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Shomera,
Dunshaughlin Business Park,
Dunshaughlin,
Co. Meath,
Ireland.

**RE: 1 Liffey Wood, Liffey Valley Park, Lucan, Co. Dublin – proximity
to storm water sewer.
Register Reference: SD22B/0209**

9 January 2023

Dear Sir or Madam,

I refer to the conditions attached to South Dublin County Council's recent notification of grant of permission for the development under reference SD22B/0209, specifically Condition 2(b):

"[T]he applicant, owner or developer shall submit... a drawing showing a cross section of foundation of development and invert level of existing adjacent surface water sewer. There shall be no load transfer from proposed development onto adjacent surface water sewer."

I have examined the Irish Water network drawing for the area and the drawings for the proposed development and visited the site to take measurements and survey invert levels etc.

There is a 225mm diameter storm water pipe in the public footpath outside the boundary wall of the site of the proposed development. Based on my measurements at the site and the best information available to me, the cross section adjacent to the proposed development is as shown in Figure 1 and summarised as follows:

1. The centreline of the existing 225mm storm pipe is approx. 2880mm from the wall of the existing annex and the proposed extension at the property.
2. Taking finished floor level as a local datum of 100.000m, the invert level of the pipe is approx. 98.150m adjacent the proposed development.
3. The proposed development will be on a 525mm thick Insulated Concrete Formwork (ICF) foundation system with sub-formation at approx. 99.475m relative to local datum.



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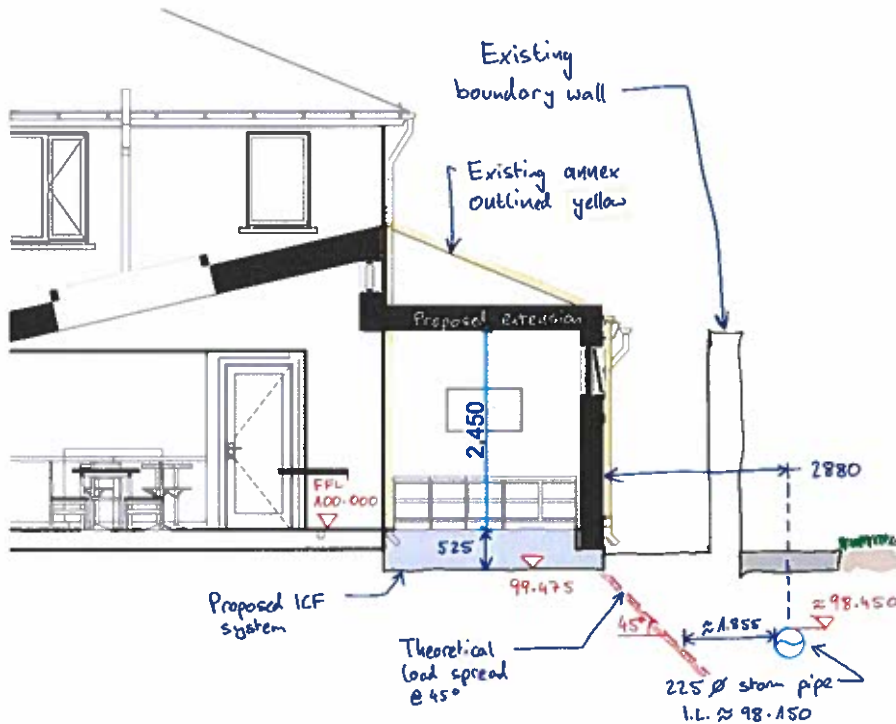


Figure 1 - Section through proposed development

Based on this, I am satisfied that the proposed development will comply with Condition 2(b) of the Second Schedule to the planning decision, as, taking a theoretical angle of load spread of 45° , there will be no transfer of load from the proposed foundation to the 225mm storm water pipeline. This is shown by the red line in Figure 1 and the dimension of $\approx 1.855\text{m}$, which is the spacing between the loaded area and my best estimate of the position of the pipeline.

Further:

- (i) the pipe is in the footpath outside the boundary wall, hence the development won't affect access to the pipe for maintenance,
- (ii) the existing annex to the property (outlined in yellow in Figure 1) has been standing at the same distance from the pipeline for many years without reported problems, and
- (iii) the proposed timber framed development on an ICF foundation is a light structure and transfers low loading to the ground.

Yours sincerely,

Ciaran Reilly BE PhD CEng MIEI RoGEP (Specialist)
Director