

Application number: CDN/22/0161

Proposal: Discharge of condition 14 (SUDS1) attached to application ref no 121099

Location: Rammon House , 1 Portugal Street East, Manchester, Manchester, M1 2WX

Applicant: -, Portugal Street East Limited

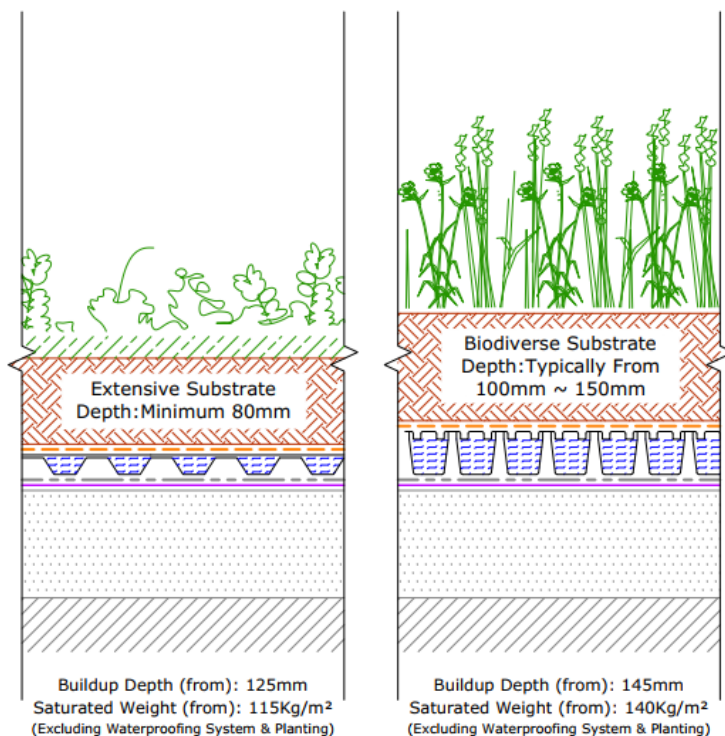
LLFA Comments 14 April 2022

The information uploaded to the Planning Portal 17 March 2022 has been considered.

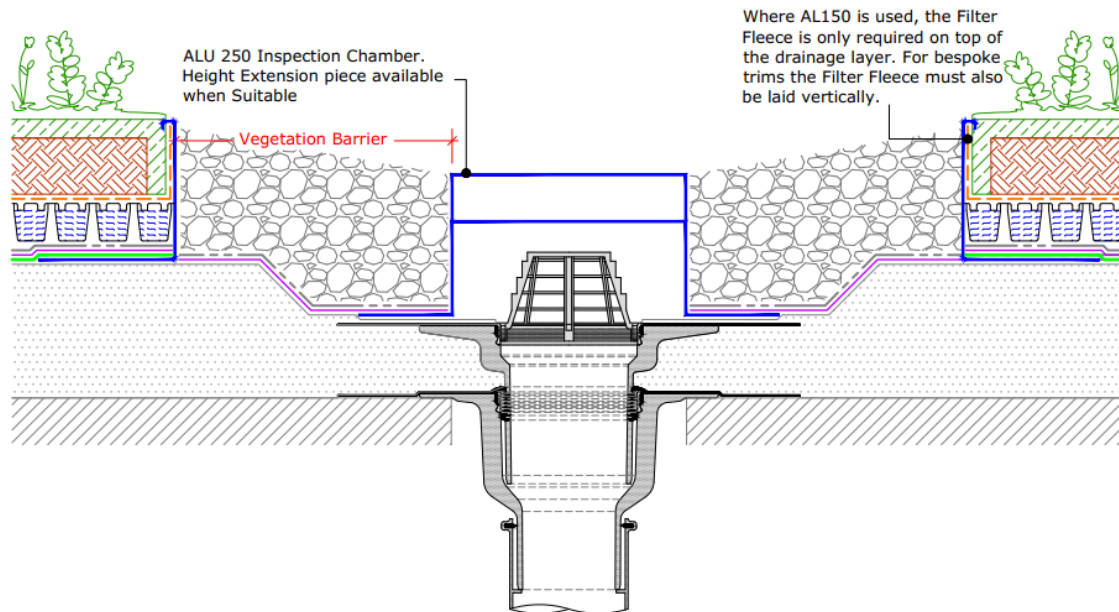
The following information is required:

