#### <u>Response to Inspector's Notes to the Council (9<sup>th</sup> and 14<sup>th</sup> July 2015) – Sites at</u> <u>Risk of Flooding</u>

- The Examination into the SADMP adjourned on 7 July and the Inspector outlined a number of issues to which he required responses. In response to the Inspector's note dated 9 July, the Council has addressed flood risk issues as set out below. We consider that the approach provides a pragmatic response, and displays sufficient certainty and flexibility in response to the Inspector's questions.
- 2. The Inspector has asked for us to provide a schedule of allocated sites at risk from flooding and how their development is envisaged to take place bearing in mind that risk. This is included in Appendix 1. This also covers the roles of other organisations such as the Middle Level Commissioners and Internal Drainage Boards. The Inspector is also seeking assurances that we have a fall-back position if development is constrained due to that flood risk and housing numbers are not fulfilled. The general response about a fall-back position is the subject of a separate Response Note.
- 3. In conclusion we consider that we have highlighted the agreed method between BCKLWN and Environment Agency (EA) for allocating sites in areas at risk of flooding and agreed design guidance for development within areas at risk of flooding (contained in the SADMP document at Appendix 3 and 4). It identifies the proposed sites for allocation within the SADMP and the flood risk at these locations, demonstrating that the EA, the overall body responsible for avoiding dangerously located development, do not raise objection in principle to any of the proposed sites for allocation.
- 4. There have clearly been applications and permissions granted for similar developments, as proposed by the SADMP, in terms of location, size and flood risk. Discussion is given in the Appendix about the suitability of these permissions and similarities to the allocation situation.
- 5. Comments received from Internal Drainage Boards as a result of the SADMP representation stage (January / February 2015) have been taken into consideration, and in consultation with our Development Control section and the relevant site agents / owners, the BCKLWN are confident that there are design solutions available. The detail of the schemes can be developed in consultation with Norfolk County Council, as the Lead Local Flood Authority (LLFA), and the relevant Internal Drainage Boards (IDBs) at the detailed design stage, that would inform a detailed planning application, which would be commented upon by the EA and LLFA. This would ensure that the development of the proposed sites for allocation could come forward as envisaged by the SADMP.

Appendix 1 - Provision of a Schedule of allocated sites at risk of flooding and the Council's approach towards their satisfactory development

# Provision of a Schedule of allocated sites at risk of flooding and the Council's approach towards their satisfactory development

**August 2015** 

#### Contents

Introduction	4
E1.4 King's Lynn – Marsh Lane	8
E1.5 King's Lynn – Boal Quay	. 11
E1.6 King's Lynn – South of Parkway	.15
E1.7 King's Lynn – Land at Lynnsport	.18
E1.8 King's Lynn – South Quay	. 22
E1.9 King's Lynn – Land west of Columbia Way	.25
E1.10 King's Lynn – North of Wisbech Road	. 28
E1.11 King's Lynn – Southgates	.31
E1.14 West Lynn – West of St Peter's Road	. 34
E1.15 West Lynn – Land at Bankside	. 37
E2.1 – West Winch Growth Area Strategic Policy	.40
E3.1 – Hall Lane, South Wootton	.42
E4.1 Knights Hill	. 45
F2.4 Hunstanton – Land north of Hunstanton Road	. 47
F3.1 Wisbech Fringe – Land east of Wisbech (west of Burrowgate Road)	. 50
G17.1 Burnham Market – Land at Foundry Field	. 52
G25.1 Clenchwarton – Land between Wildfields Road and Hall Lane	.54
G25.2 Clenchwarton – Land north of Main Road	. 55
G25.2 Clenchwarton – Land north of Main Road	.55
G25.3 Clenchwarton – Land south of Main Road	. 56
G57.1 Marshland Saint James - Land adjacent to Marshland Saint James Primary School	.59
G57.2 Marshland Saint James - Land adjacent to 145 Smeeth Road, Marshland Saint James	. 60
<u>G92.1 Ten Mile Bank – Land off Church Road</u>	. 62
G93.1 Terrington St. Clement – Land at Church Bank, Chapel Road	. 64
G93.2 Terrington St. Clement – Land adjacent King William Close	.64
G93.3 Terrington St. Clement – Land West of Benn's Lane	.65
G94.1 Terrington St John, St John's Highway and Tilney St Lawrence - Land east of School Roa	ad
<u>G96.1 Three Holes – Land adjacent to 'The Bungalow', Main Road</u>	
G97.1 Tilney All Saints – Land between School Road and Lynn Road	
G104.1 Upwell – Land north / west of Townley Close	
G104.2 Upwell – Land south / east of Townley Close	
G104.3 Upwell – Land south / east of Townley Close	
<u>G104.4 Upwell – Land off St Peter's Road</u>	
G104.6 Outwell – Land Surrounding Isle Bridge	. 82

