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21019

PROPOSED DWELLING AT No. 46A Limekiln Road, Walkinstown, Dublin 12

Clarification of Additional Information

Ref: SD22A/0386

Prepared For:
Mr. John McWeeney

Revision Register

Revision	Description	Prepared By	Checked By	Date
0	Issued to Client	IC		15.03.23
1	Minor Revisions	IC		14.04.23

1.0 Introduction

There follows a response to the civil engineering aspects of the request for Additional Information requested by South Dublin County Council. This refers to Planning Register Reference SD22A/0386.

1.1 There is a 300mm surface water sewer passing through the site where house is proposed. Water service do not recommend diverting same to allow proposed house to be developed because:

The proposed diverted surface water pipe sharpens (Increased right angle bend) the angle of flow which in turn increases the risk of blockage of surface water flow in the pipe. This would also increase flood risk up stream of site.

Downes Associates Response to point 1.1

The existing sw route is being maintained up to the site boundary, therefore there will be no change to the existing angle bend of the pipe. A new manhole ref. S7a will be provided within the site which adopts a 156 degree angle bend in the pipe to connect to manhole ref. S7. Please refer to the attached revised drawing. This minimum angle for drainage pipework at a bend is 90 degrees which is good practice. All pipework changes of direction associated with these works are in excess of 90 degrees. This revised layout will not increase the risk of blockage of surface water flow in the pipe and will not increase flood risk up stream of the site.

1.2 The proposed angle of flow of pipe entering canal is against the direction of flow and this would further block surface water entering canal.

Downes Associates Response to point 1.2

The angle of the pipe has been amended to match the angle of the existing pipe and is not against the direction of flow and will not block surface water entering the canal. Please refer to attached revised drawing. In addition, a new non-return valve is proposed at the end of the pipe entering the River Poddle which will mitigate the risk of any back flow entering from the canal.

1.3 There is an additional manhole proposed (S7) and this together with moving existing surface water sewer poses a risk of having a new pipe built in accordance with building regulations.

Downes Associates Response to point 1.3

All works will be carried out in accordance with Local authority requirements. The new manhole and diverted pipe will be constructed by or under the supervision of SDCC at the applicant's expense which will ensure full compliance with the building regulations.

1.4 The proposed surface water sewer adjacent to S7 is too close to foul drain adjacent to Manhole F4.

Downes Associates Response to point 1.4

The horizontal separation distance has been increased as per the attached revised drawing. The revised separation distance is in excess of 1m which even meets the requirements of Irish Water, albeit such requirements are not applicable on this private section of local foul sewer.

1.5 There will be traffic loads over proposed diverted surface water sewer which could damage the pipe and there is not sufficient cover level to surface water sewer.

Downes Associates Response to point 1.5

A 150mm concrete surround will be provided to the pipe in accordance with Section 11.8.2 of the Greater Dublin Regional Code of Practice for Drainage Works where cover to trafficked pipes is less than 1200mm. This is standard practice and a detail of same is included on our attached drawing No. 4002. It is noted that there is currently traffic loading over the existing surface water pipe which has not impacted on the existing route to date. The proposed concrete surround will be a significant improvement to the existing surface water drainage route and will be provided up to the front of the new dwelling ensuring that the pipe will be fully protected from any potential traffic loading that may arise.

1.6 Lowering the surface water sewer increases the risk of water from canal flowing back up surface water sewer. The Planning Authority requests that the applicant engage a specialised consultant to prepare a revised design that would enable the development to coincide with the existing 300mm surface water sewer. Any revised proposal shall be reviewed by the Surface Water Drainage Department's to ascertain whether its the above recommended reason for refusal can be overcome

Downes Associates Response to point 1.6

The outfall invert level will match the existing level of 54.770 as indicated on the attached revised drawing. The proposed pipe route is in fact shorter than the existing which will result in an improved gradient. A new tideflex non-return valve will also be provided as indicated on our drawing which will mitigate the risk of the canal backing up the surface water sewer.

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