

When to consult the Environment Agency

This guidance lists the types of planning applications where we should be consulted. It describes the categories of development that could affect the environment and includes those for which we are listed as a statutory consultee in the [Development Management Procedure Order 2015](#).

If you're unsure whether you should consult us, please call us on **0203 025 6862**.

In addition to this consultation list, local Flood Risk Standing Advice has been developed for Hull City Council, with the specific flood risk issues of the city in mind. The recommendations, mitigation and advice suggested in this document are applicable to Hull City Council only. Local flood risk standing advice may exist for other Local Planning Authorities (LPA) or Areas. Please discuss this with the LPA or Environment Agency area office relevant to that area.

Pre-application and planning application consultation

Cemeteries	Development relating to using land as a cemetery, including extensions
Coastal erosion	Development (excluding minor development) located within Coastal Change Management Areas, as defined by the LPA
Environmental Impact Assessment (EIA)	Development requiring an EIA, including scoping opinions and the environmental statement
Flood risk	See Local Flood Risk Standing Advice below
Groundwater protection	Potentially contaminating development (as defined in land contamination DoE industry profiles) located in Source Protection Zones. This type of development also includes the storage of potentially contaminating substances as defined in DoE industry profiles.
Hazardous Waste/Control of Major Accident Hazard Regulations (COMAH) Sites	<ul style="list-style-type: none"> • Development of new establishment • Modifications to existing establishments which could have significant repercussions on major accident hazard • Development within 250 metres, where the siting or development would increase the risk or consequences of a major accident.
Intensive farming	Intensive animal farming (such as pig or poultry) that may require an environmental permit. An environmental permit is required for the development or expanding of a facility with more than 750 sows or 2,000 production pigs over 30kg or 40,000 poultry.
Pollution from land contamination	Development on land where a previous use (as defined in land contamination DoE industry profiles) may have caused contamination
Mineral extraction	Development involving or including mineral and mining operations and restoration schemes relating to such development
Oil and fuels	Development for the purpose of refining or storing non-domestic oils and their by-products
Refuse or waste	<ul style="list-style-type: none"> • Development that includes the storage or spreading of sludge or slurry • Development that includes the storage, transfer, process, treatment and / or use of refuse or waste
Non-mains drainage	Major development proposing to use non-mains foul drainage
Works affecting a watercourse	Development involving works or operations in the bed of or within 20 metres of the Humber estuary or the top of the bank of a 'main river' as notified by the Environment Agency

Discharge/variations of conditions	Only consultations where the Environment Agency has requested the condition be attached to the planning permission
Planning appeals	Only appeals related to an Environment Agency objection or recommended condition
Strategic consultations	
Local Plans	Development plan documents, including documents prepared individually or in co-operation with other LPAs
Environmental evidence documents	Including, but not limited to, water cycle strategies, strategic flood risk assessments, surface water management plans, strategic infrastructure plans, green infrastructure studies, strategic housing land availability assessments
Strategic Environmental Assessment (SEA)/Sustainability Assessment (SA) of local plans	SEA/SA of local plan documents, including screening, scoping, draft and final report and post adoption statement
Other strategic planning allocations	Including, but should not be limited to enterprise zones, garden cities and other strategic growth proposals such as urban expansions

[Skip to the Standing Advice Matrix](#)

Environment Agency: Local Flood Risk Standing Advice

Refer to SFRA Figure 13 for flood depth information

Consult the EA on all development within Flood Zone 3b (Functional Floodplain). In most cases, development should not be permitted.

Consult the EA on all development lying within 20m of the bank top of a Main River or 20m of the Humber Estuary (As shown on SFRA Figure 13)

Consult the LLFA on all major developments

All development shall be provided with a place of safety at the level shown on SFRA Figure 15

Where relevant, the LPA must satisfy itself that the requirements of the Sequential Test and Exception Test, have been met. See below guidance.

Do not consult EA on any development lying solely within Flood Zone 1, unless any other consultation trigger is met on our Consultation Checklist

			A	B	C	D
	Development Category	<u>Vulnerability Classification</u>	Flood Depths >600mm	Flood Depths 300-600mm	Flood Depths <300mm & Remainder of FZ3	Flood Zone 2
1	<u>Minor Development</u>	All use classes	<u>Mitigation Note 9</u>	<u>Mitigation Note 9</u>	<u>Mitigation Note 9</u>	No consultation
2	Change of use or Prior Approval resulting in	Essential Infrastructure	Consult EA with <u>FRA</u> Guidance for developers <u>here</u>	Consult EA with <u>FRA</u> Guidance for developers <u>here</u>	Consult EA with <u>FRA</u> Guidance for developers <u>here</u>	Consult EA with <u>FRA</u>
3		Highly Vulnerable (including basements dwellings)	Consult EA - development <u>should not be permitted</u>	Consult EA - development <u>should not be permitted</u>	Consult EA - development <u>should not be permitted</u>	Consult EA with <u>FRA</u>
4		More Vulnerable	Consult EA with <u>FRA</u> Guidance for developers <u>here</u>	<u>Mitigation Note 1</u>	<u>Mitigation Note 2</u>	<u>FZ2 Note 1</u>
5		Less Vulnerable	<u>Mitigation Note 3</u>	<u>Mitigation Note 4</u>	<u>Mitigation Note 5</u>	<u>FZ2 Note 2</u>
6		Water Compatible - development includes essential ancillary sleeping or residential accommodation	Consult EA with <u>FRA</u>	<u>Mitigation Note 1</u>	<u>Mitigation Note 2</u>	No Consultation
7		Other Water Compatible	<u>Mitigation Note 3</u>	<u>Mitigation Note 4</u>	<u>Mitigation Note 5</u>	No Consultation
8		Essential Infrastructure	Consult EA with <u>FRA</u> Guidance for developers <u>here</u>	Consult EA with <u>FRA</u> Guidance for developers <u>here</u>	Consult EA with <u>FRA</u> Guidance for developers <u>here</u>	Consult EA with <u>FRA</u>
9	Operational Development	Highly Vulnerable (including basements dwellings)	Consult EA - development <u>should not be permitted</u>	Consult EA - development <u>should not be permitted</u>	Consult EA - development <u>should not be permitted</u>	Consult EA with <u>FRA</u>
10		More Vulnerable	Consult EA with <u>FRA</u> Guidance for developers <u>here</u>	<u>Mitigation Note 6</u>	<u>Mitigation Note 7</u>	<u>FZ2 Note 3</u>
11		Less Vulnerable	<u>Mitigation Note 8</u>	<u>Mitigation Note 4</u>	<u>Mitigation Note 5</u>	<u>FZ2 Note 2</u>
12		Water Compatible - development includes essential ancillary sleeping or residential accommodation	Consult EA with <u>FRA</u>	<u>Mitigation Note 6</u>	<u>Mitigation Note 7</u>	No Consultation
13		Other Water Compatible	<u>Mitigation Note 8</u>	<u>Mitigation Note 4</u>	<u>Mitigation Note 5</u>	No consultation