G106.1 Walpole Highway – Land East of Hall Road	84
G113.1 Welney – Former Three Tuns / Village Hall	87
G113.2 Welney – Land off Back Drove	88
G114.1 Wereham – Land at the Springs, Flegg Green	92
G120.1 Walton Highway – Land adjacent Common Road	95
G120.2 Walton Highway – Land north of School Road	96
G124.1 Wiggenhall St Mary Magdalen – Land on Mill Road	99
Table of Sites Proposed for Allocation within the SADMP and the Risk to Flooding	102
Planning Applications in Similar Locations and Risk to Flooding as Sites Proposed for Allocation within the SADMP.	
Conclusion	111
Appendix 1. Site G96.1 Agent's Comments	112
Appendix 2. Site G104.1 & G104.4 Agent's Comments	114
Appendix 3. Site G104.2 Land owner's Comments	115
Appendix 4. Site G104.3 Land owner's Comments	116
Appendix 5. Site G104.6, G133.1 & G113.2 Agent's Comments	117
Appendix 6. Site G114.1 Agent's Comments	118
Appendix 7. The role of the Middle Level Commissioners & Internal Drainage Boards in the	
Borough	120

#### Introduction

Included is a detailed schedule of all allocated sites at risk of flooding. This details the nature of flood risk, statutory consultee comments, how this is presented in the SA, the approach within the SADMP, potential flood resilience measures and if appropriate comments that have been made in response from site agents / owners.

A list of all the proposed allocations and the flood risk is provided, as is a table of planning applications on sites that display similar characteristics in terms of location and flood risk as the proposed allocations.

Appendices 3 and 4 of the SADMP set out the BCKLWN's general approach to allocating on sites at risk of flooding. This should be viewed alongside Policies DM21 'Sites in Areas of Flood Risk' and the site policies (E.1 to G.129) which, where appropriate, include criteria around provision of site specific Flood Risk Assessments, etc. More specifically within the Coastal Flood Risk Hazard Zone, policy DM18 should be considered.

#### Points to note:

- The BCKLWN works closely with all the relevant bodies on matters relating to flood risk- the EA, IDBs, NCC as the Lead Local Flood Authority and Anglian Water Services.
- A significant area of King's Lynn and several settlements within the Borough are at varying degrees of flood risk, identified in the SFRA, EA Tidal River Hazard Mapping etc.
- The BCKLWN agreed an approach to assessing, choosing and allocating sites in areas of flood risk with the Environment Agency. This is set out in Appendix 3 of the SADMP.
- Appendix 4 of the SADMP includes the Flood Risk Protocol (2012) between BCKLWN and the EA on how the Borough Council's SFRA and the EA Tidal River Hazard Mapping will be used in relation to planning applications.
- The Core Strategy policy CS01 states that 'new development is guided away from areas at risk of flooding....recognising development may be required within flood risk areas to deliver regeneration objectives within King's Lynn and maintain the sustainability of local communities in rural areas'.
- Policy CS08 Sustainable Development reiterates policy CS01, and includes criteria for proposals in high flood risk areas.
- There is an agreed Position Statement between BCKLWN and the EA (details are included in paragraph 3.15 of Appendix 3 of the SADMP) which explains our approach to allocating sites in areas of flood risk.
- The SADMP includes policy DM21 'Sites in Areas of Flood Risk', and also many of the site policies (where appropriate) include criteria requesting a site specific FRA as part of the application process.
- The BCKLWN/ EA published the Flood Risk Design Guidance. A proposed amendment to the SADMP is to include a reference to this within policy DM21 (see BCKLWN Examination Issue Statement 2, pages 37-38).

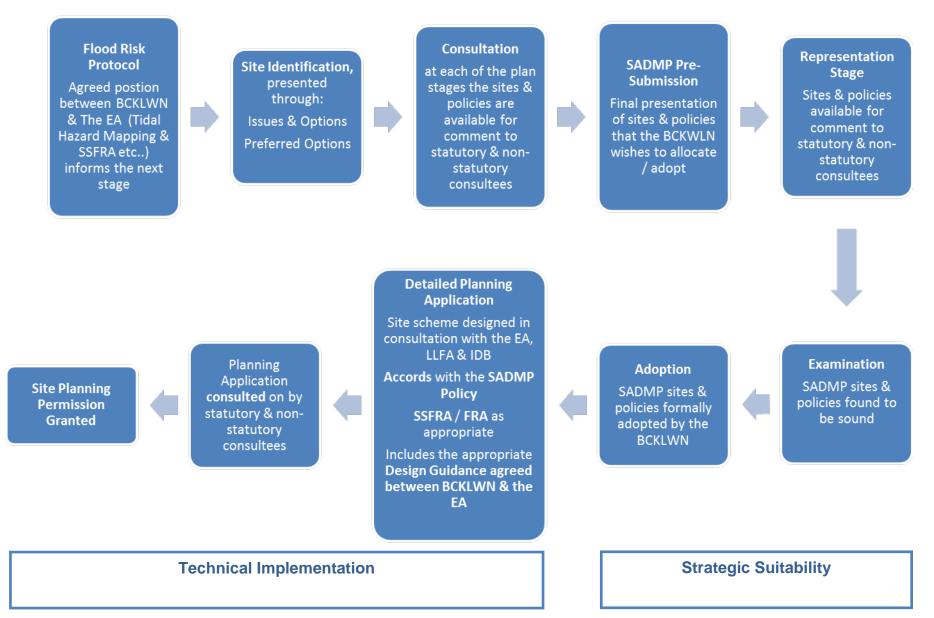
- There is also a specific policy (DM18) on the Coastal Flood Risk Hazard Zone (Hunstanton to Dersingham) in the SADMP. Paragraphs C.18.1 to C.18.9 provide additional information on this and refer to a Coastal Flood Risk – Planning Protocol for the area. The intention is that policy DM18 replaces this.
- The EA have recently produced updated Tidal River Hazard Mapping, this supersedes the earlier version. The EA have reviewed all of the proposed allocations contained within the SADMP, in light of the new mapping, and do not suggest any changes.

