

Former Mondi Mill Paper Works, Ramsbottom, Bury, BL0 0BS

Proposed Residential Redevelopment

Statement of Case - Flood Risk and Drainage

Project ref:	4174 Mondi Mill, Ramsbottom
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Introduction

1. This Flood Risk Statement of Case (SoC) relates to the proposed residential development on the site of the former Mondi Mill, Ramsbottom, Bury.
2. The SoC has been prepared by Dr Kevin Tilford, Managing Director of Weetwood Services Ltd, a consultancy firm specialising in flood risk and drainage.
3. Dr Tilford holds a BSc(Hons) in Environmental Science from the University of Lancaster (1986), an MSc(Eng) in Water Resources Technology from the University of Birmingham (1987), a PhD from the University of Salford (1991) and an MBA from Cranfield School of Management (2006).
4. Dr Tilford is a Chartered Water and Environmental Manager, Fellow of the Chartered Institution of Water and Environmental Management and a Chartered Environmentalist. He currently serves as an elected member of the CIWEM Professional Standards Committee, a committee responsible for overseeing the maintenance of professional standards and ethics within the water and environmental management profession.
5. Dr Tilford has worked in the field of hydrology, water engineering and flood risk management since 1988, initially as an academic and thereafter as a consultant with WS Atkins (2000-2005), EC Harris (2006-2010) and Weetwood (2010 on). He has worked on a wide range of development projects including residential developments, mixed use schemes, employment sites and business parks, industrial sites and leisure and recreation schemes.
6. Weetwood has been involved in the proposals since November 2019 and prepared the Flood Risk Assessment report (FRA) and Drainage Assessment report that accompanied the planning application for the proposed development.
7. The evidence and opinions presented in this document are Dr Tilford's true and professional judgements, based on the scientific evidence and professional experience.

Overview of Proposals

8. The 2.9 ha application site was previously occupied by the Mondi/Holcombe Paper Mill. The mill building was demolished in 2012. Retained buildings and structures include two 2-storey stone buildings, a brick building and brick chimney. Vehicular access to the site is provided from an existing unnamed road that adjoins Bridge Street. This access is also used by the cricket club located to the south of the site.
9. The proposals are for the erection of 73 dwellings accessed off Bridge Street to the north of the site. Emergency access will be provided via the shared accessway which runs perpendicular to Bridge Street.
10. The applicant is Ecclestone Homes Ltd, and the clients agent is Lichfields.
11. A comprehensive description of the site and its surroundings is included within the submitted Planning Statement prepared by Lichfields. Further details of the proposals are included within the submitted Planning Statement and Design & Access Statement.

Planning Application

12. A planning application for “*Erection of 73 no. dwellings including the retention and conversion of 2 existing buildings to residential use (5 no. units), the retention of a chimney and the demolition of a derelict building, together with engineering operations to create a development platform and associated parking, landscaping, drainage, the layout of internal estate roads and footways and other associated works*” was submitted to the local planning authority, Bury Metropolitan Borough Council (BMBC) on 14 August 2020.
13. The application was validated on 17 September 2020 with the planning reference 65844.
14. In respect of flood risk and drainage, the planning application was accompanied by the following reports:
 - Flood Risk Assessment report (FRA) prepared by Weetwood (report ref: 4714/FRA/Final/v1.2/2020-08-07; Issue date 7 August 2020) (refer **Annex A** to this document) - “the submitted FRA”;
 - Drainage Assessment report prepared by Weetwood (report ref: 4714/DA/Final/v1.0/2020-08-07; Issue date 7 August 2020) (refer **Annex B1** to this document);
 - Drainage Assessment report prepared by Weetwood (report ref: 4714/DA/Final/v1.3/2022-01-18; Issue date 18 January 2022) (refer **Annex B2** to this document);
 - Flood Plan prepared by Weetwood (report ref: 4714/FP/Final/v1.0/2020-11-18; Issue date 18 November 2020) (refer **Annex C** to this document);
 - Flood Risk Sequential & Exception Test Assessment report prepared by Lichfields (Unreferenced; Issue date August 2020) (refer **Annex D** to this document);
 - Flood Risk Sequential Assessment Addendum prepared by Lichfield (document ref: 62274/01/SPM/MG; Issue date 5 February 2021) (refer **Annex E** to this document).

Flood Risk and Drainage Consultation Responses

15. The following section presents in chronological order the consultation responses received from United Utilities, the Environment Agency, and BMDC. Where required, to provide clarity and/or context, related correspondence is referenced.
16. United Utilities (UU) the local sewerage undertaker provided a consultation response by way of a letter dated 21 October 2020 (UU reference: DC/20/3590) (refer **Annex F** to this document).
17. No objection was raised and UU recommended two planning conditions relating to (a) the disposal of surface water runoff from the development (pre-commencement condition) and b) that surface and foul water from the development should be drained on separate systems (compliance condition).
18. The Environment Agency (EA) provided a consultation response by way of a letter dated 28 October 2020 (EA reference: SO/2020/120565/01-L01) (refer **Annex G** to this document).
19. The letter states that the EA objects to the proposals because the submitted FRA report (v1.2): (a) failed to consider how people will be kept safe from the identified flood hazards, especially in relation to access/egress provision, and (b) failed to consider the requirement for flood emergency planning, including flood warning and evacuation of people.
20. Specifically, the letter states “...We have not been provided with the model files and therefore, our comments are based on the content of the FRA.” The letter also states that no information has been provided on flood hazard and as such “there are remaining concerns regarding the safety of the development in relation to access/egress”. Finally, the letter suggests that a flood plan, at least in outline, is submitted to BMDC emergency planners.
21. Note: The first point is incorrect - digital hydraulic model files were submitted to the EA on 19 October 2019.
22. Weetwood responded to the points of objection raised by the EA by way of a letter addressed to Ms H Leach (BMDC) dated 6 November 2020 (ref: 4714/2020-11-06/JA/EA/01) (refer **Annex H1 and H2** to this document).
23. The letter pointed out that the digital hydraulic model files requested in the EA letter of 28 October 2020 were submitted to the EA on 19 October 2020. The letter also clarified matters raised by the EA in relation to the model outputs, and provided a model output showing flood hazard for the 1 in 100 plus 35% climate change event. Finally, the letter advises that a Flood Plan was being prepared and would be submitted to BMDC. The Flood Plan (report

ref: 4714/FP/Final/v1.0/2020-11-18) (refer **Annex C** to this document) was submitted to BMDC by Lichfields on 19 November 2020.