Mitigation Note 1

[Back to the Matrix](#)

- The application must be supported by a site-specific [Flood Risk Assessment](#). **The Environment Agency do not normally wish to be consulted** on this application regarding flood risk. However, if the below measures to exclude water cannot be incorporated, the Environment Agency should be consulted, with a site-specific [Flood Risk Assessment](#) undertaken to demonstrate that the development will be safe. This must be accompanied by a detailed explanation as to why the standard measures can't be incorporated. Please also check the [EA's consultation check list](#) to make sure there aren't other triggers for consultation.
- Flood depths in this area could reach 600mm. In order to exclude potential flood water, finished floor levels shall be raised a minimum of 600mm above average site level or adjacent road frontage level, whichever is higher. An additional 300mm of flood resilience measures, above finished floor levels, shall be included, to speed the rate of recovery and minimise the impacts should flood waters enter the property.
- However, given the proposed development is a change of use, traditional flood risk mitigation measures may not be practically achievable. If there are other factors which prevent raising floor levels to the above height, floor levels shall be raised as far as possible, with passive flood proofing measures (i.e. measures which do not require flood forecasting and human intervention) incorporated, which would exclude water to a minimum of 600mm above average site level or adjacent road frontage level, whichever is higher. An additional 300mm of flood resilience measures, above the level of flood proofing, shall then be included, to speed the rate of recovery and minimise the impacts should flood waters enter the property.
- The development must incorporate a place of safety at the level shown on SFRA Figure 15. Please refer to the [guidance](#) below, which details the council's advice on what constitutes an appropriate place of safety.
- These measures must be secured through the inclusion of conditions on any planning permission granted. The [Model Conditions](#) below, provide a starting point for drafting suitable conditions. The council must be satisfied that the conditions are [lawful](#).
- **NOTE:** For any [major](#) developments which are the subject of a sustained Environment Agency objection on flood risk grounds, but where the authority is minded to grant permission for the development, you must follow the statutory requirements of the [Town and Country Planning \(Consultation\) \(England\) Direction 2009](#). In such cases, the authority, the Environment Agency and the applicant should try to agree what changes could be made to the application that would enable the objection to be withdrawn. If the Environment Agency concludes that it is unable to withdraw its objection and the authority is still minded to grant permission, the Direction requires the authority to notify the Secretary of State, prior to the granting of any planning permission, to provide them with an opportunity to call the application in for their own determination.

[Back to the Matrix](#)

Mitigation Note 2

[Back to the Matrix](#)

- The application must be supported by a site-specific [Flood Risk Assessment](#). **The Environment Agency do not normally wish to be consulted** on this application regarding flood risk. However, if the below measures to exclude water cannot be incorporated, the Environment Agency should be consulted, with a site-specific [Flood Risk Assessment](#) undertaken to demonstrate that the development will be safe. This must be accompanied by a detailed explanation as to why the standard measures can't be incorporated. Please also check the [EA's consultation check list](#) to make sure there aren't other triggers for consultation.
- Flood depths in this area could reach 300mm. In order to exclude potential flood water, finished floor levels shall be raised a minimum of 300mm above average site level or adjacent road frontage level, whichever is higher. An additional 300mm of flood resilience measures, above finished floor levels, shall be included, to speed the rate of recovery and minimise the impacts should flood waters enter the property.
- However, given the proposed development is a change of use, traditional flood risk mitigation measures may not be practically achievable. If there are other factors which prevent raising floor levels to the above height, floor levels shall be raised as far as possible, with passive flood proofing measures (i.e. measures which do not require flood forecasting and human intervention) incorporated, which would exclude water to a minimum of 300mm above average site level or adjacent road frontage level, whichever is higher. An additional 300mm of flood resilience measures, above the level of flood proofing, shall then be included, to speed the rate of recovery and minimise the impacts should flood waters enter the property.
- The development must incorporate a place of safety at the level shown on SFRA Figure 15. Please refer to the [guidance](#) below which details the council's advice on what constitutes an appropriate place of safety.
- These measures must be secured through the inclusion of conditions on any planning permission granted. The [Model Conditions](#) below, provide a starting point for drafting suitable conditions. The council must be satisfied that the conditions are [lawful](#).
- **NOTE:** For any [major](#) developments which are the subject of a sustained Environment Agency objection on flood risk grounds, but where the authority is minded to grant permission for the development, you must follow the statutory requirements of the [Town and Country Planning \(Consultation\) \(England\) Direction 2009](#). In such cases, the authority, the Environment Agency and the applicant should try to agree what changes could be made to the application that would enable the objection to be withdrawn. If the Environment Agency concludes that it is unable to withdraw its objection and the authority is still minded to grant permission, the Direction requires the authority to notify the Secretary of State, prior to the granting of any planning permission, to provide them with an opportunity to call the application in for their own determination.