#### Delivery:

- The EA made no objection to any allocations in the Plan. In our towns the EA do make comments on the allocations. In the rural area they 'consider that flood risk to these sites can be adequately addressed at full planning stage by the application to policy DM21'.
- A few of the IDBs haves raised concerns at a few specific locations. These are detailed within the following table.
- As of 26 March 2014, DEFRA and the EA require a flood risk assessment for most developments within one of the flood zones. This includes developments:
  - o in flood zone 2 or 3 including minor development and change of use
  - more than 1 hectare (ha) in flood zone 1
  - less than 1 ha in flood zone 1, including a change of use in development type to a more vulnerable class (e.g. from commercial to residential), where they could be affected by sources of flooding other than rivers and the sea (e.g., surface water drains, reservoirs)
  - in an area within flood zone 1 which has critical drainage problems as notified by the Environment Agency
  - A flood risk assessment is not required for a development that's less than 1 ha in flood zone 1 unless it could be affected by sources of flooding other than rivers and the sea, e.g. surface water drains.
- As this approach is standard practice, the policies for proposed allocation sites within Flood Zone 1 that are over 1 ha do not contain a specific policy item in relation to this, as it will clearly be required at the detailed planning application stage.
- A Surface Water Management Plan (SWMP) is being prepared by the Lead Local Flood Authority (LLFA), Norfolk County Council, for King's Lynn and West Norfolk settlements. This should be available from September 2015. This will identify areas which are particularly vulnerable to surface water flooding. The SWMP may define Critical Drainage Catchments. Any development within them is likely to increase the risk of flooding in the most vulnerable areas if no mitigation takes place.
- From 6 April 2015 sustainable drainage systems are required for developments of 10 or more dwellings, unless it can be demonstrated to be inappropriate. Local planning authorities in considering planning applications will consult with the LLFA on the management of surface water. As this is standard practice, a SUDS policy item is not always present within a site's policy, as this will be addressed at the detailed planning application stage.

• The following table demonstrates how seriously the advice from the EA is taken at the planning application stage by BCKLWN. It is a breakdown of the outcome of planning applications to which the EA raised objection to, for the period April 2006 to March 2013. Note that the 4 permissions contrary to EA advice were granted on appeal.

Category	Number	Percentage of objected to applications
Planning applications objected to by EA	413	100%
Objection overcome by submission of site FRA, etc.	163	39%
Application withdrawn	124	30%
Application refused	113	27%
Pending	9	2%
Granted permission contrary to EA advice	4	1%

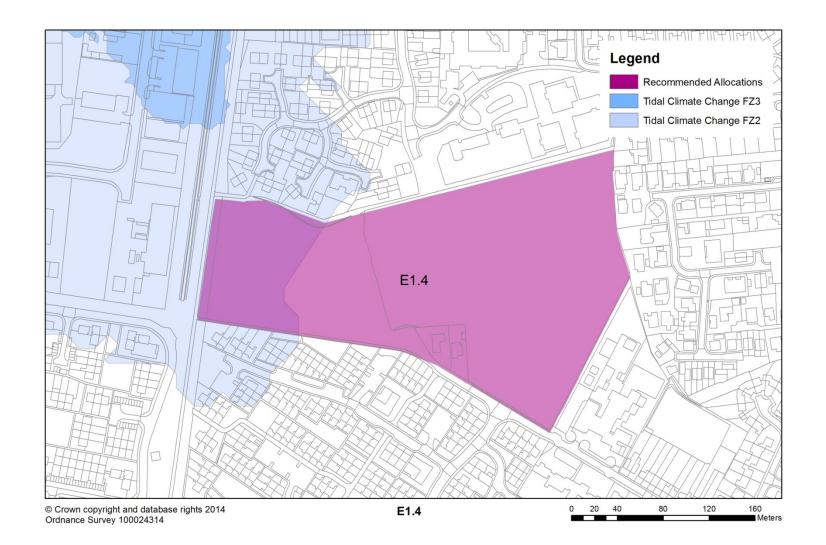


Below is a simplified diagram that illustrates the site identification process with regard to flood risk, through to the grant of planning permission.

