

**O'Reilly Design**  
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16<sup>th</sup> August 2022  
Ref: - ORD/SDCoCo/2022/01

**Planning Dept.,  
South Dublin County Council,  
County Hall,  
Tallaght,  
Dublin 24,  
D24 A3XC.**

Subject: **Additional Information-Planning Submission-  
657 Whitechurch Road, Rathfarnham, Dublin 16  
-Planning Reg. Ref. SD22B/0082.**

Dear Sirs,

We are acting as consulting engineers for our Client Mr. Nick Grundy for his proposed house extension at "657 Whitechurch Road, Rathfarnham, Dublin 16" in collaboration with Irvine Nash Architects, and further to the request from South Dublin County Council for additional information we would respond to the following drainage related points (noting that we have been in consultation with Mr Brian Harken of the Drainage Department who has given his "without prejudice" approval of the proposals):-

**Item nos. 1.1 & 1.2: - Services, Drainage and the Environment:**

*1.1 The applicant has proposed to discharge surface water run off from the proposed development to the foul water drainage network which is generally not acceptable. The applicant is required 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 shall include the location of all Aj's, manholes, pipe size, material type and direction of flow. The drawing shall 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@sdublincoco.ie](mailto:servicemaps@sdublincoco.ie).*

*Note: South Dublin County Council records show that there is an existing 300mm surface water sewer in the road to the north of the site. The applicant is required to investigate the potential to divert all surface water drainage from the site to this sewer. SuDS features shall be included to attenuate surface water run off to greenfield run off rates prior to discharge to this sewer.*

*1.2 The applicant is required to submit a drawing in plan and cross sectional views clearly showing additional proposed Sustainable Drainage Systems (SuDS) features for the development such as green roofs, water butts and rain planter boxes.*

**Response: -**

All new surface water utilising a number of Suds measures are to be discharged via a new separate surface water system. The surface water Suds measures include a new Soakaway located in the front garden area. Dr. Eugene Bolton of Trinity Green has assessed the scope for surface water disposal utilizing a Soakaway (designed in compliance with BRE 365) in conjunction with new permeable paving to the side and rear of the property- note that the Soil Infiltration rate is low with  $f= 1.E-6$ . Dr. Bolton has concluded that a new 7.44m long x 0.8m wide x 1.0m deep Soakaway situated under the front garden area (complying with minimum offset distances) would be sufficient to cater for surface water runoff from the new side extension-approx. 25m square. The existing surface runoff from the front roof would remain as is, discharging to a rainwater down-pipe which percolates to ground. The proposed rear double storey-height extension covering the footprint of the existing rear extension, approx. 44m square would continue to discharge into the existing sewer via an existing manhole located in the rear courtyard area; note the current surface water discharge from the courtyard area , approx. 57m square , would be removed (50% reduction on current overall discharge) from discharging into the existing sewer by introducing an extensive permeable paving system replacing the existing paved hard-standing with gully system ie. a net overall reduction of discharge into the sewer. We have notified Irish Water of the intention to remove existing surface water from the foul drainage system. Additional Suds measures include the use of a wall mounted rainwater harvesting tank. Refer to attached documents Drainage Layout drawing D100Rev for revised drainage layout and Trinity Green Site Specific Infiltration Testing Report and Soakaway Design and details.

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**Response: -**

We have investigated the possibility of diverting all site surface water to the existing 300mm public S/W sewer under Taylor's Lane; this is a busy traffic intersection and pedestrian junction and would entail installing approximately 35 linear metres of new 150mm diameter under existing footpath and roadway. The efficacy of this approach for a single house extension considering the associated traffic delay impact /temporary footpath closures and associated civil engineering costs is not deemed viable (please see attached cost estimate of €46,461 ex VAT & ex Local Authority Road Closure costs from Civil Engineering Contractor-Tinnelly Construction Ltd--this equates to 50% of the Client's budget):-

Price €48,461 + VAT

Please note the following clarifications;

1. No allowance for any road bond
2. No CCTV survey report included
3. We have not visited the site and this quote is based on the drawing information received only
4. Lead-in time currently 12 weeks
5. All local authority consents / permits by client
6. No retention on payments
7. Payment required within 21 days of completion of works on site
8. We have assumed adequate access & egress from the works

If you want to discuss further, please do not hesitate to contact me.

Regards,

**Shay Mallon**

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**TINNELLY CONSTRUCTION LTD**

Item no. 2.1 - **Irish Water:**

Irish Water has reviewed the application and has recommended the following **additional information:**

- 2.1 *There is an existing 4" public watermain traversing the site to the south of existing dwelling according to Irish Water records. The applicant is required to submit a drawing which shows the distance between this watermain and the proposed development. Irish Water Standard Details for water Infrastructure require 3m clear distance from a main of this size. The applicant shall engage with Irish Water's diversions section to assess feasibility of existing design if the 3m setback cannot be achieved. The outcome of this engagement with Irish Water's diversions shall be submitted to the planning authority as a response to Request for Further Information*

**Response: -**

We have located the 4" Irish Water public water main asset on our Site Layout Plan D100RevA (see attached) from Irish Water records and site survey and the minimum offset distance is 5 metres at the closest point to the new extension structure greater than the minimum 3m setback required by Irish Water standards. Irish Water have been notified and a formal submission has been made to them.

We trust this fully addresses the additional information points Nos. 1.1, 1,2 & 2.1.

Yours Faithfully

*Sean O'Reilly*

Sean O'Reilly  
Eur Ing,C.Eng,B.Sc.(Hons),MIED,MIEI,ICIOB  
**O'Reilly Design Ltd.**

**Attachments:-**

- (i) Existing Drainage Layout plan.
- (ii) "Bayat Energy" Rainwater Harvesting System Details.
- (iii) O'Reilly Design Drainage Drawings S/ORD/461 D100RevA.
- (iv) Soakaway Infiltration Test & Design.
- (v) Soakaway Sectional Detail.