[Back to the Matrix](#)

Mitigation Note 3

[Back to the Matrix](#)

- The application must be supported by a site-specific [Flood Risk Assessment](#). **The Environment Agency do not wish to be consulted on this application regarding flood risk.** If it is not possible to achieve the mitigation measures recommended below, the council should satisfy itself, without consulting the Environment Agency, that there are good reasons why the recommended mitigation measures cannot be incorporated. It should also consider whether the reliance on measures which may not exclude flood water or which would depend upon successful flood warning and human intervention to do so, would render the development unacceptable. Please also check the [EA's consultation check list](#) to make sure there aren't other triggers for consultation.
- Flood depths in this area could exceed 600mm. It may therefore be difficult to design the development to exclude flood water. In order to exclude water, finished floor levels will need to be raised above the predicted flood depth (shown on Figure 13), but as a minimum, finished floor levels shall be raised 600mm above average site level or adjacent road frontage level, whichever is higher. Flood resilience measures shall be included as a minimum to the depth of predicted flooding (shown on Figure 13). Such techniques will speed the rate of recovery and minimise the impacts should flood waters enter the property.
- However, given the proposed development is a change of use, traditional flood risk mitigation measures may not be practically achievable. If there are other factors which prevent raising floor levels to the above height, floor levels shall be raised as far as possible, with passive flood proofing measures (i.e. measures which do not require flood forecasting and human intervention) incorporated, which would exclude water to a minimum of 600mm above average site level or adjacent road frontage level, whichever is higher. Flood resilience measures shall be included to the depth of predicted flooding (shown on Figure 13) as a minimum. Such techniques will speed the rate of recovery and minimise the impacts should flood waters enter the property.
- The applicant should be aware that standard masonry buildings are at significant risk of structural damage if there is a water level difference between outside and inside of about 0.6m or more. If a water exclusion strategy is proposed which would aim to keep out flood depths of more than 600mm, the applicant must satisfy themselves that the building will be constructed in such a way that this would not jeopardise its structural stability. Further information can be found [here](#).
- The development must incorporate a place of safety at the level shown on SFRA Figure 15. Please refer to the [guidance](#) below, which details the council's advice on what constitutes an appropriate place of safety.
- These measures must be secured through the inclusion of conditions on any planning permission granted. The [Model Conditions](#) below, provide a starting point for drafting suitable conditions. The council must be satisfied that the conditions are [lawful](#).

[Back to the Matrix](#)

Mitigation Note 4

[Back to the Matrix](#)

- The application must be supported by a site-specific [Flood Risk Assessment](#). **The Environment Agency do not wish to be consulted on this application regarding flood risk.** If it is not possible to achieve the mitigation measures recommended below, the council should satisfy itself, without consulting the Environment Agency, that there are good reasons why the recommended mitigation measures cannot be incorporated. It should also consider whether the reliance on measures that may not exclude flood water, or which would depend upon successful flood warning and human intervention to do so, would render the development unacceptable. Please also check the [EA's consultation check list](#) to make sure there aren't other triggers for consultation.
- Flood depths in this area could reach 600mm. In order to exclude potential flood water, finished floor levels shall be raised a minimum of 600mm above average site level or adjacent road frontage level, whichever is higher. An additional 300mm of flood resilience measures, above finished floor levels, shall be included, to speed the rate of recovery and minimise the impacts should flood waters enter the property.
- If there are other factors which prevent raising floor levels to the above height, floor levels shall be raised as far as possible, with passive flood proofing measures (i.e. measures which do not require flood forecasting and human intervention) incorporated, which would exclude water to a minimum of 600mm above average site level or adjacent road frontage level, whichever is higher. An additional 300mm of flood resilience measures, above the level of flood proofing, shall then be included, to speed the rate of recovery and minimise the impacts should flood waters enter the property.
- The development must incorporate a place of safety at the level shown on SFRA Figure 15. Please refer to the [guidance](#) below, which details the council's advice on what constitutes an appropriate place of safety.
- These measures must be secured through the inclusion of conditions on any planning permission granted. The [Model Conditions](#) below, provide a starting point for drafting suitable conditions. The council must be satisfied that the conditions are [lawful](#).

[Back to the Matrix](#)

Mitigation Note 5

[Back to the Matrix](#)

- The application must be supported by a site-specific [Flood Risk Assessment](#). **The Environment Agency do not wish to be consulted on this application regarding flood risk.** If it is not possible to achieve the mitigation measures recommended below, the council should satisfy itself, without consulting the Environment Agency, that there are good reasons why the recommended mitigation measures cannot be incorporated. It should also consider whether the reliance on measures that may not exclude flood water, or which would depend upon successful flood warning and human intervention to do so, would render the development unacceptable. Please also check the [EA's consultation check list](#) to make sure there aren't other triggers for consultation.
- Flood depths in this area could reach 300mm. In order to exclude potential flood water, finished floor levels shall be raised a minimum of 300mm above average site level or adjacent road frontage level, whichever is higher. An additional 300mm of flood resilience measures, above finished floor levels, shall be included to speed the rate of recovery and minimise the impacts should flood waters enter the property.
- If there are other factors which prevent raising floor levels to the above height, floor levels shall be raised as far as possible, with passive flood proofing measures (i.e. measures which do not require flood forecasting and human intervention) incorporated, which would exclude water to a minimum of 300mm above average site level or adjacent road frontage level, whichever is higher. An additional 300mm of flood resilience measures, above the level of flood proofing, shall then be included, to speed the rate of recovery and minimise the impacts should flood waters enter the property.
- The development must incorporate a place of safety at the level shown on SFRA Figure 15. Please refer to the [guidance](#) below, which details the council's advice on what constitutes an appropriate place of safety.
- These measures must be secured through the inclusion of conditions on any planning permission granted. The [Model Conditions](#) below, provide a starting point for drafting suitable conditions. The council must be satisfied that the conditions are [lawful](#).