Policy / Site & Flood Risk	Statutory consultee comments	Flood Risk - Noted in the Sustainability Appraisal	Council's Approach in the proposed SADMP policy	Potential Flood Resilience Measures
E1.4 King's Lynn – Marsh Lane Partial Tidal Climate Change Flood Zone 2	<ul> <li>Miss Emily Crook (ID: 476133), The Environment Agency:</li> <li>No objection, wish to make the following comments;</li> <li>Our Tidal Hazard Mapping for the River Great Ouse illustrates in the flood risk to the site in the event of an overtopping and breach of the defences in a 1 in 200 year event, both now and in the future (taking into account the impacts of climate change up to the year 2115). The site is located in an area where the mapping identifies inundation to depths of up to 2m in such an event, over the developments lifetime. It is essential that this information is included within the site specific Flood Risk Assessment and used to inform the design of the proposed development and any mitigation measures.</li> </ul>	<b>'+/x'</b> The site is partially constrained by flood risk, with the majority of site being located within Flood Zone 1 and the remaining site area being within Flood Zone 2, hence the '+/x' sustainability score.	<ul> <li>Submission of a Site Specific Flood Risk Assessment</li> <li>Submission of details showing how sustainable drainage measures will integrate with the design of the development and how the drainage system will contribute to the amenity and biodiversity of the development. A suitable plan for the future management and maintenance of the SUDS should be included with the submission.</li> </ul>	<ul> <li>For sites predicted to flood to 1 - 2m the site specific FRA (in combination with detailed topographical information) will need to identify the precise flood risk to the site and the necessary resiliency measures, these should include some or all of the following flood resiliency measures:</li> <li>Finished floor level raising</li> <li>Dam boards</li> <li>Other resiliency measures such as raising of electrical sockets/switches</li> <li>No ground floor sleeping accommodation</li> <li>Safe refuge is provided</li> <li>Or no habitable ground floor</li> </ul>
	<ul> <li>We have worked with your Authority to produce design guidance for new dwellings</li> </ul>			<ul> <li>accommodation</li> <li>Flood emergency response and evacuation procedures</li> </ul>

#### E1.4 King's Lynn – Marsh Lane

Policy / Site & Flood Risk	Statutory consultee comments	Flood Risk - Noted in the Sustainability Appraisal	Council's Approach in the proposed SADMP policy	Potential Flood Resilience Measures
	located in the area covered by our Tidal Hazard Mapping which can be viewed on your Authority's Website and strongly recommend that any new dwellings are designed in accordance with this guidance.			
	<ul> <li>Given the high flood risk at this location flood emergency response and evacuation procedures will also need to be addressed as part of any subsequent planning application.</li> </ul>			

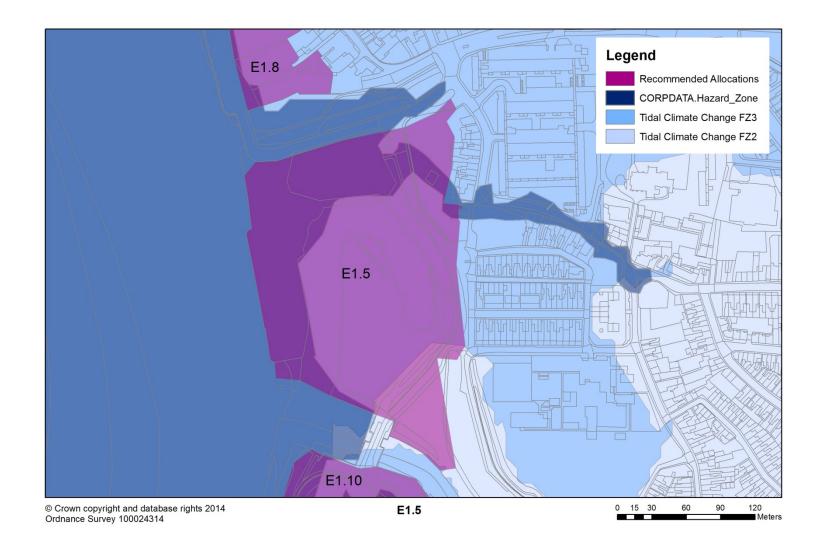


Policy / Site & Flood Risk	Statutory consultee comments	Flood Risk - Noted in the Sustainability Appraisal	Council's Approach in the proposed SADMP policy	Potential Flood Resilience Measures
E1.5 King's Lynn – Boal Quay Tidal Climate Flood Zone 2 & 3 & Hazard Zone	<ul> <li>Miss Emily Crook (ID: 476133), The Environment Agency:</li> <li>No objection, wish to make the following comments;</li> <li>Our Tidal Hazard Mapping for the River Great Ouse illustrates in the flood risk to the site in the event of an overtopping and breach of the defences in a 1 in 200 year event, both now and in the future (taking into account the impacts of climate change up to the year 2115). The site is located in an area where the mapping identifies inundation to depths of up to 2m in such an event, over the developments lifetime. It is essential that this information is included within the site specific Flood Risk Assessment and used to inform the design of the proposed development and any mitigation measures.</li> <li>We have worked with your Authority to produce design guidance for new dwellings located in the area covered by our Tidal Hazard Mapping (which can be viewed on your Authority's Website and strongly recommend that any new dwellings are</li> </ul>	'xx' The site does score poorly in relation to the indicator flood risk, with site located being located within Flood Zone 2, 3 and a portion within the Hazard Zone. Despite the identified flood risk it is considered that appropriate mitigation measures could be taken to mitigate this risk.	<ul> <li>Submission of a Site Specific Flood Risk Assessment</li> <li>Submission of details showing how sustainable drainage measures will integrate with the design of the development and how the drainage system will contribute to the amenity and biodiversity of the development. A suitable plan for the future management and maintenance of the SUDS should be included with the submission.</li> </ul>	<ul> <li>For sites predicted to flood to 1 - 2m the site specific FRA (in combination with detailed topographical information) will need to identify the precise flood risk to the site and the necessary resiliency measures, these should include some or all of the following flood resiliency measures:</li> <li>Finished floor level raising</li> <li>Dam boards</li> <li>Other resiliency measures such as raising of electrical sockets/switches</li> <li>No ground floor sleeping accommodation</li> <li>Safe refuge is provided</li> <li>Or no habitable ground floor accommodation</li> <li>Flood emergency response and evacuation procedures</li> </ul>