24. The EA provided a further consultation response by way of a letter dated 20 November 2020 (EA reference: SO/2020/120565/02-L01) (refer **Annex I** to this document).
25. The letter stated that the EA had reviewed the detailed modelling files and confirmed that “...the modelling is acceptable and fit for purpose”. Notwithstanding this, the EA requested further information relating to model outputs for the baseline (pre-development) scenario, and again requested further clarification in respect of flood hazard. The letter concluded that the EA would maintain its objection until this information has been provided.
26. The Environment Agency (EA) provided a further consultation response by way of a letter dated 29 December 2020 (EA reference: SO/2020/120565/03-L01) (refer **Annex J** to this document).
27. The letter accepted the explanation presented in Weetwood’s letter of 6 November 2020 of the model outputs for the baseline scenario. The letter also stated that the mapping of flood hazard provided by Weetwood in its letter of 6 November 2020 indicated that there would be localised areas of moderate hazard (i.e. “Danger to Some”) on parts of Bridge Street during the 1 in 100 plus 35% climate change event, and suggested that “ [BMDC’s] emergency planners should provide comment on this”. The letter also states “it would be advisable to assess the hazards associated with the 70%CC [climate change] increase”, although the letter goes on to state “Climate change allowances are due to be updated in 2021 following the most recent UKCP18 rainfall projections and are likely to increase”.
28. Finally, the letter reiterates via an informative statement that the safety of the proposed development would rely on evacuation (i.e. Flood Plan) and/or use of safe refuges within dwellings and states “We recommend that [BMDC’s] emergency planners consider this in line with the NPPF PPG paragraphs 057 and 058. [BMDC] may want to consult the emergency services regarding the content of this [Flood Plan] as the development could increase the scale of any rescue that might be required.”
29. The letter concludes, “Once details have been submitted to address the above, we will be please [sic] to comment further”.
30. Up to March 2021, no formal consultation response to the application had been provided by the lead local flood authority (LLFA). However, I do note that on 2 March 2021 BMDC issued a letter by email to the applicant, following a meeting between the applicant and BMDC (participants and date unknown). The document, titled “Planning Policy Comments” (dated 2 March 2021; unreferenced, but prepared by CW/FS) relates almost entirely to flood risk and drainage matters and is provided as **Annex K** to this document. I note that at the time of preparing this document, the letter is not on BMDC’s planning portal.
31. The letter states that BMDC accepts “...the criteria by which the alternative sites have been considered within the Flood Risk Sequential and Exception Test and agrees that there are no sequentially preferable sites that are appropriate or reasonably available within the search area and therefore the Sequential Test has been met”.
32. The letter goes on to state that BMDC does not accept that the benefits of the development, as articulated in the Flood Risk Sequential and Exception Test and submitted FRA, outweigh flood risk to the site and does not accept that the proposal meets criteria 2 of the Exception Test. In evidencing this, the letter refers to the Level 2 Strategic Flood Risk Assessment and seven specific recommendations contained therein. The letter goes on to state that “The Council requires the applicant to demonstrate that all of the above has been included within the [submitted] FRA and agreed with the Environment Agency and the LLFA.”
33. The letter states that the applicant should discuss with the LLFA whether modelling is required to investigate the interaction between river flooding and surface water in order to determine the likelihood of increased flooding in Ramsbottom. The letter then states that BMDC agrees with the EA that additional hazard modelling should be undertaken to investigate if the site can be safely accessed (as per the EA letter of 29 December 2020) noting that the proposed development must be safe to comply with the second part of the Exception Test. Finally, the letter acknowledges that a Flood Plan has been submitted with the application.

34. Weetwood responded to the points raised by BMDC in its letter of 2 March 2021 by way of an email dated 16 March 2021 (email forwarded to Ms Leach of BMDC on 17 March 2021 by Mr M Grant (Lichfields)). The email response is provided *verbatim* as **Annex L**.
35. The email responds to each of the matters raised by BMDC. In brief, the email confirms the following:
- The hydraulic modelling undertaken by Weetwood has been reviewed and confirmed as fit for purpose by the EA;
 - The approved hydraulic model includes the unnamed watercourse and culverts located at the site;
 - An alternative access to the site is not required as the development provides safe refuge, the flood hazard at the site access is generally Low, and that the site could be accessed by emergency vehicles;
 - Hydraulic modelling to assess the residual risk associated with blockage of the Bridge Street bridge is not deemed to be necessary because raising the development plots above the 1 in 100 plus 70% climate change event appropriately mitigates this residual risk;
 - The planning application is accompanied by a Drainage Assessment report presenting a surface water drainage strategy (uploaded to the BMDC planning portal on 19 August 2020);
 - A Flood Plan has been prepared and was submitted to BMDC on 19 November 2020. The plan sets out the procedures to be followed in the event that a flood warning is issued by the EA.
 - All of the above points have been covered and agreed with the EA, the only remaining point being for MBDC to review the submitted Flood Plan.
 - The requirement to provide flood hazard for the 1 in 100 plus 70% climate change event is rebutted as unreasonable, given that there is only a 10% chance that climate change would result in an increase in peak river flow of 70%.
36. The letter also points out that the LLFA has not provided a consultation response to the planning application.
37. Ms Leach (BMDC) responded to the Lichfield email of 17 March 2021 by way of an email to Mr Grant (Lichfields) dated 23 April 2021 (refer **Annex M** to this document).
38. In relation to flood risk, the email opens by stating that “...*there is still scepticism and concern about the validity of the site...*” Again, it is highlighted that the LLFA had not submitted a formal consultation response to the application. Irrespective, the email goes on to list eight matters which Ms Leach considered to be unresolved. These are summarised below:
- Concerns that the proposed development would increase flood risk upstream of the site due to surface water outfalls being blocked due to high river levels;
 - A concern that increases in flood risk shown by the model outputs presented in the submitted FRA are “dismissed as modelling anomalies”
 - Proposal would need to address any “upstream effects and any increase in flood risk arising from the proposals;
 - Confirmation of how the drainage system will be maintained if not adopted by the sewerage undertaker;
 - A requirement for exceedance flow plans;
 - Further information on existing drainage infrastructure to include a survey of all on-site drainage assets, to ensure that the modelling assumptions are correct;
 - Confirmation that the surface water drainage outfall has been appropriately assessed to ensure that no flooding will result due to surface water outfalls being “drowned” by high river levels;
 - The EA need to be involved more in the discussions about the impact of river level on flooding in general for the area.
39. Weetwood responded to the points raised by BMDC by way of a letter addressed to Ms H Leach (BMDC) dated 17 June 2021 (ref: 4714/2021-06-17/JA/LLFA/01) (refer **Annex N** to this document).
40. Due to the overlap in many of the matters raised in the BMDC letter with matters previously raised by the EA (subsequently addressed by Weetwood) and due to a concern that BMDC had not reviewed the EA consultation letters of 28 October 2020, 20 November 2020, and 29 December 2020, and Weetwood’s response letter of 6 November 2020, the Weetwood letter of 17 June 2021 first summarises the earlier EA consultation letters.

