Flood Risk Assessment Pro-forma

Flood risk assessment for new development

1 Development description and location
1a. What type of development is proposed and where will it be located? Construction of new underground screening chamber and adjacent above ground control kiosk located in footpath within car park occupied by Manchester City Council (off Bennett Street / Vaughan Street, Manchester)
1b. What is its vulnerability classification? The development is classed as Water-Compatible
1c. Is the proposed development consistent with the Local Development Documents? Yes, the proposal is consistent with Manchester City Council Unitary Development Plan.
1d. Please provide evidence that the Sequential Test or Exception Test has been applied in the selection of this site for this development type? The sequential test shows that the proposed development is located within Zone 2 Medium Probability and is classed as essential infrastructure meaning the development is appropriate in this flood zone (according to Table D.3). As the development is required to be located adjacent to the existing infrastrutcture, the Exception Test can be applied; a) the development provides wider sustainability benefits to the community, b) the development is on previously developed land and c) the development will reduce risk of flooding overall.
2. Definition of the flood hazard
2a. What sources of flooding could affect the site? (see Annex C PPS25). Flooding from river
2b. For each identified source, describe how flooding would occur, with reference to any historic records wherever these are available. Severe weather events increasing river levels could cause flooding. No access to historic records.
2c. What are the existing surface water drainage arrangements for the site? Existing paved car park and pedestrian footpath areas are drained by crossfalls, channels, road gullies and surface water / combined sewerage system

3. Probability

3a Which flood zone is the site within?
1 in 1000 year

3b If there is a Strategic Flood Risk Assessment covering this site, what does it show?
The Manchester Salford Trafford Strategic Flood Risk Assessment shows that the area is a housing area not within an area susceptible to surface water flooding. The site is within the 1 in 1000 year flood zone but on the edge of the 1 in 100 year flood zone therefore falls within the 1 in 100 year with climate change flood zone.

3c What is the probability of the site flooding taking account of the contents of the SFRA and of any further site-specific assessment?
Not susceptible to surface water flooding.

3d What are the existing rates and volumes of run-off generated by the site?
Unknown

4. Climate change

4a How is flood risk at the site likely to be affected by climate change?
The Manchester Salford Trafford Strategic Flood Risk Assessment shows that the area is within the 1 in 100 year with climate change flood zone.

5. Detailed development proposals

5a Please provide details of the development layout, referring to the relevant drawings.
Refer to planning application drawing No.MAN0376/80021989/00/97/2001 Rev B

5b Where appropriate, demonstrate how land-uses most sensitive to flood damage have been placed in areas within the site that are at least risk of flooding.
Not Applicable as the kiosk is required to be located adjacent to the existing infrastructure.

6. Flood risk management measures

6a. How will the site be protected from flooding, including the potential impacts of climate change, over the development's lifetime?
No specific protection measures have been provided, the below ground mechanical plant is designed to operate under water. The new control kiosk will be located on a concrete plinth 150mm above ground level and all electrical connections will be raised again above this level.

7. Off site impacts

7a How will you ensure that your proposed development and the measures to protect your site from flooding will not increase flood risk elsewhere?
There are no additional flood protection measures proposed. Given the minor scale of development proposed; and that improvements are to be made to the sewer system it is expected that it will not increase the risk of flooding elsewhere..

7b How will you prevent run-off from the completed development causing an impact elsewhere?
There will be no impact as the development is minimal and located within a positively drained (to public sewer) existing paved car park area.

8. Residual risks

8a What flood-related risks will remain after you have implemented the measures to protect the site from flooding?
Small risk of power failure and mechanical plant failure

8b How, and by whom, will these risks be managed over the lifetime of the development?
These risks will be monitored via telemetry links and be managed by UU Network Operations.