[Back to the Matrix](#)

Mitigation Note 6

[Back to the Matrix](#)

- The application must be supported by a site-specific [Flood Risk Assessment](#). **The Environment Agency do not normally wish to be consulted on this application regarding flood risk.** However, if the below measures to exclude water cannot be incorporated, the Environment Agency should be consulted, with a site-specific [Flood Risk Assessment](#) undertaken to demonstrate that the development will be safe. This must be accompanied by a detailed explanation as to why the standard measures cannot be incorporated. Please also check the [EA's consultation check list](#) to make sure there are no other triggers for consultation.
- Flood depths in this area could reach 600mm. In order to exclude potential flood water, finished floor levels shall be raised a minimum of 600mm above average site level or adjacent road frontage level, whichever is higher. An additional 300mm of flood resilience measures, above finished floor levels, shall be included to speed the rate of recovery and minimise the impacts should flood waters enter the property.
- The development must incorporate a place of safety at the level shown on SFRA Figure 15. Please refer to the [guidance](#) below, which details the council's advice on what constitutes an appropriate place of safety.
- These measures must be secured through the inclusion of conditions on any planning permission granted. The [Model Conditions](#) below, provide a starting point for drafting suitable conditions. The council must be satisfied that the conditions are [lawful](#).
- **NOTE:** For any [major](#) developments which are the subject of a sustained Environment Agency objection on flood risk grounds, but where the authority is minded to grant permission for the development, you must follow the statutory requirements of the [Town and Country Planning \(Consultation\) \(England\) Direction 2009](#). In such cases, the authority, the Environment Agency and the applicant should try to agree what changes could be made to the application that would enable the objection to be withdrawn. If the Environment Agency concludes that it is unable to withdraw its objection and the authority is still minded to grant permission, the Direction requires the authority to notify the Secretary of State, prior to the granting of any planning permission, to provide them with an opportunity to call the application in for their own determination.

[Back to the Matrix](#)

Mitigation Note 7

[Back to the Matrix](#)

- The application must be supported by a site-specific [Flood Risk Assessment](#). **The Environment Agency do not normally wish to be consulted** on this application regarding flood risk. However, if the below measures to exclude water cannot be incorporated, the Environment Agency should be consulted, with a site-specific [Flood Risk Assessment](#) undertaken to demonstrate that the development will be safe. This must be accompanied by a detailed explanation as to why the standard measures cannot be incorporated. Please also check the [EA's consultation check list](#) to make sure there are no other triggers for consultation.
- Flood depths in this area could reach 300mm. In order to exclude potential flood water, finished floor levels shall be raised a minimum of 300mm above average site level or adjacent road frontage level, whichever is higher. An additional 300mm of flood resilience measures above finished floor levels, shall be included to speed the rate of recovery and minimise the impacts should flood waters enter the property.
- The development must incorporate a place of safety at the level shown on SFRA Figure 15. Please refer to the [guidance](#) below, which details the council's advice on what constitutes an appropriate place of safety.
- These measures must be secured through the inclusion of conditions on any planning permission granted. The [Model Conditions](#) below, provide a starting point for drafting suitable conditions. The council must be satisfied that the conditions are [lawful](#).
- **NOTE:** For any [major](#) developments which are the subject of a sustained Environment Agency objection on flood risk grounds, but where the authority is minded to grant permission for the development, you must follow the statutory requirements of the [Town and Country Planning \(Consultation\) \(England\) Direction 2009](#). In such cases, the authority, the Environment Agency and the applicant should try to agree what changes could be made to the application that would enable the objection to be withdrawn. If the Environment Agency concludes that it is unable to withdraw its objection and the authority is still minded to grant permission, the Direction requires the authority to notify the Secretary of State, prior to the granting of any planning permission, to provide them with an opportunity to call the application in for their own determination.

[Back to the Matrix](#)

Mitigation Note 8

[Back to the Matrix](#)

- The application must be supported by a site-specific [Flood Risk Assessment](#). **The Environment Agency do not wish to be consulted on this application regarding flood risk.** If it is not possible to achieve the mitigation measures recommended below, the council should satisfy itself, without consulting the Environment Agency, that there are good reasons why the recommended mitigation measures cannot be incorporated. It should also consider whether the reliance on measures that may not exclude flood water, or which would depend upon successful flood warning and human intervention to do so, would render the development unacceptable. Please also check [the EA's consultation check list](#) to make sure there are no other triggers for consultation.
- Flood depths in this area could exceed 600mm. It may therefore be difficult to design the development to exclude flood water. In order to exclude water, finished floor levels will need to be raised above the predicted flood depth (shown on Figure 13), but as a minimum, finished floor levels shall be raised a minimum of 600mm above average site level or adjacent road frontage level, whichever is higher. Flood resilience measures shall be included to the depth of predicted flooding as a minimum. Such techniques will speed the rate of recovery and minimise the impacts should flood waters enter the property.
- If there are other factors which prevent raising floor levels to the above height, floor levels shall be raised as far as possible, with passive (i.e. measures which do not require flood forecasting and human intervention, such as flood doors, rather than demountable flood gates) flood proofing measures (i.e. water exclusion measures) included to a minimum of 600mm above average site level or adjacent road frontage level, whichever is higher. An additional 300mm of flood resilience measures, above the level of flood proofing, shall then be included, to speed the rate of recovery and minimise the impacts should flood waters enter the property.
- The applicant should be aware that standard masonry buildings are at significant risk of structural damage if there is a water level difference between outside and inside of about 0.6m or more. If a water exclusion strategy is proposed, which would aim to keep out flood depths of more than 600mm, the applicant must satisfy themselves that the building will be constructed in such a way that this would not jeopardise its structural stability. Further information can be found [here](#).
- The development must incorporate a place of safety at the level shown on SFRA Figure 15. Please refer to the [guidance](#) below, which details the council's advice on what constitutes an appropriate place of safety.
- These measures must be secured through the inclusion of conditions on any planning permission granted. The [Model Conditions](#) below, provide a starting point for drafting suitable conditions. The council must be satisfied that the conditions are [lawful](#).

