

6 Loom Street - CDN/22/0143

Alastair Neil <Alastair.neil@alanwood.co.uk>

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To: Katie Raw <Katie.Raw@manchester.gov.uk>

Cc: Mike Foulkes <Mike.Foulkes@dla-architecture.co.uk>; Kim Han <Kim.Han@alanwood.co.uk>; Stuart Riley <Stuart.Riley@dla-architecture.co.uk>

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Afternoon Katie,

Hope you are well. Just contacting you to assist in the closing of the planning conditions to loom street, please see response to condition 6 below.

Condition 6 :-

We have a small city centre site so the options for a SuDS system on a project like this are limited, as you can see from the table extract below many of the options are not feasible on our scheme.

Please see Fig. 1 extract from SuDS Manual

Rainwater harvesting systems	Systems that collect runoff from the roof of a building or other paved surface for use
Green roofs	Planted soil layers on the roof of buildings that slow and store runoff
Infiltration systems	Systems that collect and store runoff, allowing it to infiltrate into the ground
Proprietary treatment systems	Subsurface structures designed to provide treatment of runoff
Filter strips	Grass strips that promote sedimentation and filtration as runoff is conveyed over the surface
Filter drains	Shallow stone-filled trenches that provide attenuation, conveyance and treatment of runoff
Swales	Vegetated channels (sometimes planted) used to convey and treat runoff
Bioretention systems	Shallow landscaped depressions that allow runoff to pond temporarily on the surface, before filtering through vegetation and underlying soils
Trees	Trees within soil-filled tree pits, tree planters or structural soils used to collect, store and treat runoff
Pervious pavements	Structural paving through which runoff can soak and subsequently be stored in the sub-base beneath, and/or allowed to infiltrate into the ground below
Attenuation storage tanks	Large, below-ground voided spaces used to temporarily store runoff before infiltration, controlled release or use
Detention basins	Vegetated depressions that store and treat runoff
Ponds and wetlands	Permanent pools of water used to facilitate treatment of runoff – runoff can also be stored in an attenuation zone above the pool

Due to the site being situated in Ancoats in a dense urban environment many of the options by virtue are nonstarters due to the lack of space within the site boundary.

This rules out Infiltration systems, proprietary treatment systems, filter strips, filter drains, swales, bioretention systems, trees, pervious pavements, detention basins or ponds and wetlands.

We also don't have scope with the structural/below ground design to introduce any kind of attenuation storage tanks due to the existing site constraints.

The only practical solutions would be to have either a green roof or a rainwater harvesting system.

With relation to the rainwater harvesting system, we don't really have the room in the current layouts to introduce a tank to accommodate a passive system given the lack of space available with the flat roof and limited available storage space in the scheme.

We are already working on a tight floor to ceiling distance, and it would not be a viable option to conceal the system at a high level in any of the rooms.