41. The letter again points out that the lead local flood authority had still not provided a consultation response to the application. The letter also points out that the Flood Plan submitted to BMDC (Ms Leach) on 19 November 2020 appeared not to have been reviewed by the Council; nor had it been uploaded to the planning portal (at the time of preparing this document, I note that this is still the case).
42. The Weetwood letter responds to each of the eight points raised by Ms Leach in BMDC's email of 23 April 2021. Again, the full response is provided in the relevant Annex to this document, with a summary of the responses as follows:
 - The hydraulic modelling used to inform the submitted FRA had been reviewed by the EA and confirmed as fit for purpose;
 - The model outputs presented in the submitted FRA report demonstrate that the proposals would not increase flood risk elsewhere, and would in places result in a reduction in off-site flood risk;
 - BMDC has misinterpreted the model outputs presented in the submitted FRA and the statement regarding modelling anomalies is incorrect;
 - The statement regarding maintenance of the drainage system in the event that the sewerage undertaker does not adopt the drainage is stated not to be a valid reason for refusal and alternative maintenance arrangements in the unlikely event that the drainage system is not adopted by UU could be secured by condition;
 - A walkover survey undertaken by the applicant (provided as Annex 3 to the letter) confirms that the inlet to the mill race to the north of Bridge Street has been sealed, that the on-site culverts have been appropriately represented within the model, and that the culverts have sufficient capacity to convey surface water runoff from the development.
43. An exceedance flow plan was provided to BMDC as Annex 2 to Weetwood's letter.
44. In the latter half of 2021 a series of email correspondence were exchanged between the applicant/ and/or Weetwood and Mr A Southgate (BMDC), as well as at least one meeting (on 27 July 2021) to discuss the drainage proposals for the site.
45. It transpired through discussion that BMDC accepted that the surface water drainage strategy appropriately addressed surface water drainage but that BMDC were concerned that foul water from the proposed development could increase flood risk in the vicinity of the site from the combined public sewer network.
46. On 24 November 2021, Mr Southgate (BMDC) shared with Weetwood by way of an email, sewer modelling undertaken by UU of the public combined sewer that runs along the eastern edge of the site. I note that the modelling is unreviewed, and the applicant challenged a number of the outputs from the (unreviewed) modelling. Nevertheless, the "headline" finding is that the modelling suggested that the development could increase flooding from several manholes, by a total of 14.9 cu m during the 1 in 30 storm event.
47. To properly address this matter, Weetwood prepared a foul water drainage strategy for the site and incorporated this, along with the associated modelling outputs, in a revised Drainage Assessment report. The revised Drainage Assessment report (refer Annex B2 to this document) was issued to Mr Southgate (BMDC) on 29 January 2022.
48. The proposed foul water drainage scheme presented in the report would provide circa 44 cu m of below ground storage. Notwithstanding concerns regarding the accuracy of UU's modelling, the storage provided within the proposed below ground foul sewer network serving the development significantly exceeds the 15 cu m of increased flooding indicated by the modelling undertaken by UU.
49. I am not aware of any further correspondence from Mr Southgate (or any other officers) regarding the revised Drainage Assessment report, and foul water drainage scheme presented therein. I also note that the revised report is not (at the time of writing) available on BMDC's planning portal.
50. On 12 January 2022, Weetwood issued a letter to Ms H Leach (BMDC) (ref: 4926/2022-01-12/JA/LPA/01) (refer **Annex O** to this document) covering the representation of climate change in hydraulic modelling of rivers.
51. The letter confirmed that the hydraulic modelling presented in the submitted FRA considered the potential increase in peak flow during the 1 in 100 event of 30%, 35% and 70% in accordance with the EA guidance on climate change allowances at the time the application was submitted.

52. The letter goes on to confirm that on 20 July 2021, the EA issued revised guidance on climate change allowances. The revised guidance simplifies the superseded guidance in that only the “Central Allowance” need be assessed for More Vulnerable development located in flood zones 2 and 3a. According to the new guidance, the site is located in the Irwell management catchment. The Central Allowance for the Irwell management catchment is 35% for the 2080’s climate epoch.
53. The letter confirms that on this basis, the proposed flood risk mitigation measures would continue to appropriately mitigate flood risk and that the development would have a negligible impact on flood risk elsewhere. The letter concludes that the submitted FRA and associated consultation responses remain valid.
54. Although not stated in the letter, it follows that there is no requirement to assess flood hazard for the 1 in 100 plus 70% climate change allowance. This point was made by way of an email from Lichfields to Mr D Marno (BMDC) on 12 April 2022 (refer **Annex P** to this document). The email, which included as attachments the Weetwood letters of 6 November 2020 and 12 January 2022, and the submitted Flood Plan, states “*From our perspective we have responded to all outstanding matters raised by the EA over a year ago*”, and concludes “*Collectively we believe that the attached information clarifies all points raised by the EA previously. Please can you forwards [sic] this to Sylvia [i.e. EA] and request that she reviews as a matter of urgency?*”.
55. The EA provided a consultation response by way of a letter dated 4 May 2022 (EA reference: SO/2020/120565/04-L01) (refer **Annex Q** to this document).
56. The letter confirms that the EA has reviewed the “*...further details to the Environment Agency to address our previous objection. We have reviewed the email dated 12 April 2022, with documents attached...*” The letter also acknowledges Weetwood’s letter of 12 January 2022 and confirms that EA had previously reviewed the letter from Weetwood dated 6 November 2020.
57. The letter states that the EA has “*...no additional comments to make in relation to these documents...*”, confirms that the assessment presented in the submitted FRA is appropriate and that “*Following review of the submitted details, we can now remove our objection...*”.
58. The letter also observes that the submitted FRA proposes to manage flood risk relating to site access/egress by way of a Flood Plan and recommends that the BMDC’s emergency planners should comment on the adequacy of the submitted plan before determining the application.
59. Notwithstanding the fact that the EA letter dated 4 May 2022 states the EA has no further comments to make on the submitted documents, the EA provided a further consultation response by way of a letter dated 6 May 2022 (EA reference: SO/2020/120565/05-L01) (refer **Annex R** to this document), stating that the EA “*...would like to make the following additional comments*”.
60. The response goes on to state that the development must be carried out in accordance with the approved flood risk assessment and the mitigation measures within it and that floor and ground levels must follow the design requirements set out in Section 5 of the submitted FRA.
61. The letter states that a pre-commencement planning condition requiring details of proposed site levels and floor levels to be submitted to and approved in writing by the local planning authority, and requiring the scheme to comply with the approved FRA, should be attached to any permission.