# E1.5 King's Lynn – Boal Quay

Policy / Site & Flood Risk	Statutory consultee comments	Flood Risk - Noted in the Sustainability Appraisal	Council's Approach in the proposed SADMP policy	Potential Flood Resilience Measures
	<ul> <li>designed in accordance with this guidance.</li> <li>Given the high flood risk at this location flood emergency response and evacuation procedures will also need to be addressed as part of any subsequent planning application.</li> </ul>			<ul> <li>Improve the flood defences and the standard of protection to both this site and the wider King's Lynn area.</li> </ul>
	<ul> <li>In addition, the site is also located close to part of our flood defences for the River Great Ouse. The Standard of Protection (SoP) of the defences in this area is currently 1 in 200 years. However, the impact of climate change on sea levels will significantly reduce the SoP to below the 1 in 200 year mark, over the life time of the development.</li> </ul>			
	• This development proposal provides an excellent opportunity to improve the flood defences and the standard of protection to both this site and the wider King's Lynn area. The December 2013 tidal surge has highlighted the importance of improving the flood defences, with flooding occurring in several places close to this site including the car park adjacent the River Nar and basements along the South Quay.			

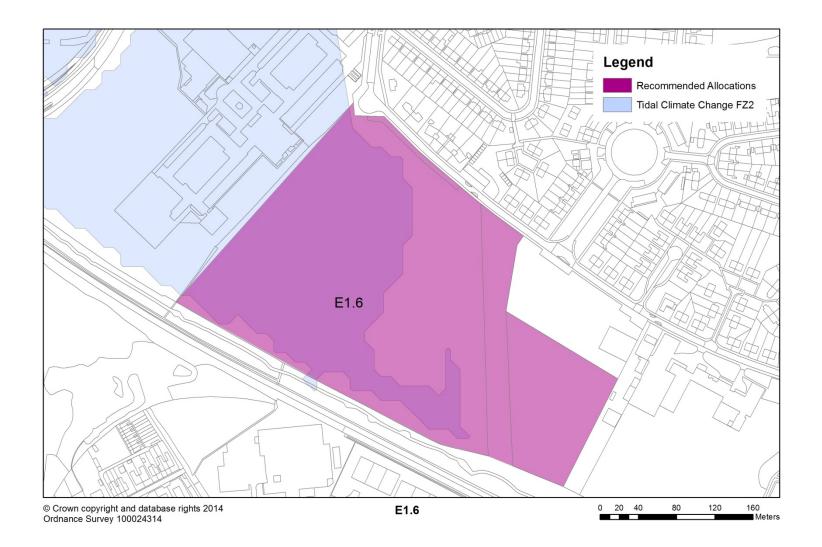
Policy / Site & Flood Risk	Statutory consultee comments	Flood Risk - Noted in the Sustainability Appraisal	Council's Approach in the proposed SADMP policy	Potential Flood Resilience Measures
	Accordingly, flood defences (provision, improvement, maintenance and operation) must form an essential element of the redevelopment of Boal Quay.			



Policy / Site & Flood Risk	Statutory consultee comments	Flood Risk - Noted in the Sustainability Appraisal	Council's Approach in the proposed SADMP policy	Potential Flood Resilience Measures
E1.6 King's Lynn – South of Parkway Partial Tidal	<ul> <li>Miss Emily Crook (ID: 476133), The Environment Agency:</li> <li>No objection, wish to make the following comments;</li> </ul>	<b>'+/x'</b> The site is partially constrained by flood risk, being located partially within Flood Zone 1 and 2, hence the '+/x' sustainability score. It is considered that this risk	<ul> <li>Submission of a Site Specific Flood Risk Assessment</li> <li>Submission of details</li> </ul>	<ul> <li>For sites predicted to flood to 1 - 2m the site specific FRA (in combination with detailed topographical information) will need to identify the precise flood risk to the site and the necessary resiliency measures,</li> </ul>
Climate Change Flood Zone 2	• Our Tidal Hazard Mapping for the River Great Ouse illustrates in the flood risk to the site in the event of an overtopping and breach of the defences in a 1 in 200 year event, both now and in the future (taking	could be mitigated through appropriate measures.	showing how sustainable drainage measures will integrate with the design of the development and how	<ul> <li>these should include some or all of the following flood resiliency measures:</li> <li>Finished floor level raising</li> </ul>
	into account the impacts of climate change up to the year 2115). The site is located in an area where the mapping identifies inundation to depths of up to <b>2m</b> in such an event, over the developments lifetime. It is essential that this information is included		the drainage system will contribute to the amenity and biodiversity of the development. A suitable plan for the	<ul> <li>Dam boards</li> <li>Other resiliency measures such as raising of electrical sockets/switches</li> </ul>
	within the site specific Flood Risk Assessment and used to inform the design of the proposed development and any mitigation measures.		future management and maintenance of the SUDS should be included with the submission.	<ul> <li>No ground floor sleeping accommodation</li> <li>Safe refuge is provided</li> <li>Or no habitable ground floor accommodation</li> </ul>
	• We have worked with your Authority to produce design guidance for new dwellings located in the area covered by our Tidal Hazard Mapping which can be viewed on your Authority's Website and strongly recommend that any new dwellings are			<ul> <li>accommodation</li> <li>Flood emergency response and evacuation procedures</li> </ul>