[Back to the Matrix](#)

Mitigation Note 9

[Back to the Matrix](#)

- The Environment Agency do not wish to be consulted on this application regarding flood risk, unless it is within 20 metres of any main river or the Humber estuary. Please also check the [EA's consultation check list](#) to make sure there are no other triggers for consultation.
- Finished floor levels shall be set no lower than existing floor levels. Opportunities should be explored to raise floor levels, or incorporate passive flood resistance measures, to exclude water to the depths shown on SFRA Figure 13. If there are other factors that prevent measures to exclude water, flood resilience measures should be incorporated to at least 300mm above the depth of flooding shown on SFRA Figure 13, to speed the rate of recovery and minimise the impacts should flood waters enter the property.
- If there is no access available to an existing place of safety, opportunities to incorporate a place of safety at the level shown on SFRA Figure 15 should be explored. Please refer to the SFRA for more detail about what constitutes an appropriate place of safety.

[Back to the Matrix](#)

FZ2 Note 1

We have no comments on 'more vulnerable' development in Flood Zone 2, unless the proposed development is a landfill, a waste facility or a caravan site. In such circumstances, please apply the guidance contained in [Mitigation Note 2](#). For other development in Flood Zone 2, guidance is available within the Environment Agency's [National Flood Risk Standing Advice](#).

Please also refer to the [EA's consultation check list](#) to ensure there aren't other triggers for consultation.

[Back to the Matrix](#)

FZ2 Note 2

We do not wish to be consulted on flood risk grounds for 'less vulnerable' development proposed in Flood Zone 2, unless the proposed development is a land or building used for agriculture or forestry; a waste treatment site; a mineral processing site, a water treatment plant; or a sewage treatment plant. In such circumstances, please apply the guidance contained in [Mitigation Note 5](#). For other development in Flood Zone 2, guidance is available within the Environment Agency's [National Flood Risk Standing Advice](#).

Please also refer to the [EA's consultation check list](#) to ensure there are no other triggers for consultation.

[Back to the Matrix](#)

FZ2 Note 3

We have no comments on 'more vulnerable' development in Flood Zone 2, unless the proposed development is a landfill, a waste facility or a caravan site. In such circumstances, please apply the guidance contained in [Mitigation Note 7](#). For other development in Flood Zone 2, guidance is available within the Environment Agency's [National Flood Risk Standing Advice](#).

Please also refer to the [EA's consultation check list](#) to ensure there are no other triggers for consultation.

[Back to the Matrix](#)

Model Conditions

[Back to the Matrix](#)

The below conditions are suggested as a starting point for drafting. It remains the responsibility of the LPA to satisfy themselves that any conditions included are lawful. Please note that where conditions have been included following advice in a mitigation note, we do not wish to be consulted on applications to discharge those conditions.

In the interests of clarity, wherever possible, conditions for finished floor levels and flood resistance/resilience measures should relate to an absolute height in metres above Ordnance Datum, rather than to a relative height. Please refer to the [guidance](#) section below for further advice about how to deduce the relevant level. Please select the relevant conditions from below and populate them with the correct level information.

CONDITION: Finished floor levels shall be set at a minimum height of XX metres Above Ordnance Datum. Flood resilience measures shall be incorporated to a minimum height of XX metres Above Ordnance Datum. These measures shall be retained throughout the lifetime of the development.

REASON: To minimise the impacts of flooding on people and property. To reduce the likelihood of flood water ingress. To speed the rate of recovery in the event of flood water ingress.

CONDITION: Finished floor levels shall be set at a minimum height of XX metres Above Ordnance Datum. Passive flood resistance measures shall be incorporated to a minimum height of XX metres Above Ordnance Datum. Flood resilience measures shall be incorporated to a minimum height of xx metres Above Ordnance Datum. These measures shall be retained throughout the lifetime of the development.

REASON: To minimise the impacts of flooding on people and property. To reduce the likelihood of flood water ingress. To speed the rate of recovery in the event of flood water ingress.

CONDITION: A place of safety at a minimum height of XX metres Above Ordnance Datum shall be provided in accordance with [Add reference to Flood Risk Assessment and/or relevant plan]. The place of safety shall be retained and made available throughout the lifetime of the development.

REASON: To ensure the provision of a place of safety above predicted flood waters.

CONDITION: Prior to the commencement of development a Flood Warning and Evacuation Plan shall be submitted to, and approved in writing by, the Local Planning Authority. The approved Flood Warning and Evacuation Plan shall then be implemented upon occupation. The Flood Warning and Evacuation Plan shall be kept up-to-date throughout the lifetime of the development and shall be disseminated periodically to users.

REASON: To minimise the impacts of flooding.

[Back to the Matrix](#)

This local Flood Risk Standing Advice has been developed for Hull City Council, with the specific flood risk issues of the city in mind. The recommendations, mitigation and advice suggested in this document are therefore applicable to Hull City Council only. Local flood risk standing advice may exist for other Local Planning Authorities (LPA) or Areas. Please discuss this with the LPA or Environment Agency area office relevant to that area.

a) What should I do if a site falls into more than one depth category?

Where a development site encapsulates a range of different depth categories, please assume the greatest depth and apply the Flood Risk Standing Advice Matrix accordingly.

b) What should I do if a development falls into more than one vulnerability classification?

Information on vulnerability classification can be found in [Table 2](#) of the Planning Practice Guidance. If the proposed development falls into more than one vulnerability classification, the highest category should be used when applying the Flood Risk Standing Advice Matrix. This approach should be taken irrespective of which storey the categories are proposed on.

c) When does the Sequential Test need to be undertaken?

