APPENDIX B(i) - Applicant drainage checklist

Development	
Location	
Date	
LPA Contact	
EA Contact	
IDB Contact	
LLFA Contact	
General Notes	

Recommended actions	Notes	✓
Managing the risk of flooding (see Chapter 4 '*Guidance on managing flood risk to developments and site selection*' and Chapter 5 '*Managing and mitigating risk*')		
Establish if your development is at risk of tidal, river flooding or other forms of flooding. Check the flood maps on the EAs website, and the LPAs SFRAs and SWMPs		
Make sure the location of your development meets the Sequential Test (NPPG). Only where there is no other choice, carry out and meet the Exception Test.		
Assess what information is required to be included within your FRA, if one is required. See FRA checklist below for further details.		
Managing surface water (see Chapter 6 '*surface water and sustainable drainage systems*'		
Before you plan your site, consider how you can manage the rate of surface water run-off so that it is similar to the conditions before the development. Also consider the effect this run-off will have on any receiving watercourse.		
Demonstrate in your FRA that you will deal with surface water by installing the best combination of SuDS techniques for your site (see FRA requirements below).		
Use CIRIA guidance to inform your choice of SUDS design for the development.		
Where infiltration techniques are not possible, or where space is limited, you can still use features such as green roofs to reduce the rate or total amount of run-off.		
Speak to the LLFA about the surface water drainage proposals for your site. They can tell you what consents you will need, which types of SuDS are unsuitable and whether you will have to take special precautions to prevent pollution or reduce infiltration.		
Demonstrate in your FRA that you will deal with surface water by installing the best combination of SuDS techniques for your site.		
Ensure you have an adequate management and maintenance system in place.		
Water Resources (See Chapter 6 '*surface water and sustainable drainage systems*')		
Design your development to at least meet the minimum level of Building Regulations or Local Planning policies related to water conservation where appropriate		
Consider water and energy-efficient appliances and fittings in your development such as 'A-rated' washing machines and low or dual-flush toilets.		
If your development is large, consider leak-detection, rainwater-harvesting or even rainwater re-use systems. Information about their management and maintenance should be provided.		
Pollution Prevention (See Chapter 7 '*Water environment*'		
Talk to the local sewerage company to ensure: • there is sufficient sewage treatment capacity for the lifetime of your development; • there are arrangements for sewage discharges to foul sewer;		

• what consents you will need.		
Please also check with the LPA as to their full Local Validation requirements.		

APPENDIX B(ii) - Applicant flood risk assessment checklist

FRA requirements	Notes	✓
1. Development Description and Location		
a. What type of development is proposed (e.g., new development, an extension to existing development, a change of use etc.) and where will it be located.		
b. What is its flood risk vulnerability classification?		
c. Is the proposed development consistent with the Local Plan for the area? (Seek advice from the LPA if you are unsure about this).		
d. What evidence can be provided that the Sequential Test and where necessary the Exception Test has/have been applied in the selection of this site for this development type?		
e. Will your proposal increase overall the number of occupants and/or users of the building/land, or the nature or times of occupation or use, such that it may affect the degree of flood risk to these people? (Particularly relevant to minor developments (alterations and extensions) and changes of use).		
2. Definition of the Flood Hazard		
a. What sources of flooding could affect the site?		
b. For each identified source in box 2a above, can you describe how flooding would occur, with reference to any historic records where these are available?		
c. What are the existing surface water drainage arrangements for the site?		
3. Probability		
a. Which Flood Zone is the site within? (As a first step, check the Flood Map for Planning (Rivers and Sea) on the EAs website).		
b. If there is a SFRA covering this site (check with the LPA), does this show the same or a different Flood Zone compared with the EAs flood map? (If different you should seek advice from the LPA and, if necessary, the EA).		
c. What is the probability of the site flooding, taking account of the maps of flood risk from rivers and the sea and from surface water, on the EAs website, and the SFRA, and of any further flood risk information for the site?		
d. If known, what (approximately) are the existing rates and volumes of surface water run-off generated by the site?		
4. Climate Change		
How is flood risk at the site likely to be affected by climate change? (The LPAs SFRA should have taken this into account). Further information on climate change and development and flood risk is available on the EAs website.		
5. Detailed Development Proposals		
Where appropriate, are you able to demonstrate how land uses most sensitive to flood damage have been placed in areas within the site that are at least risk of flooding (including providing details of the development layout)?		
6. Flood Risk Management Measures		
How will the site/building be protected from flooding, including the potential impacts of climate change, over the development's lifetime?		
7. Off-site Impacts		
a. How will you ensure that your proposed development and the measures to protect your site from flooding will not increase flood risk elsewhere?		
b. How will you prevent run-off from the completed development causing an impact elsewhere?		
c. Are there any opportunities offered by the development to reduce flood risk elsewhere?		
8. Residual Risks		
a. What flood-related risks will remain after you have implemented the measures to protect the site from flooding?		
b. How, and by whom, will these risks be managed over the lifetime of the development? (E.g., flood warning and evacuation procedures).		

Note: A site-specific flood risk assessment (FRA) is required for proposals of 1 hectare or greater in Flood Zone 1; all proposals for new development (including minor development and change of use) in Flood Zones 2 and 3, or in an area within Flood Zone 1 which has critical drainage problems (as notified to the LPA by the EA); and where proposed development or a change of use to a more vulnerable class may be subject to other sources of flooding (NPPF, Footnote 20).

A step by step guide on how to complete a FRA in support of a planning application is set out in Chapter 4.

Note: The above checklist is taken from the National Planning Practice Guidance (NPPG) on Flood Risk and Coastal Change – Site-Specific Flood Risk Assessment: Checklist (http://planningguidance.planningportal.gov.uk/blog/guidance/flood-risk-and-coastal-change/site-specific-flood-risk-assessment-checklist/).