# E1.6 King's Lynn – South of Parkway

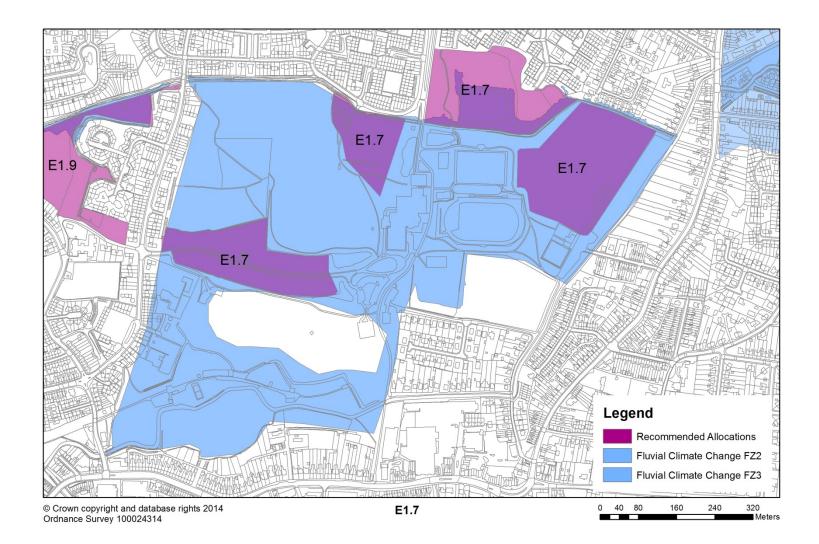
Policy / Site & Flood Risk	Statutory consultee comments	Flood Risk - Noted in the Sustainability Appraisal	Council's Approach in the proposed SADMP policy	Potential Flood Resilience Measures
	<ul> <li>designed in accordance with this guidance.</li> <li>Given the high flood risk at this location flood emergency response and evacuation procedures will also need to be addressed as part of any subsequent planning application.</li> </ul>			



Policy / Site & Flood Risk	Statutory consultee comments	Flood Risk - Noted in the Sustainability Appraisal	Council's Approach in the proposed SADMP policy	Potential Flood Resilience Measures
E1.7 King's Lynn – Land at Lynnsport Partial Fluvial	<ul> <li>Miss Emily Crook (ID: 476133), The Environment Agency:</li> <li>No objection, wish to make the following comments;</li> </ul>	<ul> <li>'+/x' Site E1.7 is located within Flood Zones 1, 2 &amp; 3 this is reflected by the positive/negative sustainability score for the 'flood risk' category.</li> </ul>	Submission of a Site Specific Flood Risk Assessment	<ul> <li>For sites predicted to flood to 1 - 2m the site specific FRA (in combination with detailed topographical information) will need to identify the precise flood risk to the site and the</li> </ul>
Climate Change Flood Zone 2 & 3	<ul> <li>Our Tidal Hazard Mapping for the River Great Ouse illustrates in the flood risk to the site in the event of an overtopping and breach of the defences in a 1 in 200 year</li> </ul>	However, It is considered that appropriate measures could be taken to mitigate this risk.	Submission of details showing how sustainable drainage measures will integrate with the design of the	necessary resiliency measures, these should include some or all of the following flood resiliency measures:
	event, both now and in the future (taking into account the impacts of climate change up to the year 2115). The site is located in an area where the mapping identifies		development and how the drainage system will contribute to the amenity and	<ul> <li>Finished floor level raising</li> <li>Dam boards</li> <li>Other resiliency measures such</li> </ul>
	inundation to depths of up to <b>2m</b> in such an event, over the developments lifetime. It is essential that this information is included within the site specific Flood Risk		biodiversity of the development. A suitable plan for the	as raising of electrical sockets/switches
	Assessment and used to inform the design of the proposed development and any mitigation measures.		future management and maintenance of the SUDS should be included with the	<ul> <li>No ground floor sleeping accommodation</li> <li>Safe refuge is provided</li> </ul>
			submission.	<ul> <li>Or no habitable ground floor accommodation</li> </ul>
	<ul> <li>We have worked with your Authority to produce design guidance for new dwellings located in the area covered by our Tidal Hazard Mapping which can be viewed on your Authority's Website and strongly recommend that any new dwellings are</li> </ul>			Flood emergency response and evacuation procedures

# E1.7 King's Lynn – Land at Lynnsport

Policy / Site Statut & Flood Risk	ory consultee comments	Flood Risk - Noted in the Sustainability Appraisal	Council's Approach in the proposed SADMP policy	Potential Flood Resilience Measures
	<ul> <li>designed in accordance with this guidance.</li> <li>Given the high flood risk at this location flood emergency response and evacuation procedures will also need to be addressed as part of any subsequent planning application.</li> <li>With respect to the provision of a new road linking the site to the A1078 Edward Benefer Way; the proposed link road would impact the North Lynn Drain. Our records indicate that the Bawsey Drain, which connects with the North Lynn Drain, provides passage for fish and eels. It is therefore essential that a detailed ecological assessment is prepared for this development.</li> </ul>			