Planning Officer Report

62. The Officer’s report on the application is set out in the Agenda Document for the Planning Control Committee, dated 31 May 2022.
63. In respect of flood risk, the officer’s report states (*verbatim*):
 - *The application site is a former mill site which has partially been cleared and is largely situated within flood zone 3.*
 - *There is historical evidence that the site has flooded, namely in the recent Storm Eva and Storm Clara flood events experienced in 2015 and 2020.*

- A Flood Risk Assessment (FRA) was submitted with the application and further information has been provided over the course of the application. The proposed development would involve the creation of a development platform for the proposed dwellings to ensure that the finished floor levels for the dwellings would be set above the flood levels. The Environment Agency have considered the FRA, which has assessed the predominant fluvial flood risk to the site and proposed measures to mitigate the risks. The FRA identifies that there is some risk associated with access/egress from the site during a design event or more extreme events. The applicant has proposed management of these risks via a Flood Plan.
- The Environment Agency has no objections to the proposed development, subject to the inclusion of conditions relating to finished floor levels.
- The Emergency Planning team have been consulted on the Flood Plan and their comments are awaited. These will be reported in the Supplementary Report.
- The issue of surface water drainage has been considered and further information submitted during the course of the application. The applicant has agreed to increase the size of the pipes within the site, which allows for the greater retention of water within the site. As a larger volume of water would be retained within the site, the proposed development would not increase the risk of flooding from surface water drainage. The Drainage Section has no objections, subject to the inclusion of a condition relating to Drainage Assessment and United Utilities has no objections, subject to the inclusion of conditions relating to foul and surface water drainage.
- Therefore, the proposed development would not increase flood risk to the site or increase flood risk downstream. The proposed development would not impact adversely upon the foul and surface water drainage. Therefore, the proposed development would comply with Policies EN5/1 and EN7/5 of the Bury Unitary Development Plan.

64. In respect of statutory/non statutory consultations, the report states the following:

- “Environment Agency - **No objections** [my emphasis], subject to the inclusion of conditions relating to finished floor levels
- Drainage Section - **No objections** [my emphasis], subject to implementation in accordance with the submitted Drainage Assessment, Final Report, v1.3, January 2022 and associated plans and confirmation of detailed arrangements for future maintenance, including details of any management company appointed
- United Utilities - **No objections** [my emphasis], subject to the inclusion of conditions relating to foul and surface water drainage”

65. The report states the recommendation is “Minded to Approve”.

66. The Officer’s supplementary report on the application is set out in the Supplementary Agenda Document for the Planning Control Committee, dated 31 May 2022.

67. In respect of flood risk, the officer’s report states that as part of the FRA, a sequential assessment was submitted. (Strictly speaking, this is incorrect. A Flood Risk Sequential & Exception Test Assessment report, and a Flood Risk Sequential Assessment Addendum were submitted and are provided as **Annex D** and **Annex E** to this document. However, the documents were prepared by Lichfield and are separate to the submitted FRA).

68. Irrespective, the officer’s report states “It is accepted that there are no sequentially preferable sites that are appropriate or reasonably available within the search area and as such, the sequential test has been met”.

69. The report goes on to state the benefits that would be provided by the proposals and that the applicant has agreed to increase the capacity of the surface water drainage system to decrease the risk of flooding from surface water. The officer concludes that the proposed development would meet the flood risk exceptions test.

70. Finally, the officer states that a Flood Evacuation Plan has been submitted and has been assessed. The officer confirms that the plan is acceptable in principle although there are some areas of detail that would require amendment (acknowledging that these would be secured by condition).

71. The officer concludes that the proposed development would be in accordance with Policy EN5/1 of the Bury Unitary Development Plan.

Planning Decision

72. Planning permission was refused by way of a decision letter dated 7 June 2022. Two reasons for refusal were cited, the second of which relates to flood risk. This is cited in full below:

“Notwithstanding the provisions of the development and associated mitigation, the proposed development is located in flood zone 3, which has flooded in 2015 and would lead to increased flooding in the vicinity of the site from surface water and the combined sewer network. The proposed development would conflict with Policy EN5/1 - New Development and Flood Risk of the Bury Unitary Development Plan and Section 14 of the National Planning Policy Framework.”

73. The decision notice then states:

“The proposal would not improve the economic, social and environmental conditions of the area nor does it comply with the development plan and therefore does not comprise sustainable development. There were no amendments to the scheme, or conditions which could reasonably have been imposed, which could have made the development acceptable and it was therefore not possible to approve the application. The Local Planning Authority has therefore implemented the requirement in Paragraph 38 of the National Planning Policy Framework.”

74. The reason for refusal raises (conflates) four matters:

- Matter 1: The site is located in flood zone 3.
- Matter 2: The site flooded in 2015
- Matter 3: Development would increase surface water flood risk
- Matter 4: Development would increase the risk of flooding from the combined water sewer.

Matter 1 - The site is located in flood zone 3

75. The reason for refusal implies that the proposed development is wholly located in flood zone 3. This is not correct. For the avoidance of doubt, **Figure 1** presents an extract from the EA Flood Map for Planning with the application site outline and development platform superimposed.
76. The figure illustrates that whilst the majority of the proposed development is in flood zone 3 (circa 47 dwellings), a significant part of the proposed development is located in flood zone 1 and flood zone 2 (circa 18 dwellings).
77. Irrespective, the fact that a site is located partly or wholly in flood zone 3 is not, in itself, a valid ground for refusal of planning permission. Table 1 Flood Zones (Para. 065) of the Planning Practice Guidance (PPG) defines flood zones as follows:
- Flood Zone 1: Low Probability. Land having a less than 1:1,000 annual probability of river or sea flooding.
 - Flood Zone 2: Medium Probability. Land having between a 1:100 and 1:1,000 annual probability of river flooding; or Land having between a 1:200 and 1:1,000 annual probability of sea flooding.
 - Flood Zone 3a: High Probability. Land having a 1:100 or greater annual probability of river flooding; or Land having a 1:200 or greater annual probability of sea flooding.
 - Flood Zone 3b: Functional Floodplain. Land where water has to flow or be stored in times of flood.
78. Table 2 Flood Risk Vulnerability Classification (Para. 066) of the PPG states residential dwelling houses to be “More Vulnerable” to flood risk.
79. Table 3 Flood Risk Vulnerability and Flood Zone Compatibility (Para. 067) of the PPG confirms that residential development in flood zones 1, 2 and 3a is an appropriate form of development, subject to the flood risk sequential test being addressed for sites in flood zone 2 and 3, and the flood risk exception test being passed for sites in flood zone 3.
80. The sequential test requires a demonstration that there are no reasonably available and suitable sites at a lower risk of flooding, whilst the exception test requires a demonstration that the proposals provide wider sustainability benefits that outweigh flood risk, will be safe for their lifetime and not increase flood risk elsewhere.

81. In respect of this application, the Supplementary Agenda Document for the Planning Control Committee (31 May 2022) states:
 - *“It is accepted that there are no sequentially preferable sites that are appropriate or reasonably available within the search area and as such, the sequential test has been met”.*
 - [The proposals would] *“...decrease the risk of flooding from surface water”* and *“the development would provide wider sustainability benefits to the community and would meet the exceptions test”.*
82. The flood zones presented on the EA Flood Map for Planning do not take into account flood defences, including walls that provide a flood defence function, e.g. the wall along the northern carriageway of Bridge Street.
83. The submitted FRA report presents outputs from the EA model of the River Irwell, amended (slightly) to improve the accuracy at and in the vicinity of the site, including incorporation of the wall along Bridge Street. As stated earlier in this SoC, the model was reviewed and stated to be fit for purpose (for assessing flood risk at the site) by the EA.
84. The modelling of the pre-development (existing) scenario demonstrates that the extent of flooding during the 1 in 100 event (i.e. the extent of flood zone 3) (refer **Figure 2** below) and hence the extent of the development platform located in flood zone 3, is significantly less than indicated on the Flood Map for Planning (refer **Figure 1**).
85. Hydraulic modelling of the post development scenario, again using the approved hydraulic model of the River Irwell, demonstrate that the development platform is entirely located outside of the extent of flooding during the 1 in 100 and 1 in 1000 events (ref **Figure 3a** and **Figure 3b**), i.e. in flood zone 1.
86. Moreover, the development platform is also shown to be outside of the flood extent during the 1 in 100 plus 35% climate change event (refer **Figure 3c**), confirming that the development would be safe for its lifetime taking into account a potential 35% increase in peak river flow due to climate change.
87. Furthermore, the submitted FRA demonstrates that the proposed development would not increase flood risk and that flood risk in some places, including to the cricket ground and to the south of the site is actually reduced.

