

OBA Consulting Engineers Ltd
The School Yard
1 Grantham Street
Dublin 8
Ireland

Tel +353 1 535 0084
email ciaran@obaconsulting.ie
Web www.obaconsulting.ie



Senior Planning Officer
Land Use
Planning and Transportation Department
South Dublin County Council,

24/01/2022

Dear Sir/Madam,

**Further Information: Removal of existing single storey extension and sheds to side and rear of house; construction of two storey extension to side of house and single storey extension to front of house; new vehicle entrance to front; new boundary treatments, 27 Ballyboden Road, Dublin 14
Planning ref: SD21B/0542**

Enclosed:

- 500-22A-C01 Foul & SW Drain Site Layout Plan; and
- Report Engineering Drainage Report for Planning Submission:
Renovations & Extensions to 27 Ballyboden Road, Rathfarnham, Dublin 14

Please find attached responses to engineering related items of the request for further information, dated 16th December 2021.

Responses to Additional Information Request Item No.'s 3 & 4:

3)

- The applicant has not proposed any SuDS (Sustainable Drainage Systems) features for the proposed development. The applicant is requested to submit a drawing in plan and cross sectional views clearly showing proposed Sustainable Drainage Systems (SuDS) features for the development. Sample SuDS devices include green roofs, water butts, and permeable paving amongst others.*
- The applicant has not submitted surface water drainage plans for the proposed development. The applicant is requested to submit a drawing showing existing and proposed surface water drainage layouts up to and including the point of connection to the public surface water sewer. The drawing should include the location of all AJs, manholes, pipe size, material type and direction of flow. The drawing should clearly show that the foul and surface water systems are discharging to separate pipe networks. Maps of the mains foul and surface water drainage networks may be obtained, if available, for required locations in South Dublin County Council by emailing: servicemaps@sdcublincoco.ie. All works are to comply with the Greater Dublin Regional Code of Practice for Drainage Works.*

4)

- Irish Water records show that there is an existing 225mm foul sewer traversing the site underneath the existing dwelling and proposed development. The applicant is requested to submit a drawing showing and plan and cross section view of the existing sewer and the proposed development. The drawing should also show the invert levels of the existing sewer. The applicant is requested to contact South Dublin County Council Drainage Operations section to determine the exact location and depth of this sewer.*
- The proposed development is in close proximity to a 225mm public foul water sewer. Irish Water Standard Details for water Infrastructure require 3m clear distance from a main of this size. The applicant is requested to engage with Irish Water's diversions section to assess feasibility of existing design and an alternative design which may accommodate Irish Water's minimum required separation distances from public infrastructure. The outcome of this engagement with Irish Water's diversions should be submitted to the planning authority as a response to Request for Further Information.*
- The applicant is requested to submit a drawing showing existing and proposed private foul water drainage layouts up to and including the point of connection to the public foul water sewer. The drawing should include the location of all AJs, manholes, pipe size, material type and direction of flow. The drawing should clearly show that the foul and surface water systems are discharging to separate*



ENGINEERS
IRELAND



ACEI
Association of Consulting
Engineers Ireland

Managing Director
Ciaran O'Brien
B.Eng., Eur. Ing., C.Eng., MIEI, FConsEI
Director
Ruth Skinner
BSc
Company Registration No: 587983
VAT No: IE 3435174PH

pipe networks. Maps of the public watermains and Wastewater drainage networks may be obtained, if available, for required locations in by emailing: datarequests@water.ie.

Response

3)

- i) Sustainable Urban Drainage Systems (SUDS) in the form of a soakaway and/or sedum green roof have been considered unsuitable for this site, due to the limitations of the site area not providing sufficient mandatory offset distances (5m from foundations and 3m from boundaries and foul sewer wayleave); and proposed pitched roof structure.

Limited SUDS application is to be through the provision permeable hydropaving to the vehicle driveway, water butts on all rainwater downpipes and the provision of an Aquacell SW attenuation tank, providing sufficient attenuation to store the 100-year return storm with an additional allowance of 20% for climate change prior to discharge. Discharge is to be limited through the use of a hydrobrake in the final manhole, discharge is to be limited to 1.2 l/s.

Please refer to the enclosed documents,

- 500-22A-C01 Foul & SW Drain Site Layout Plan; and
- Report Engineering Drainage Report for Planning Submission: Renovations & Extensions to 27 Ballyboden Road, Rathfarnham, Dublin 14

for further clarity.

- ii) Please find enclosed OBA drawing number 500-22A-C01, Foul & SW Drain Site Layout Plan, showing existing and proposed surface water drainage layouts up to and including the point of connection to the public surface water sewer. The drawing includes the location of all Aj's, manholes, pipe size, material type and direction of flow. The drawing also shows that the foul and surface water systems are discharging to separate pipe networks. All works comply with the Greater Dublin Regional Code of Practice for Drainage.

Irish Records show a 225mm diameter foul sewer to the front of the property, however further on-site exploratory works confirm that this foul sewer is (incorrectly located on the Irish Water maps and is) actually 3.2m offset from the front wall of the house. Please refer to the attached report from Green Day Environmental and photos of the trial hole locating the foul sewer in adjacent property, 29 Ballyboden Road, all contained within the enclosed 'Engineering Drainage Report for Planning Submission'.

4)

- i) As mentioned above, the existing 225mm diameter foul sewer is located a distance of 3.2m from the front face of the building at an approximate depth of 1.5m, reference is made to the exploratory works by Green Day Environmental and adjacent property trial holes.
- ii) The actual location of the 225mm diameter foul sewer (3.2m from the front face of the building) allows for a full 6m wayleave to be observed. Revised current proposals ensure that no new (or existing) building works are located within the 6m wayleave.
- iii) Please find enclosed OBA drawing number 500-22A-C01, Foul & SW Drain Site Layout Plan, showing existing and proposed foul water drainage layouts up to and including the point of connection to the public foul water sewer. The drawing includes the location of all Aj's, manholes, pipe size, material type and direction of flow. The drawing also shows that the foul and surface water systems are discharging to separate pipe networks. All works comply with Irish Water Wastewater Code of Practice.



Ciaran O'Brien

BEng CEng MIEI EurIng FConsEI