Policy / Site & Flood Risk	Statutory consultee comments	Flood Risk - Noted in the Sustainability Appraisal	Council's Approach in the proposed SADMP policy	Potential Flood Resilience Measures
E1.8 King's Lynn – South Quay Tidal Climate Change Flood Zone 2 & 3, Partial Hazard Zone	<ul> <li>Miss Emily Crook (ID: 476133), The Environment Agency:</li> <li>No objection, wish to make the following comments;</li> <li>Our Tidal Hazard Mapping for the River Great Ouse illustrates in the flood risk to the site in the event of an overtopping and breach of the defences in a 1 in 200 year event, both now and in the future (taking into account the impacts of climate change up to the year 2115). The site is located in an area where the mapping identifies inundation to depths of up to 2m in such an event, over the developments lifetime. It is essential that this information is included within the site specific Flood Risk Assessment and used to inform the design of the proposed development and any mitigation measures.</li> <li>We have worked with your Authority to produce design guidance for new dwellings located in the area covered by our Tidal Hazard Mapping which can be viewed on your Authority's Website and strongly recommend that any new dwellings are</li> </ul>	'xx' The site does score poorly in relation to the indicator flood risk, with site located being located within Flood Zone 2, 3 and a portion within the Hazard Zone. Despite the identified flood risk it is considered that appropriate mitigation measures could be taken to mitigate this risk.	<ul> <li>Submission of a Site Specific Flood Risk Assessment</li> <li>Submission of details showing how sustainable drainage measures will integrate with the design of the development and how the drainage system will contribute to the amenity and biodiversity of the development. A suitable plan for the future management and maintenance of the SUDS should be included with the submission.</li> </ul>	<ul> <li>For sites predicted to flood to 1 - 2m the site specific FRA (in combination with detailed topographical information) will need to identify the precise flood risk to the site and the necessary resiliency measures, these should include some or all of the following flood resiliency measures:</li> <li>Finished floor level raising</li> <li>Dam boards</li> <li>Other resiliency measures such as raising of electrical sockets/switches</li> <li>No ground floor sleeping accommodation</li> <li>Safe refuge is provided</li> <li>Or no habitable ground floor accommodation</li> <li>Flood emergency response and evacuation procedures</li> <li>Flood defences (provision,</li> </ul>

# E1.8 King's Lynn – South Quay

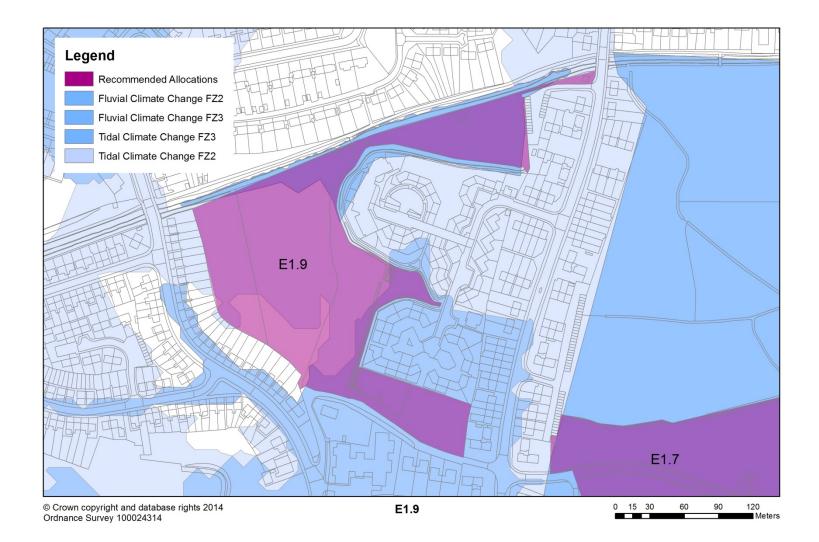
Policy / Site & Flood Risk	Statutory consultee comments	Flood Risk - Noted in the Sustainability Appraisal	Council's Approach in the proposed SADMP policy	Potential Flood Resilience Measures
	<ul> <li>designed in accordance with this guidance.</li> <li>Given the high flood risk at this location flood emergency response and evacuation procedures will also need to be addressed as part of any subsequent planning application.</li> <li>In addition, the site is located close to part of our flood defences for the River Great Ouse. Accordingly, flood defences (provision, improvement, maintenance and operation) must form an essential element of the development proposal for South Quay.</li> </ul>			improvement, maintenance and operation) must form an essential element of the development proposal