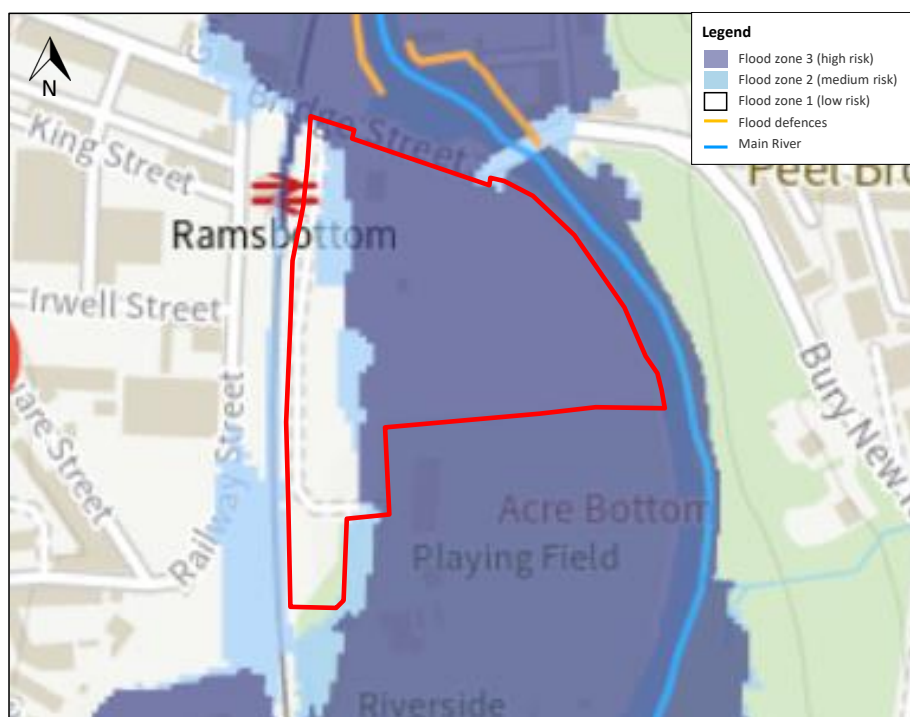


Figure 1 – Extract from EA Flood Map for Planning with Application Site Outline Superimposed

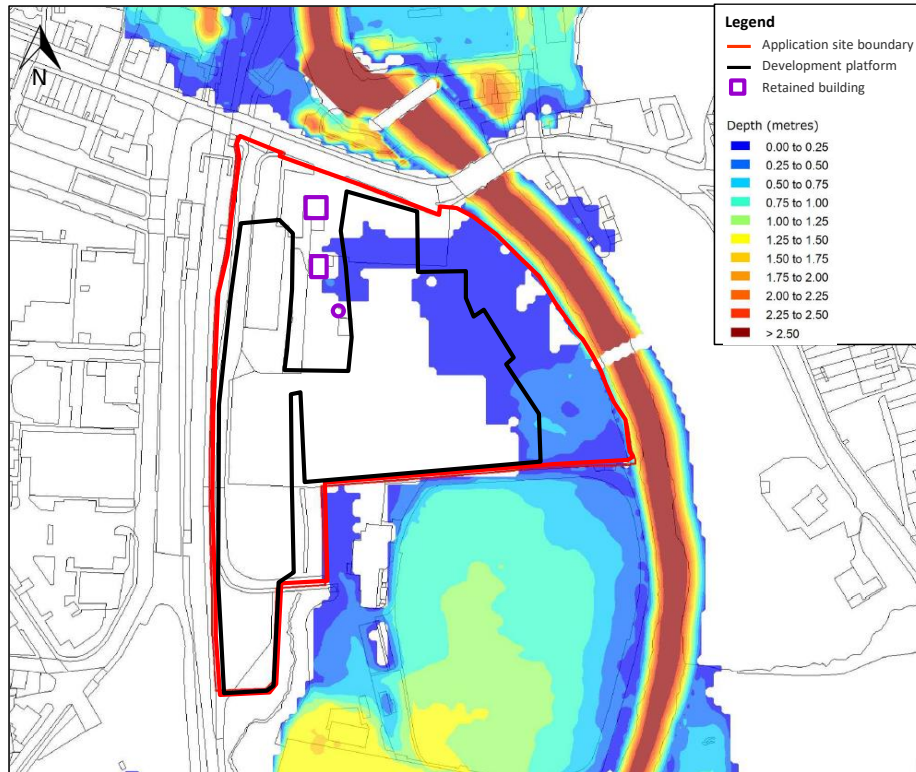


Figure 2 – Extent and Depth of Flooding during the 1 in 100 Event (Pre-Development Scenario)
(Source: Extract from Site Specific Hydraulic Modelling presented as Appendix D of the Submitted FRA)

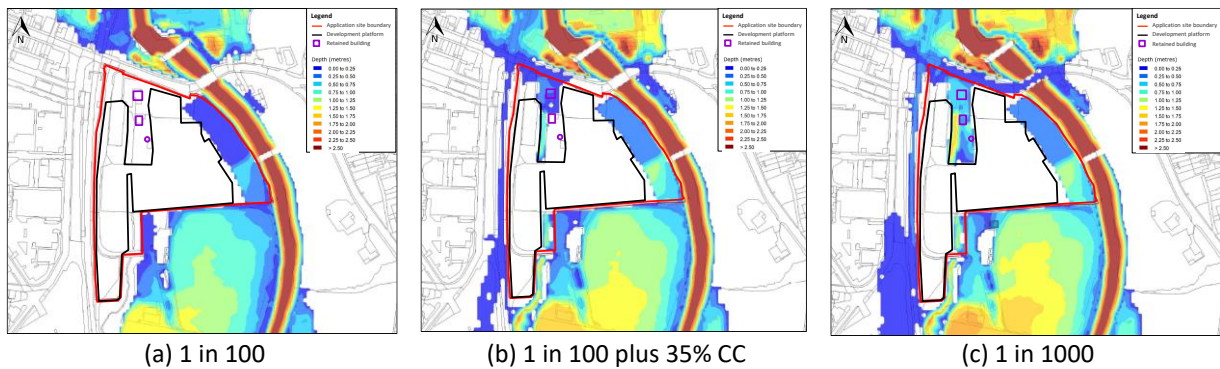


Figure 3 – Extent and Depth of Flooding (Post Development Scenario)
(Source: Extract from Site Specific Hydraulic Modelling presented as Appendix E of the Submitted FRA)