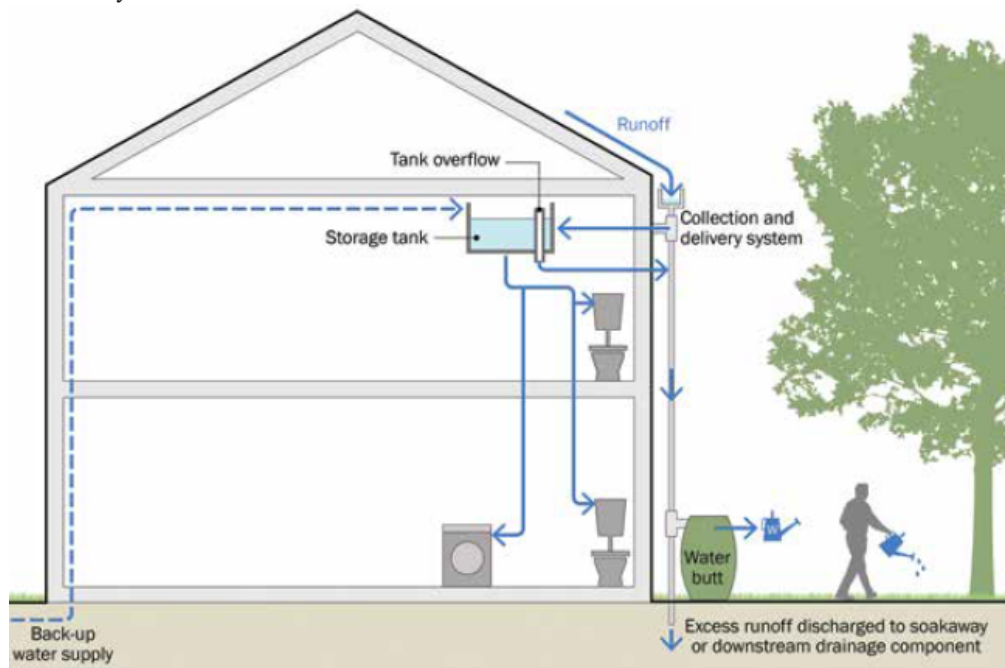


Fig 2 – Gravity fed system example from SuDS Manual

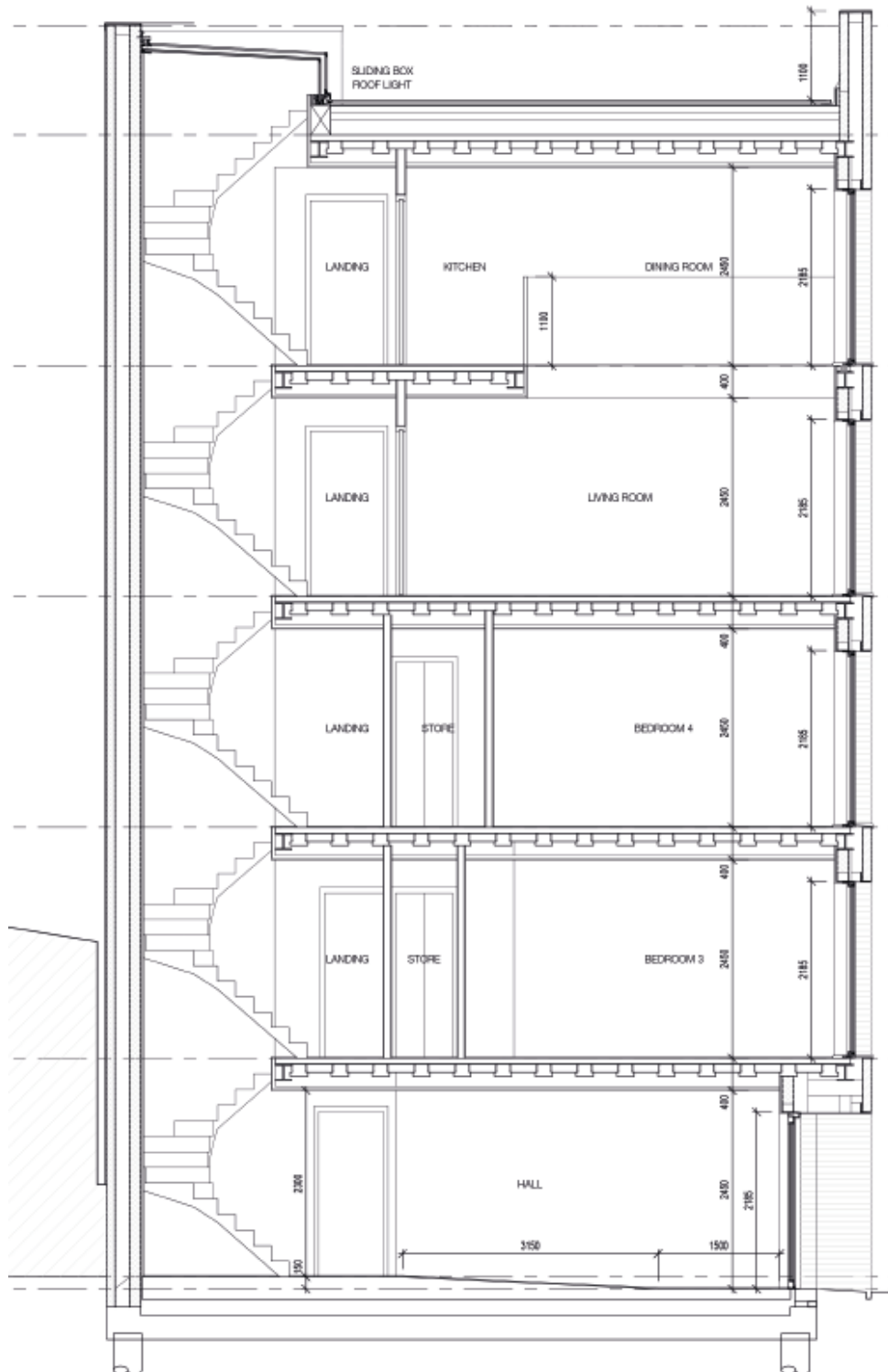


Fig 3 – 6 Loom Street long section

Similarly, a green roof would not be a viable option due to the clients intended use for the flat roof area space and the parapet height constraints/requirements discussed in previous variations to the planning conditions.

Additionally, a green roof build up would increase the overall depth of the roof and would mean we would have to reintroduce a handrail which was the reason for the original variation for the parapet height something we would want to avoid.

UU have granted us 5L/s for the discharge, and we are using only 2.8L/s so we are well under the allowable limit given for the system.

Please let me know if you require anything additional or further clarification.

Kind Regards,

Alastair Neil
Graduate Structural Engineer



T: 01135 311 098

For and on behalf of Alan Wood & Partners

• LEEDS • HULL • LINCOLN • LONDON • SCARBOROUGH • SHEFFIELD • YORK •

• Suite 72 • Brabazon House • Turnberry Park • Morley • Leeds • LS27 7LE

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