Requirements and aspirations for SuDS in Hammersmith & Fulham

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Lead Environment Policy Officer
(and Lead Local Flood Authority Officer)

Presentation Topics

• Part 1 – Discuss flood risks in H&F and the LLFA approach to getting SuDS measures integrated into major developments

• Part 2 – Comment on the LLFA process for the Landmark House case study
Tidal Flood Risks

2100 Breach Scenario

Groundwater and Sewer Flood Risks

Increased Potential for Elevated Groundwater

Sewer Flooding Incidents

283

415

418

872
Combined Sewer Capacity Issues

Modelled sewerage and drainage capacity in 2050

Source: Thames Water

Surface Water Flood Risks

1 in 100 yr +CC storm event

Flood Incidents
Flood Risk Assessment Stats

- Application referrals for flood risk comments

<table>
<thead>
<tr>
<th>Month</th>
<th>applications commented on</th>
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<tbody>
<tr>
<td>September</td>
<td>109</td>
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<tr>
<td>August</td>
<td>162</td>
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<td>July</td>
<td>117</td>
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- 2017 – 1,195 consultation requests so far
- 2016 – 1,474 applications commented on
- Major applications assessed by the LLFA:
  - 15 in the last 3 months
  - 79 in 2016 (many of these are pre-apps)

Lead Local Flood Authority

- Consists of 2 officers:
  - Lead Environment Policy Officer (Planning)
  - Flood Risk Manager (Highways)

- Weekly meetings to discuss applications and agree comment on SuDS Strategies
- LLFA gets 3 weeks to submit comments – deadline met in majority of cases
- Most frequent response is to object and require further information. Detailed comments and advice provided.
Local Planning Policy

• We have a current Local Plan Policy that is in line with the requirements of the London Plan

• The new Local Plan Policy due to be adopted in January 2018
  – All major developments must implement SuDS to enable a reduction in peak run-off to greenfield run-off rates (for a range of storm events) and maximise attenuation

• New planning guidance on SuDS under development
Why we object to SuDS Strategies

- "The site is already 100% impermeable so why are SuDS necessary?"
- London Plan Drainage Hierarchy not followed
- Rainwater harvesting not considered
- Too much emphasis on storage tanks
- Infiltration ruled out too early and use of Building Regs 5m rule to justify not just exclusion of soakaways but all forms of infiltration
- Attenuation levels achieved are too low (50% is not a design target)
- Final discharges are too high (aim for greenfield not 5l/s); multiple discharge points are planned but not clearly identified
- Benefits of above-ground SuDS measures not considered
- Designing just for the 1 in 100 yr storm and not more frequent events
- Inconsistencies between the FRA, the SuDS Strategy, the Sustainability Statement and the site Plans

How to get your SuDS Strategy Approved

- Make use of the pre-app process and get advice on the LLFA requirements for the site
- Follow the London Plan Drainage Hierarchy
- Maximise above-ground SuDS measures including rainwater harvesting and infiltration methods where possible.
- Once above-ground measures have been maximised, then consider if underground storage is required
- Minimise final discharges to greenfield rates
- Maximise attenuation achieved on the site
- Provide maintenance information for all SuDS measures
- Provide plans and details of the SuDS measures
- We want as much detail up front at application stage so we can condition the implementation of the SuDS scheme as outlined where possible

- READ THE POLICIES & GUIDANCE, DESIGN A SCHEME THAT COMPLIES WITH THEM AND TALK TO US ABOUT YOUR PROPOSALS
Part 1 - Summary

- H&F has serious problems in terms of surface water flooding
- The planning system, through the LLFA, needs to ensure that development opportunities are used to get SuDS measure implemented wherever possible
- SuDS Strategies must maximise attenuation, minimise final discharges and use above-ground measures that not only provide flood risk benefits but other benefits for biodiversity, water quality, water efficiency etc.

Part 2

- Comment on the LLFA process for the Landmark House Application case study
Landmark House

Development Proposals

- Demolish existing building
- Build a part 6, 12 and 22 storey building providing a hotel, office and retail space, as well as a cultural space
- Plan includes some public realm landscaped areas
- Basement across the entire site
LLFA Process

• **Pre-app Stage**
  – No formal pre-app ✗
  – Brief discussion on FRA/SuDS requirements but no detailed advice provided ✓

• **Full Application Stage**
  – Validated on 25th Jan and notified to the LLFA on 31st Jan.
  – FRA carried out by Buro Happold and SuDS Strategy developed by Ramboll
  – LLFA started to assess the application in late Feb and provided comments on 2nd March.

LLFA Comments

An objection was made to the SuDS Strategy:

– Not clear that the Drainage Hierarchy was followed ✗
– Attenuation was limited to 50% improvement ✗
– Greenfield rates not achieved for final discharge ✗
– Too reliant on use of the underground tank ✗
– Some alternative measures mentioned (gardens, landscaping) but no detail ✗
– Thames Water concerns were also noted as they flagged issues with lack of sewer capacity ✗
LLFA Comments

LLFA/Ramboll Discussions

- Detailed comments provided to the case officer who passed them onto the applicant and consultant
- Early May – email discussions began with Ramboll to discuss how the SuDS Strategy should be revised
- Meeting held to discuss proposed amendments and agree a way forward
Revised SuDS Strategy

- Key components of the SuDS Strategy had been improved:
  - Final discharge rate lowered to 2.4 l/s ✓
  - Large increase in attenuation achieved (over 90% compared to current site) ✓ ✓
  - Rainwater harvesting now proposed ✓
  - Green roofs ✓ ✓
  - Rain gardens ✓ ✓
  - Permeable paving ✓ ✓
  - Volume of attenuation tank reduced ✓

Next Steps

- Revised SuDS Strategy was accepted and the LLFA objection to the application was removed
- Application went to July Planning Committee with a recommendation for approval, including SuDS conditions
- We still want to see a revised SuDS Strategy prior to commencement to confirm inclusion of measures highlighted in the submitted Strategy
Part 2 - Summary

• Large-scale redevelopment of the Landmark House site provided a good opportunity to integrate SuDS
• The original SuDS Strategy was objected to by the LLFA and revisions were required to make it policy compliant
• LLFA and Ramboll worked together to revise the Strategy and increase prioritised SuDS measures
• LLFA Objection removed and application was approved

Thank you

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