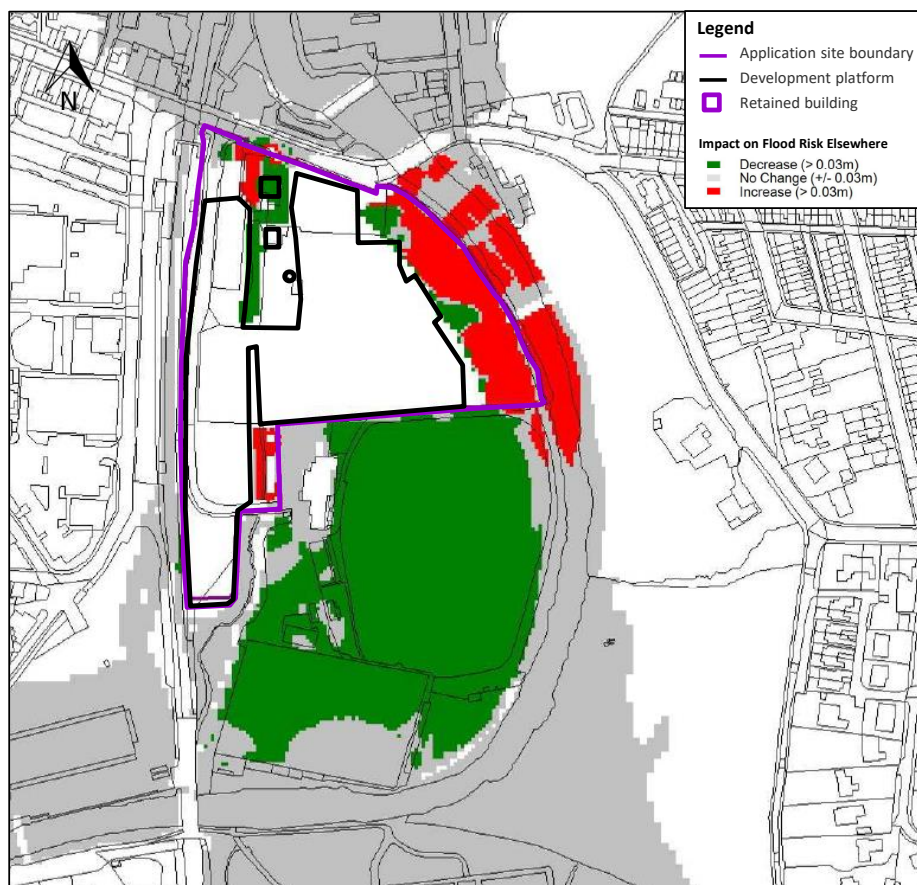


Figure 4 – Impact of proposed Development on Flood Risk During the 1 in 100 Plus 35% CC Event
(Source: Extract from Site Specific Hydraulic Modelling presented as Appendix E of the Submitted FRA)

Matter 2 - The site flooded in 2015

88. Northern England experienced widespread flooding in December 2015 associated with Storm Desmond (4-6 December), Eva (23-26 December and Storm Frank (30-31 December).
89. The peak river level recorded at gauging stations on the River Irwell were the largest on record (on 26 December 2015) and the peak level at the gauging station at Ramsbottom Weir recorded at 13:15 on 26 December was the highest on record (record length unknown).
90. The reason for refusal states that the site experienced flooding in 2015. This statement is unsubstantiated.
91. The definitive record of historic flooding is the EA Historic Flood Map¹. According to the GOV.UK website “*The Historic Flood Map is a GIS layer showing the maximum extent of individual Recorded Flood Outlines from river, the sea and groundwater springs that meet a set criteria. It shows areas of land that have previously been subject to flooding in England. This excludes flooding from surface water, except in areas where it is impossible to determine whether the source is fluvial or surface water but the dominant source is fluvial. The majority of records began in 1946 when predecessor bodies to the Environment Agency started collecting detailed information about flooding incidents, although we hold limited details about flooding incidents prior to this date.*”
92. The EA Historic Flood Map does not include records of the site having flooded in December 2015, or at any other time.

¹ <https://data.gov.uk/dataset/76292bec-7d8b-43e8-9c98-02734fd89c81/historic-flood-map>

93. According to the GOV.UK website, if an area is not covered by the Historic Flood Map it does not mean that the area has never flooded, only that the EA does not currently have records of flooding in this area that meet the criteria for inclusion.
94. According to the site specific hydraulic modelling presented in the submitted FRA (and **Figure 2** above), the site, in its pre-development state, may partially flood (for the most part to a depth of <250 mm) during the 1 in 100 event. Whilst the return period of the December 2015 flood event is not known, it is feasible that a small part of the site flooded. It is also possible that the site may also have flooded due to direct rainfall onto the site and/or surface water runoff. Again though, I am unaware of any records of any such flooding.
95. The aforementioned modelling does indicate that land to the north of the site, e.g. along and adjacent to Kenyon Street, and to the south of the site, e.g. the Ramsbottom Cricket Club pitch and the Ramsbottom United football ground is at a significantly higher risk of flooding than the application site.
96. I conclude that whilst land to the north of Bridge Street and to the south of the application site experienced flooding in December 2015, there is no evidence that the application site flooded from the River Irwell. There are also anecdotal statements that no flooding of the application site occurred. Furthermore, I have not seen evidence demonstrating that the site flooded from other sources.
97. Again, I have to say that the statement in the reason for refusal that “*the site flooded in 2015*” appears to be unsubstantiated, unless the Council has evidence, not shared with the applicant, to the contrary.
98. Irrespective, even if the site has flooded in the past, from any source, this is not a valid reason for refusal, since measures have been proposed to appropriately mitigate the risk of flooding to the proposed development in the future, in accordance with planning policy.

Matter 3 - Development would increase surface water flood risk

99. The planning application was accompanied by a Drainage Assessment report (refer **Annex B**). The report presented a preliminary surface water drainage scheme to manage surface water runoff generated from impermeable surfaces within the proposed development.
100. The key design principles for the surface drainage scheme are summarised as follows:
- Surface water runoff will be discharged, via two separate outfalls, to the existing mill race that crosses the site in accordance with the drainage hierarchy (PPG Para. 80). The mill race discharges to the River Irwell to the south of the site via an existing outfall.
 - The pipe conveyance network will provide significant attenuation storage
 - Peak runoff rate will be restricted by 2 no. outlet control devices.
 - Peak runoff rates from the redeveloped site will be 52.5 – 77.7% lower than the existing rates
 - Exceedance flows, i.e. above ground runoff generated during events exceeding the 1 in 100 plus 40% climate change due to the drainage system capacity being exceeded, will be managed in exceedance flow routes (as shown on the Exceedance Pathway Plan – refer Appendix G of the revised Drainage Assessment report [**Annex B2**]).
 - The surface water drainage scheme will be offered for adoption by UU, the sewerage undertaker.
101. By restricting the peak rates that surface water runoff generated within the development discharges to the River Irwell, the surface water drainage scheme will help reduce downstream flood risk compared to the existing situation.
102. The EA Risk of Flooding from Surface Water map (refer Figure 7 of the submitted FRA [**Annex A**]) indicates the presence of a potential surface water pathway through the site. The pathway appears to correspond to the mill race through the site. As stated in Section 2.3 of the submitted FRA, the inlet to the mill race has been sealed off, and as such it is unlikely that the surface water pathway would develop as indicated. Nevertheless, if it did, it would be contained and conveyed in a southerly direction by the mill race and would not affect the proposed development.
103. I conclude that there is no basis for this statement that the development would increase surface water flood risk.