The [Sequential Test](#) must be undertaken for all development proposed within Flood Zone 2 or 3, except [minor](#) and change of use (except for a change of use to a caravan, camping or chalet site, or to a mobile home or park home site) applications. The Sequential Test does not need to be applied for individual developments on sites that have been allocated in development plans through the Sequential Test, provided the proposed use is in accordance with the development plan. The Sequential Test should be undertaken using Strategic Flood Risk Assessment Figure 14. Further guidance on the Sequential Test can be found in the Strategic Flood Risk Assessment.

d) When does the Exception Test need to be undertaken?

Following the application of the Sequential Test, the [Exception Test](#) must also be undertaken in those instances set out in [Table 3](#) of the Planning Practice Guidance. The [Exception Test](#) does not need to be undertaken for [minor](#) or change of use (except for a change of use to a caravan, camping or chalet site, or to a mobile home or park home site) applications. Further guidance on the Sequential Test can be found in the Strategic Flood Risk Assessment.

e) Who is responsible for undertaking the Sequential Test?

The [Planning Practice Guidance](#) describes that it is for local planning authorities, taking advice from the Environment Agency as appropriate, to consider the extent to which Sequential Test considerations have been satisfied, taking into account the particular circumstances in any given case. The developer should justify with evidence to the local planning authority what area of search has been used when making the application. Further guidance on the Sequential Test can be found in the Strategic Flood Risk Assessment.

f) What if it's not possible to achieve the finished floor levels set out in the Flood Risk Standing Advice Matrix?

Applicants should always be expected to incorporate the finished floor levels set out in each Mitigation Note. Where the applicant does not think it is possible to achieve this, they must fully explain and justify why. Innovative measures such as internal steps/ramping, under-croft parking, non-habitable ground floor uses and half-storeys (where upper floors are partially pushed up into the roof space) should be fully considered as they may help to overcome these issues. If such techniques cannot overcome the issues preventing the finished floor levels from being achieved, or if their inclusion would render the development unviable, the passive resistance measures may then be considered. If there are insurmountable reasons why the passive resistance measures cannot be achieved, there are some instances, as set out in each Mitigation Note, when the Environment Agency wish to be consulted with a full Flood Risk Assessment justifying why alternative mitigation measures are sufficient to make the development safe. In other instances, it will be for the council to negotiate alternative mitigation measures and to determine whether the development can be considered safe, having regard to the potential impacts on people and property of flood water entering the development.

g) What should happen if the LPA want to grant planning permission for a major development against Environment Agency advice?

For any [major](#) developments which are the subject of a sustained Environment Agency objection on flood risk grounds, but where the authority is minded to grant permission for the development, you must follow

the statutory requirements of the [Town and Country Planning \(Consultation\) \(England\) Direction 2009](#). In such cases, the authority, the Environment Agency and the applicant should try to agree what changes could be made to the application that would enable the objection to be withdrawn. If the Environment Agency concludes that it is unable to withdraw its objection and the authority is still minded to grant permission, the Direction requires the authority to notify the Secretary of State, prior to the granting of any planning permission, to provide them with an opportunity to call the application in for their own determination. In this context, “major development” means:

- In respect of residential development, the provision of 10 or more dwellings, or a site of 0.5 hectares or more;
- In respect of non-residential development, new floorspace of 1,000 square metres or more, or a site of 1 hectare or more.

h) How do I calculate average site level or adjacent road frontage level?

When determining the necessary level of flood mitigation, average site level should be calculated based on a representative range of spot heights across the site. In the unlikely event that a site is steeply sloped, the average site level may need to be discussed and agreed with the applicant, having regard to the flood risk implications of this decision. Adjacent road frontage level is important, as roadways can often be the first places that flood waters flow or accumulate. When the capacity of a roadway to hold water is exceeded, flood waters can flow quickly into any adjacent development where floor levels are below the road. Where there is a choice of adjacent roads, the highest should be chosen. The road frontage level is the average between the gutter and crown of the road. Clear topographical surveys to GPS-derived Ordnance Datum must be submitted to show this information.

i) What’s the difference between flood resistance and flood resilience measures?

The term ‘flood resistance measures’ refers to techniques which attempt to exclude water – i.e. to prevent it entering a building. In contrast, the term ‘flood resilience measures’ refers to techniques which allow the water in, but which minimise the impacts on property and speed the rate of recovery following a flood.

j) What’s meant by ‘passive’ flood resistance measures?

Passive flood resistance measures are techniques which would mitigate flood risk but which don’t require the prior forecasting and warning of flooding nor rely on people to put them in place. Examples of passive measures would include the raising of finished floor levels or the installation of flood proof doors which are normally closed. In contrast, ‘active’ measures would include demountable flood barriers or flood gates which need to be put in place in advance of a flood and therefore would only be effective if a flood is accurately predicted and people are available to implement the measures.

k) What constitutes an acceptable Place of Safety?

Because the Environment Agency does not perform a flood evacuation role during a flood incident, it is for the council to define what an acceptable place of safety is. The council’s position is as follows:

Figure 15 gives a zoned approach to levels for the place of safety (POS). The following factors apply for the POS for residential and commercial:

Residential

- Must be able to accommodate all potential occupants e.g. a 3 bed roomed house should have a POS to accommodate 5 people as a minimum;
- It must be freely internally accessed;
- The level of the POS should be set at the levels shown in Figure 15;
- An evacuation plan must be prepared which considers the speed and depth of flooding (figures 6 and 7) and the flood warning system. The evacuation plan should take into account the vulnerability of users, such as those with mobility issues.

All non-residential

- The level of the POS should be set at the levels shown in Figure 15;
- Consideration should be given to the maximum occupancy of the building in regards to the how many people it needs to occupy;
- A detailed evacuation plan must be submitted which considers the velocity and depth of flooding and the flood warning system;

- The POS should be freely internally accessed; external access would only be suitable for areas where the velocity of flooding is low.

l) What if there are differences between the SFRA map and the Environment Agency’s published Flood Map?