*Maximise use of green SuDS in design including the public realm;

- Please clarify how maximised green SuDS is being provided by this development. Is a green roof being provided, as it is referred to as just a blue roof in submitted drainage layouts, & construction drawing spec is not clear. Please note a blue roof would not be classed as green SuDS. Documents should be updated to show green roof or other green SuDS provisions to be shown. A green roof will be provided to Block 3. A blue roof only will be provided to Block 1 and block 2. Please find attached architectural drawings showing green and blue roof extents with typical details for Block 3. The final blue/green roof will be finalised and designed by a specialist, but the typical construction build up will comprise the following:



Typical Green roof Section



Typical Roof Outlet (Bauder or similar approved)

- Please clarify why drainage strategy does not include public park ('the Green'). This area was included in report DAE/NA/3633 FRA V5 and would be a good opportunity to integrate green SuDS. The public park would require crossing third party land (Hereford Street) which MCC highways are likely to object to. The majority attenuation for the site is provided in the form of a green roof.

*Details of surface water attenuation that offers a reduction in surface water runoff rate in line with the Manchester Trafford and Salford Strategic Flood Risk Assessment, i.e. at least a 50% reduction in runoff rate compared to the existing rates, as the site is located within Conurbation Core Critical Drainage Area;

- Evidence of UU acceptance of the proposed connection point is required. Please see attached pre-development enquiry email where UU have stated they will accept 35 l/s into the combined sewer on Hereford Street. A Section 106 application will be made to formally agree the connection.
- Evidence of UU comment on the proposed combined sewer diversions is required. Please find attached email from UU stating the diversion is feasible. Please also find attached the Design and Construction Assurance from UU. We are in the final stages of the Section 185 agreement with UU.
- Please comment on how outfall level TBC can be ensured to be compatible for gravity connection with respect to proposed sewer diversion. The outfall level is deep enough for the proposed connection from the development (4m+ deep). The sewer records (attached) show an invert level of 42.78m upstream at MH 2902 and an invert level of 40.67m downstream at MH 1905. The actual connection level will need to be determined by a survey or on site.

- The surface water drainage network appears to run outside of the site boundary, annotated '*boundary/ ownership extents tbc to ensure all areas are drained where required and third party land is not entered*' - please clarify this. It is noted that the Site boundary presented here is not consistent with DAE/NA/3633 FRA V5. Please find attached drawing 1284-21-DAY-A-00-103 showing the drainage overlay on the land consolidation plan. The drain runs outside the 'ownership boundary' but this has now been agreed between the client and third-party landowner. I am advised the formal agreements are being written at present.
- As the strategy has switched from below ground to rooftop attenuation since DAE/NA/3633 FRA V5, please confirm that the building design is compatible with blue roofs and can support these overhead attenuation structures. Please refer to the architect's roof plans attached. With regard to additional water loading this has been incorporated into the structural design.
- May require further comment when clarification on 'the Green' is submitted.

*Evidence that the drainage system has been designed (unless an area is designated to hold and/or convey water as part of the design) so that flooding does not occur during a 1 in 100 year rainfall event with allowance for climate change in any part of a building. Hydraulic calculation needs to be provided;

- To remain in-place until further information received with respect to above comments.

*Assessment of overland flow routes for extreme events that is diverted away from buildings (including basements). Overland flow routes need to be designed to convey the flood water in a safe manner in the event of a blockage or exceedance of the proposed drainage system capacity including inlet structures. A layout with overland flow routes needs to be presented with appreciation of these overland flow routes with regards to the properties on site and adjacent properties off site.

- To remain in-place until further information received with respect to above comments.

*Construction details of flow control and SuDS attenuation elements.

- To remain in-place until further information received with respect to above comments.
- Please also include detail for permeable paving (which shall be compliant with Condition 28 no infiltration).

Type C Permeable Paving below (no infiltration). Any surface water within sub-base will be drained through perforated pipe.