Matter 4 - Development would increase the risk of flooding from the combined water sewer.

104. Again, there is no basis for this statement.
105. As stated above (Matter 3), surface water runoff from the proposed development will be discharged to the River Irwell via outfalls to the existing mill race. As such, no surface water from the proposed development will enter the public sewer system.
106. With regards foul water, it is estimated that the peak foul loading generated by the development would be 3.4 l/s (based upon the Water UK Design and Construction Guidance document). This corresponds to a reduction of 26% compared to the estimated foul loading for the former paper mill (4.6 l/s).
107. Domestic foul water from the proposed development would discharge to the public combined sewer that runs adjacent to the eastern boundary of the site. This approach has been accepted by UU, as confirmed by UU's consultation response to the application (refer Annex F) and also by UU's response to a pre-application enquiry dated 10 June 2021 (refer **Annex S**) which states *"Foul flow from this site will be allowed to drain into the public foul water/combined sewer system. Our preferred point of discharge would be to the 1000mm diameter public combined sewer located on-site at an unrestricted rate."*
108. Notwithstanding this, BMDC raised a concern during correspondence prior to determination of the application that the development would increase the risk of flooding from the receiving combined public sewer. This issue has been covered in para's 44-49 of this SoC which demonstrates that the proposals would not increase the risk of flooding from the combined sewer.
109. It is concluded that there is no basis for the statement.

Conclusion

110. This Statement of Case relates to the proposed Erection of 73 no. dwellings, the retention and conversion of 2 existing buildings to residential use (5 no. units), the retention of a chimney and the demolition of a derelict building, together with engineering operations to create a development platform and associated parking, landscaping, drainage, the layout of internal estate roads and footways and other associated works, as per planning application 65844 in August 2020.
111. The PPG states residential dwelling houses to be "More Vulnerable" to flood risk and that residential development in flood zones 1, 2 and 3a is an appropriate form of development, subject to the flood risk sequential test being addressed for sites in flood zone 2 and 3, and the flood risk exception test being passed for sites in flood zone 3.
112. The sequential test requires a demonstration that there are no reasonably available and suitable sites at a lower risk of flooding, whilst the exception test requires a demonstration that the proposals provide wider sustainability benefits that outweigh flood risk, will be safe for their lifetime and not increase flood risk elsewhere.
113. The 2020 planning application was accompanied by a Flood Risk Sequential & Exception Test Assessment report (**Annex D**) and Flood Risk Sequential Assessment Addendum report (**Annex E**) prepared by Lichfields demonstrating that the proposals address the requirements of the sequential test in accordance with NPPF para. 167 (**Annex T**) (refer also to PPG para's 18-19; 34 (**Annex T**)).
114. The Supplementary Agenda Document for the Planning Control Committee (31 May 2022) confirms that BDMC accepts *"... there are no sequentially preferable sites that are appropriate or reasonably available within the search area and as such, the sequential test has been met."*
115. The submitted Flood Risk Sequential & Exception Test Assessment report (**Annex D**) and Flood Risk Sequential Assessment Addendum (**Annex E**) demonstrate that the proposals provide wider sustainability benefits that outweigh flood risk (the first part of the Exception Test) in accordance with planning policy (e.g. NPPF para. 164 (**Annex T**)).

116. BMDC states in the Supplementary Agenda Document for the Planning Control Committee that the development would provide wider sustainability benefits to the community and that the proposals pass the first part of the exception test.
117. The 2020 planning application was accompanied by a Flood Risk Assessment report (**Annex A**) and Drainage Assessment report (**Annex B**) prepared by Weetwood, in accordance with planning policy NPPF para. 167 (**Annex T**).
118. The submitted FRA report was informed by detailed hydraulic modelling of the River Irwell, undertaken using an amended version of a hydraulic model provided by the EA. The amended model was reviewed and accepted as fit for purpose for assessing fluvial flood risk at the site. The submitted FRA report includes a package of measures to appropriately mitigate flood risk for the lifetime of the development.
119. Detailed hydraulic modelling demonstrates that the proposed development would be safe from flood risk and would not increase flood risk for its lifetime (and would actually reduce flood risk to the south of the site) in accordance with NPPF para's 164-165; 167 (**Annex T**).
120. The Drainage Assessment report presents a preliminary surface and foul water drainage scheme:
- Surface water runoff will be discharged to the River Irwell via an existing on-site mill race at reduced rates (compared to existing). As such, the surface water drainage scheme will deliver a reduction in existing surface water runoff rates and in so doing will reduce downstream flood risk.
 - Domestic foul water from the proposed development will be discharged to the public sewer system, as agreed by UU. The foul water loading will be lower than the former paper mill and will not increase the risk of flooding from the public sewer network.
121. The submitted FRA report and Drainage Assessment demonstrate that the proposals would be safe for its lifetime and would not increase flood risk elsewhere in accordance with NPPF para. 159 (**Annex T**) and thereby demonstrating that the proposals pass the second part of the Exception Test in accordance with NPPF para. 159 (**Annex T**).
122. BDMC states in its Supplementary Agenda Document for the Planning Control Committee that the proposals would decrease the risk of flooding from surface water and would meet the exceptions test.
123. I conclude that the proposals comply with national planning policy as set out in the NPPF.
124. For the reasons presented in this SOC and summarised above, the proposed development would not be at risk from flooding, would not be likely to increase the risk of flooding elsewhere, and would not adversely affect river flood defences. As such, the proposals are demonstrated to also comply fully with Policy EN5/1 New Development and Flood Risk of the adopted Bury Unitary Development Plan (refer **Annex U**).
125. **I conclude that the proposals comply fully with local and national planning policy and that there are no grounds for planning permission to be refused on flood risk and/or drainage grounds.**