The Environment Agency’s Flood Map provides a broad, precautionary indication of areas at risk from flooding. Because virtually all of Hull is in Flood Zone 3, it is difficult to manage flood risk spatially. The SFRA has been done specifically for Hull and makes use of the best available information for all sources of flooding, as well as higher resolution modelling than the Flood Map. At the point of the SFRA being published, Figures 14 and 13 have been drawn such that their maximum flood extents match the current Environment Agency Flood Map. Instances of discrepancies should therefore currently be minimal. The SFRA mapping therefore takes precedence over the Flood Map until such time that the SFRA mapping becomes out-dated and is superseded by better available information.

m) What if information suggests the SFRA maps substantially under or over estimate the flood risk?

The SFRA maps are the best available information at the time of publishing. They represent comprehensive consideration of flooding from all sources, as well as modelling information at a far greater resolution than the Environment Agency’s flood map. However, modelling of any sort is a simplification of a complex reality and there may be instances where site specific evidence suggests the SFRA maps are inaccurate. We welcome comments on areas where there may be inaccuracies in the SFRA, but in any given instance, the onus will be on applicants to substantiate any suggestion that the SFRA maps and their associated guidance should not be followed. This information will be considered when the SFRA maps are updated in the next review.

n) What if a change of use is proposed but the vulnerability classification isn’t changing?

Even if the vulnerability classification doesn’t change, the matrix should be applied on the basis of the vulnerability classification which will result from the change of use, irrespective of the vulnerability classification of the previous use.

o) Are there any instances when basement dwellings may be acceptable?

The Planning Practice Guidance sets out that basement dwellings are ‘highly vulnerable’ and should not be permitted within Flood Zone 3. Proposals for new-build basement dwellings and change of use applications for self-contained basement dwellings are both likely to result in an objection in principle from the Environment Agency. However, for change of use applications where a basement would form part of a dwelling split over 2 storeys, this may be acceptable provided:

- It is not in close proximity to flood defences where, in the event of a breach, the onset of flooding would be very fast; and
- All sleeping accommodation will be raised above predicted flood depths; and
- Measures are incorporated which would prevent surrounding flood water up to depths of 300mm (above average site level or adjacent road frontage level, whichever is higher) from entering the basement; and
- Flood resilience measures are incorporated above predicted flood depths; and
- A place of safety is provided at the height set out on SFRA Figure 15.

p) What if a proposed development falls within the buffer zones shown on SFRA Figure 13, which denote 20 metres of Main Rivers and the Humber estuary?

The Environment Agency must be consulted, irrespective of the depths of flooding predicted. A site specific Flood Risk Assessment must be provided which shall detail the implications of the proposed development on such things as:

- Access to the Main River or estuary to undertake maintenance;
- Access to any fluvial or tidal flood defences to undertake maintenance or future improvements;
- The provision of space to allow for potential future realignment of flood defences;
- Flood risk impacts on the Main River or estuary during the construction of the development.

In addition, the applicant should be made aware that an [Environmental Permit](#) may be required from the Environment Agency, under the Environmental Permitting Regulations. If the proposed development is not within the buffer zones shown on Figure 13, but is close to another small river, ditch or stream, the applicant should contact your flood risk team or the relevant [internal drainage board](#) to check if land drainage consent will be needed.

[Back to the Matrix](#)

This development may be at a high risk of flooding or and/or be classified as a 'more vulnerable' development or 'essential infrastructure'. As a result, the application must be supported by a detailed, site-specific flood risk assessment (FRA) and the council must consult us so we can undertake a full review.

In order to assist the production of the FRA and to minimise the chances that we will object to the proposed development, we have provided the below guidance. This advice is relevant to those proposing developments that fall into the above cells, particularly the authors of relevant FRAs. It should be referred to early in the process, before a planning application is submitted and ideally from the outset of a design process that fully considers and integrates flood risk mitigation with other issues such as access, street scene and over-shadowing. If the points below are not fully addressed, we are likely to object to your planning application.

Assessing the risk

- Your FRA will need to assess the nature and severity of flood risk from all sources. This should include information on the speed-of-onset, depth, velocity and duration of any anticipated flooding, as well as information on the source(s) of flooding. As well as considering the development's current flood risk, you will need to assess how climate change will affect this risk over the course of the development's lifetime. Figures 0 to 15 of the [SFRA](#) should be used as a starting point to carry out this assessment.
- You will need to determine the nature of the flood risk to the site:
 - A site is at risk of 'frequent' flooding if flooding would occur in the [design event](#)¹, with flood risk management infrastructure operating effectively.
 - A site is at 'residual' risk if flooding would only occur in the event of flood defences failing or their design standard being exceeded.

This can be deduced by comparing [SFRA](#) Figures 2, 6b, 11 and 13. Please note that sites can be at risk of both 'frequent' flooding and 'residual' risk.

- If a site is shown as being subject to flood depths predicted to be over 1.2m (e.g. on SFRA Figure 13), your assessment will need to more accurately characterise the likely flood depths in order to inform your mitigation strategy. Alternatively, a precautionary approach could be taken by using the place of safety level shown on [SFRA](#) Figure 15 as the predicted flood depth.
- Your FRA will need to consider the latest climate change allowances. Since the SFRA was published, new climate change data (UKCP18) has been published. The information within the SFRA was based on climate change allowances published in 2016 (based on UKCP09 data). However, until such time as new allowances based on UKCP18 are published, it is generally considered reasonable to continue use the 2016 allowances. The information within the SFRA is therefore still appropriate for use when considering the impacts of climate change on most new developments.
 - In exceptional cases, where developments are very sensitive to flood risk and have a lifetime of at least 100 years, such as infrastructure projects, further assessment will be required. We recommend you assess the impact of both the current allowance and the 95th percentile of UKCP18 'RCP 8.5' scenario (high emissions scenario) standard method sea level rise projections of UKCP18, and plan according to this assessed risk. Sea level rise allowances beyond 2100 will need to be calculated by extrapolating the UKCP18 dataset."

