective. Details should elaborate upon quantum of development and infrastructure within the area of the masterplan objective, including mix of units, open space, movement hierarchy, water services infrastructure and interaction of the proposed development with the adjoining street network and open space areas.

Response:

Please refer to accompanying CGIS, Architects report, and Landscape Architects response for this item.

Please also refer to Section 3.0 of the accompanying updated Traffic and Transport Assessment which describes the access and movement to the site for pedestrians, cyclists and vehicles and proximity to public transport.

A DMURS Statement is provided in Section 3.2 of the accompanying DMURS Report which outlines the proposed use of roads and open space to create a sense of place while allowing a high level of permeability for the active modes of transport.

Please also refer to a Quality Audit, which has been undertaken by Traffico Road Safety Engineering, and is included in Appendix A of the accompanying DMURS Report. This audit addresses pedestrian, cyclist, and vehicular access and movements.

Water services infrastructure is outlined in Sections 2.0, 3.0, and 4.0 in accompanying Engineering Assessment report, for foul water, surface water (including attenuation and SuDS systems) and water supply infrastructure, respectively.

2.2 Item 4

Further consideration and/or elaboration in relation to vehicular permeability through the site and connectivity with Kinsealy Lane. Particular regard should be had to the issues raised in the report of the planning authority Transportation Planning Section, report dated 1st December 2020.

Response:

As directed by the Fingal County Council opinion report, dated 1st December 2020, and referred to in An Bord Pleanála's opinion report, a vehicular connection is now proposed to connect to Kinsealy Lane via the southern road in Hazelbrook which will allow for improved permeability for the southern site.

It is noted that the Applicant has assessed this proposed southern vehicular access link and confirms that the route through Hazelbrook and the subject site will only be used for local access

and not as a short-cut/'rat-run' as the internal road layout has been designed in accordance with DMURS to have vertical and horizontal deflections, raised tables at junctions, pedestrian crossings, low radii corners, on-street parking etc, which combined with the meandering nature of the roads will ensure lower vehicular speeds and therefore not be an attractive route for a short-cut/rat-run as it would take longer to navigate in terms of both distance and time for vehicles.

Please also refer to Section 3.0 of the accompanying updated Traffic and Transport Assessment which describes the access and movement through the site for pedestrians, cyclists and vehicles and its proximity to public transport.

2.3 Item 5

Further consideration and elaboration of the documents as they relate to the design and layout of internal streets, specifically the design of the proposed home zones, car and bicycle parking, and positioning of footpaths relative to parking spaces.

Response:

Please refer to revised Waterman Moylan drawing P002 which now shows revised Homezones as per Fingal County Council requirements in their opinion report dated 1 December 2020. It is proposed to provide suitable material finishes that distinguish homezones from standard access roads, provide entry treatment and adequate signage and markings which will assist to reduce vehicular speeds. We note that shared surface areas will not distinguish between vehicular space and pedestrian space and will be at the one level with no vertical lips / kerbs.

Please refer to updated Section 14.0 of the accompanying Traffic and Transport Assessment for bicycle parking provisions.

All footpaths have been adjusted to ensure adequate space for reverse movement, allowing 11m in total for the parking pace and reverse area. Please refer to drawings P100 to P103.

2.4 Item 9

Further consideration and elaboration of the documents as they relate to the risk of flooding, in addition to information relating to SUDS, having regard to the issues raised in the planning authority Water Services report, dated 1st December 2020.

Response:

Please refer to accompanying Flood Risk Assessment report for the subject site.

Please refer to Section 3.0 in the accompanying Engineering Assessment report surface water proposals, including attenuation and SuDS systems. Attenuation calculations have been revised to utilise Soil Type 4 as advised in the FCC opinion report, water services department appendix, surface water section item 3.

During a meeting with Fingal County Council Water Services department and Parks Department, 6th May 2021 (after the SHD Stage 2 tripartite meeting) it was agreed that open swales would be

provided along the perimeter of open spaces to provide above ground treatment of surface water runoff which will also slow down the rate of run off.

At that meeting, it was discussed that underground attenuation tanks are suitable for the subject site due to the shallow nature of the surrounding outfall ditches and restricted open space areas to provide above ground attenuation basins or ponds. It is noted that this is a material contravention of Fingal County Councils Development Plan. However, it is also noted that underground tanks will not impede in the usability of the open space which is also an objection of Fingal County Council Development Plan as only 10% of open space can be used for above ground attenuation / SuDS to ensure the usability of open space.

The proposed locations of the underground tanks have been co-ordinated with the landscape designs and other underground services.

2.5 Item 17

Site Specific Construction and Demolition Waste Management Plan.

Response:

Please refer to updated accompanying Preliminary Construction, Demolition and Waste Management Plan and the newly created Preliminary Construction Management Plan Report.

The plans sets out typical arrangements and measures which may be undertaken during the construction phase of the project in order to mitigate and minimise disruption / disturbance to the area around the site. The purpose of the report is to summarise the possible impacts and measures to be implemented and to guide the Contractor who will be required to develop and implement both the Preliminary Construction, Demolition & Waste Management Plan and Preliminary Construction management Plan on site during the works.

This management plans are indicative only and should not be construed as representing the exact method or sequence in which the construction works shall be carried out.

As is normal practice, the Main Contractor for the project will be responsible for the method in which the construction works are carried out and to ensure that best practices and all legal obligations including Local Authority requirements and Health and Safety legislation are complied with. The main contractor will also be responsible for the design and installation of all temporary works required to complete the permanent works. The plans can be used by the Main Contractor to develop their final construction management plan.

FCC have requested in their opinion report, that details of permits and licences for waste transportation and disposal facilities, and expected waste streams and tonnages be provided, however, at this stage of the planning process a Main Contractor for the project is not appointed and this request is considered premature. It may be considered more practical that the Main Contractors Construction Waste Management Plan be conditioned for agreement by FCC (with the requisite permits and licences and waste stream and tonnages included) as part of a grant of planning permission.

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