Annex A – Flood Risk Assessment Report

Prepared by Weetwood

v1.2, 7 August 2020

Annex B1 – Drainage Assessment Report

Prepared by Weetwood

v1.0, 7 August 2020

Annex B2 – Drainage Assessment Report

Prepared by Weetwood

v1.3, 18 January 2022

Annex C – Flood Plan

Prepared by Weetwood

V1.0, 18 November 2020

Annex D – Flood Risk Sequential & Exception Test Assessment

Prepared by Lichfields

August 2020

Annex E – Flood Risk Sequential Assessment Addendum

Prepared by Lichfields

February 2021

Annex F – United Utilities Consultation Letter

21 October 2020

Annex G – Environment Agency Consultation Letter

28 October 2020

Annex H –Weetwood Response Letter

6 November 2020

Annex I – Environment Agency Consultation Letter

20 November 2020

Annex J – Environment Agency Consultation Letter

29 December 2020

Annex K – Bury Council Planning Policy Comments Correspondence

2 March 2021

Annex L – Weetwood/Lichfield Response Correspondence

16/17 March 2021

Annex M – Bury Council Correspondence

23 March 2021

Annex N – Weetwood Response Letter

17 June 2021

Annex O – Weetwood Clarification Letter

12 January 2022

Annex P – Lichfield Correspondence

12 April 2022

Annex Q – Environment Agency Consultation Letter

4 May 2022

Annex R – Environment Agency Consultation Letter

6 May 2022

Annex S – United Utilities Consultation Letter

10 June 2021

Annex T – National Planning Policy Framework

Section 14 (Updated July 2021)

The thrust of national planning policy, as articulated in the NPPF is that inappropriate development in areas at risk of flooding should be avoided where possible, as summarised below:

- Inappropriate development in areas at risk of flooding should be avoided and that development should be directed away from areas at highest risk (whether existing or future), but where development is necessary in such areas, the development should be made safe for its lifetime without increasing flood risk elsewhere (para. 159).
- The policy of seeking to steer development to areas with the lowest risk of flooding, from any source, is implemented through the application of the flood risk sequential test. Development should not be allocated or permitted if there are reasonably available sites, appropriate for the proposed development in areas with a lower risk of flooding. The sequential approach should be used in areas known to be at risk now or in the future from any form of flooding (para. 162).
- If it is not possible for development to be located in zones with a lower risk of flooding (taking into account wider sustainable development objectives) the exception test may have to be applied. The need for the test will depend on the potential vulnerability of the site and of the vulnerability of the development proposed (as set out in Annex 3 of NPPF; also PPG Table 2 and Table 3) (para. 163). For example, the exception test need not be applied for less vulnerable development in any flood zone, or for more vulnerable development in flood zones 1 or 2.
- Where the exception test must be applied, application of the test for development proposals at the application stage should be informed by a site-specific flood risk assessment. For the test to be passed it should be demonstrated that: (a) the development would provide wider sustainability benefits to the community that outweigh the flood risk; (b) and the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall (para. 164). Both elements of the test should be satisfied for the development to be permitted (para. 165).
- Development should not increase flood risk elsewhere (para. 167).
- Where appropriate, planning applications should be supported by a site-specific flood risk assessment, and development should only be allowed in areas at risk of flooding where the flood risk assessment (and the sequential and exception tests, as required), demonstrate that: a) within the site, the most vulnerable development is located in areas of lowest flood risk (unless there are overriding reasons to prefer a different location); b) the development is appropriately flood resistant and resilient such that, in the event of a flood, it could be quickly brought back into use without significant refurbishment; c) the development incorporates sustainable drainage systems, unless there is clear evidence that this would be inappropriate; d) any residual (flood) risk can be safely managed; and e) safe access and escape routes are included where appropriate, as part of an agreed emergency plan (para.167).
- NPPF para. 167 references Footnote 55. The footnote states that a site-specific flood risk assessment should be provided for all development in flood zones 2 and 3 [whilst] in flood zone 1, an assessment should accompany all proposals involving: sites of 1 ha or more; land which has been identified by the Environment Agency as having critical drainage problems; land identified in a strategic flood risk assessment as being at increased flood risk in future; or land that may be subject to other sources of flooding, where its development would introduce a more vulnerable use (para. 167).
- Applications for some minor development and changes of use should not be subject to the sequential or exception tests (para. 168). The exceptions are stated in Footnote 56.

Guidance on application of the sequential and exception test is provided in the Planning Practice Guidance (PPG). For example:

- This general approach is designed to ensure that areas at little or no risk of flooding from any source are developed in preference to areas at higher risk. The aim should be to keep development out of medium and high flood risk areas (flood zones 2 and 3) and other areas affected by other sources of flooding where possible (para. 18).
- Where there are no reasonably available sites in flood zone 1, local planning authorities in their decision making should take into account the flood risk vulnerability of land uses and consider reasonably available sites in flood zone 2 (areas with a medium probability of river or sea flooding), applying the Exception Test if required. Only where there are no reasonably available sites in flood zones 1 or 2 should the suitability of sites in flood zone 3 (areas with a high probability of river or sea flooding) be considered, taking into account the flood risk vulnerability of land uses and applying the exception test if required. Within each flood zone, surface water and other sources of flooding also need to be taken into account in applying the sequential approach to the location of development (para. 19).
- The sequential test does not need to be applied for individual developments on sites which have been allocated in development plans through the sequential test, or for applications for minor development 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) (para. 33)
- It should not normally be necessary to apply the sequential test to development proposals in flood zone 1, unless the Strategic Flood Risk Assessment for the area, or other more recent information, indicates there may be flooding issues now or in the future (for example, through the impact of climate change) (para. 33).
- For individual planning applications where there has been no sequential testing of the allocations in the development plan, or where the use of the site being proposed is not in accordance with the development plan, the area to apply the sequential test across will be defined by local circumstances relating to the catchment area for the type of development proposed. For some developments this may be clear, for example, the catchment area for a school. In other cases it may be identified from other Local Plan policies, such as the need for affordable housing within a town centre, or a specific area identified for regeneration. For example, where there are large areas in flood zones 2 and 3 (medium to high probability of flooding) and development is needed in those areas to sustain the existing community, sites outside them are unlikely to provide reasonable alternatives (para. 33).
- When applying the Sequential Test, a pragmatic approach on the availability of alternatives should be taken. For example, in considering planning applications for extensions to existing business premises it might be impractical to suggest that there are more suitable alternative locations for that development elsewhere. For nationally or regionally important infrastructure the area of search to which the Sequential Test could be applied will be wider than the local planning authority boundary.
- Any development proposal should take into account the likelihood of flooding from other sources, as well as from rivers and the sea. The sequential approach to locating development in areas at lower flood risk should be applied to all sources of flooding, including development in an area which has critical drainage problems, as notified to the local planning authority by the Environment Agency, and where the proposed location of the development would increase flood risk elsewhere (para. 33).

Annex U – Bury MDC Unitary Development Plan

Policy EN5/1 - New Development and Flood Risk

The Council will not permit new development, including the raising of land and the intensification of development, where such development would be at risk from flooding, would be likely to increase the risk of flooding elsewhere, or would adversely affect river flood defences. When assessing proposals against this policy, the following criteria will apply:

- *the impact on the floodplain;*
- *the increase in surface water run-off as a result of the proposal;*
- *the impact on fluvial flood defences;*
- *the incorporation of mitigating works.*

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