Mitigating the risk

Your FRA should demonstrate that you have taken a sequential approach to flood risk within the site, both horizontally and vertically. This means that the most vulnerable uses should be located within the lowest risk areas. This also means steering the most vulnerable aspects of the development to upper floors. You will need to describe how the risks from each source will be mitigated, to ensure the building and its occupants remain safe throughout its lifetime without increasing risk elsewhere. Opportunities to reduce flood risk overall should also be explored and incorporated where possible.

Your FRA should adhere to the following principles:

¹ This is a flood event of a given annual flood probability, which is generally taken as:

- fluvial (river) flooding likely to occur with a 1% annual probability (a 1 in 100 chance each year), or;
- tidal flooding with a 0.5% annual probability (1 in 200 chance each year), against which the suitability of a proposed development is assessed and mitigation measures, if any, are designed.

- Where a site spans different flood risk depths on Figure 13, a sequential approach to the layout of the site should be taken, avoiding buildings on the worst areas of the site, and matching the vulnerability of uses to the level of risk.
- Your mitigation should keep floodwater out of buildings via ‘passive’ means that do not require human intervention. Ideally, you should exclude the predicted depths (as shown in Figure 13) by raising floor levels (either alone or in conjunction with localised land raising²). Where you are able to clearly justify that flood water cannot be excluded from buildings, other passive measures may be considered to exclude water up to the predicted depths. When doing this, you should consider the implications of the predicted flood depths and velocities on structural stability, and clearly show either that walls of traditional construction will not be expected to exclude more than 600mm of flood water or that the structure has been appropriately designed to withstand the predicted flood depths.
- Flood resilience measures should also be incorporated up to the level of the predicted flood depths shown in Figure 13 (based on the higher of the average site level or the adjacent road frontage level).
- If you are unable to exclude predicted flood depths from all buildings, all habitable accommodation should be moved to upper floors, above potential flood depths.
- Where a site spans different flood risk depths on Figure 13, a precautionary approach should be taken and the greatest flood depth used, unless information in the site-specific FRA justifies an alternative approach.
- If the above measures cannot be met, the FRA should explain what protection can be offered and what other measures are proposed to ensure the safety of buildings and occupants in accordance with the Local Plan, National Planning Policy Framework and the Planning Practice Guidance. Departures from the above should be clearly justified within the assessment, so that a view can be formed about their relative merit. In circumstances where the above measures cannot be met, we strongly recommend that you seek detailed advice³ from us at pre-application stage, so alternative approaches to mitigation can be discussed.
- If mitigation measures are unable to exclude predicted flood depths from buildings, it is crucial that your FRA incorporates detailed information about the characteristics of the flooding that would be experienced *within* any buildings, taking into account any proposed land/floor level raising. Information must cover speed-of-onset, depth, velocity, hazard and duration. **Please note** that the [SFRA](#) will not provide all the necessary information, so additional site-specific work is likely to be needed.
- The development must incorporate a place of safety at the level shown in Figure 15 of the [SFRA](#), which should be internally accessible. Please refer to the above guidance⁴, which details the council’s advice on what constitutes an appropriate place of safety. If a place of safety cannot be provided, we are likely to object unless there is an alternative in place that is considered acceptable by the council. Your FRA should also provide details of access and egress in accordance with the [SFRA](#) guidelines.
- You will need to prepare an emergency plan as part of your FRA. Developers are advised to speak to Hull City Council’s Emergency Planning and Flood Risk Planning Teams for further information and refer to the self-assessment checklist tool on the Hull City Council website. We do not usually comment on emergency planning matters as we do not perform this role in a flood event.
- It is important that your FRA demonstrates that the site’s development will not increase flood risk elsewhere by altering flood flow routes or displacing flood risk to others. This is particularly important where a site is subject to frequent flooding (i.e. flooding that would take place even with flood defences operating effectively) or where there is a significant risk of surface water flooding.

For any scenarios where you are not able to meet the mitigation described above, your FRA should provide a detailed explanation as to why this is and how the subsequent risk will be managed. For instance, ‘active’ flood resistance measures will only be acceptable where your FRA provides sound rationale as to why passive measures cannot be achieved and where you have demonstrated that the speed of onset of any flooding would allow for active measures to be safely implemented in advance of the onset of flooding.

Further advice

This [site-specific checklist](#) provides a useful starting point for your FRA. If you would like more detailed guidance on your FRA prior to its submission, please contact us for advice (sp-yorkshire@environment-agency.gov.uk).

² Any proposal involving land raising must be supported by information demonstrating that flood risk will not be increased elsewhere as a result. This is likely to include information on the management of surface water and on flood flow routes.

³ Contact the Environment Agency’s Yorkshire Sustainable Places via sp-yorkshire@environment-agency.gov.uk for detailed pre-application advice. Our standard terms and conditions and details of our charges for this advice, can be found [here](#).

⁴ See Question k within the [Flood Risk Standing Advice guidance](#)

Beyond a free preliminary opinion, there will be a charge for this service. Hull City Council, as the lead local flood authority can provide advice about the management of surface water from your development, and may hold relevant information about sources of flooding other than from rivers and the sea, beyond that which is presented in the [SFRA](#).

We recommend referring to '[Improving the Flood Performance of New Buildings – Flood Resilient Construction](#)' when deciding which methods of flood resistance/resilience will be suitable. This sets out limitations on the level of flood proofing that can be incorporated safely into a building depending on whether a water exclusion strategy or water enter strategy is chosen, and the possible depths of flooding that could be experienced. We also recommend that you contact the council's flood risk and building control departments to determine whether flood proofing measures are likely to be effective.

[Back to the Matrix](#)

EXPIRES 01/03/2021