Policy / Site & Flood Risk	Statutory consultee comments	Flood Risk - Noted in the Sustainability Appraisal	Council's Approach in the proposed SADMP policy	Potential Flood Resilience Measures
E1.9 King's Lynn – Land west of Columbia Way Partial Fluvial Climate Change Flood Zone 2 & 3, Partial Tidal Climate Change Flood Zone 2 & 3	<ul> <li>Miss Emily Crook (ID: 476133), The Environment Agency:</li> <li>No objection, wish to make the following comments;</li> <li>Our Tidal Hazard Mapping for the River Great Ouse illustrates in the flood risk to the site in the event of an overtopping and breach of the defences in a 1 in 200 year event, both now and in the future (taking into account the impacts of climate change up to the year 2115). The site is located in an area where the mapping identifies inundation to depths of up to 2m in such an event, over the developments lifetime. It is essential that this information is included within the site specific Flood Risk Assessment and used to inform the design of the proposed development and any mitigation measures.</li> <li>We have worked with your Authority to produce design guidance for new dwellings located in the area covered by our Tidal Hazard Mapping which can be viewed on your Authority's Website and strongly recommend that any new dwellings are</li> </ul>	'x' The site scores negatively in relation the 'flood risk' indicator as the site is located partially with Flood Zones 1, 2 & 3. It is considered that through appropriate measures the flood risk could be mitigated.	<ul> <li>Submission of a Site Specific Flood Risk Assessment</li> <li>Submission of details showing how sustainable drainage measures will integrate with the design of the development and how the drainage system will contribute to the amenity and biodiversity of the development. A suitable plan for the future management and maintenance of the SUDS should be included with the submission.</li> </ul>	<ul> <li>For sites predicted to flood to 1 - 2m the site specific FRA (in combination with detailed topographical information) will need to identify the precise flood risk to the site and the necessary resiliency measures, these should include some or all of the following flood resiliency measures:</li> <li>Finished floor level raising</li> <li>Dam boards</li> <li>Other resiliency measures such as raising of electrical sockets/switches</li> <li>No ground floor sleeping accommodation</li> <li>Safe refuge is provided</li> <li>Or no habitable ground floor accommodation</li> <li>Flood emergency response and evacuation procedures</li> </ul>

# E1.9 King's Lynn – Land west of Columbia Way

Policy / Site & Flood Risk	Statutory consultee comments	Flood Risk - Noted in the Sustainability Appraisal	Council's Approach in the proposed SADMP policy	Potential Flood Resilience Measures
	<ul> <li>designed in accordance with this guidance.</li> <li>Given the high flood risk at this location flood emergency response and evacuation procedures will also need to be addressed as part of any subsequent planning application.</li> </ul>			



Policy / Site & Flood Risk	Statutory consultee comments	Flood Risk - Noted in the Sustainability Appraisal	Council's Approach in the proposed SADMP policy	Potential Flood Resilience Measures
E1.10 King's Lynn – North of Wisbech Road Tidal Climate Change Flood Zone 2, Partial Tidal Climate Change Flood Zone 3 and Hazard Zone	<ul> <li>Miss Emily Crook (ID: 476133), The Environment Agency:</li> <li>No objection, wish to make the following comments;</li> <li>Our Tidal Hazard Mapping for the River Great Ouse illustrates in the flood risk to the site in the event of an overtopping and breach of the defences in a 1 in 200 year event, both now and in the future (taking into account the impacts of climate change up to the year 2115). The site is located in an area where the mapping identifies inundation to depths of up to 2m in such an event, over the developments lifetime. It is essential that this information is included within the site specific Flood Risk Assessment and used to inform the design of the proposed development and any mitigation measures.</li> <li>We have worked with your Authority to</li> </ul>	Appraisal 'x' E1.10 does score poorly in respect of the 'flood risk' category as it is located within areas classed as Flood Zone 2, 3 and the Hazard Zone. Despite the identified flood risk it is considered that appropriate mitigation measures could be taken to mitigate this risk.	<ul> <li>Submission of a Site Specific Flood Risk Assessment</li> <li>Submission of details showing how sustainable drainage measures will integrate with the design of the development and how the drainage system will contribute to the amenity and biodiversity of the development. A suitable plan for the future management and maintenance of the SUDS should be included with the submission.</li> </ul>	<ul> <li>For sites predicted to flood to 1 - 2m the site specific FRA (in combination with detailed topographical information) will need to identify the precise flood risk to the site and the necessary resiliency measures, these should include some or all of the following flood resiliency measures:</li> <li>Finished floor level raising</li> <li>Dam boards</li> <li>Other resiliency measures such as raising of electrical sockets/switches</li> <li>No ground floor sleeping accommodation</li> <li>Safe refuge is provided</li> <li>Or no habitable ground floor accommodation</li> </ul>
	• We have worked with your Additionity to produce design guidance for new dwellings located in the area covered by our Tidal Hazard Mapping which can be viewed on your Authority's Website and strongly recommend that any new dwellings are			<ul> <li>Flood emergency response and evacuation procedures</li> <li>Flood defences (provision,</li> </ul>

#### E1.10 King's Lynn – North of Wisbech Road

Policy / Site & Flood Risk	Statutory consultee comments	Flood Risk - Noted in the Sustainability Appraisal	Council's Approach in the proposed SADMP policy	Potential Flood Resilience Measures
	<ul> <li>designed in accordance with this guidance.</li> <li>Given the high flood risk at this location flood emergency response and evacuation procedures will also need to be addressed as part of any subsequent planning application.</li> <li>In addition, the site is located close to part of our flood defences for the River Great Ouse. Accordingly, flood defences (provision, improvement, maintenance and operation) must form an essential element of the development proposal for South Quay.</li> </ul>			improvement, maintenance and operation) must form an essential element of the development proposal