Ashwood Homes

Crease Drove, Peterborough

Flood Risk Assessment

Issue P01
July 2018



Revision Schedule

Flood Risk Assessment

July 2018

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1.0 INTRODUCTION

1.1 Inspire Design & Development Ltd (IDD) has been appointed by Ashwood Homes to undertake a Flood Risk Assessment (FRA) of land located off Crease Drove, Peterborough.

1.2 The purpose of the report is to assess flood risk and drainage in accordance with the National Planning Policy Framework (NPPF) in support of the planning application for residential development at the proposed site. The requirement for an FRA is based primarily upon the flood zone classification (Zone 3a) affecting part of the site.

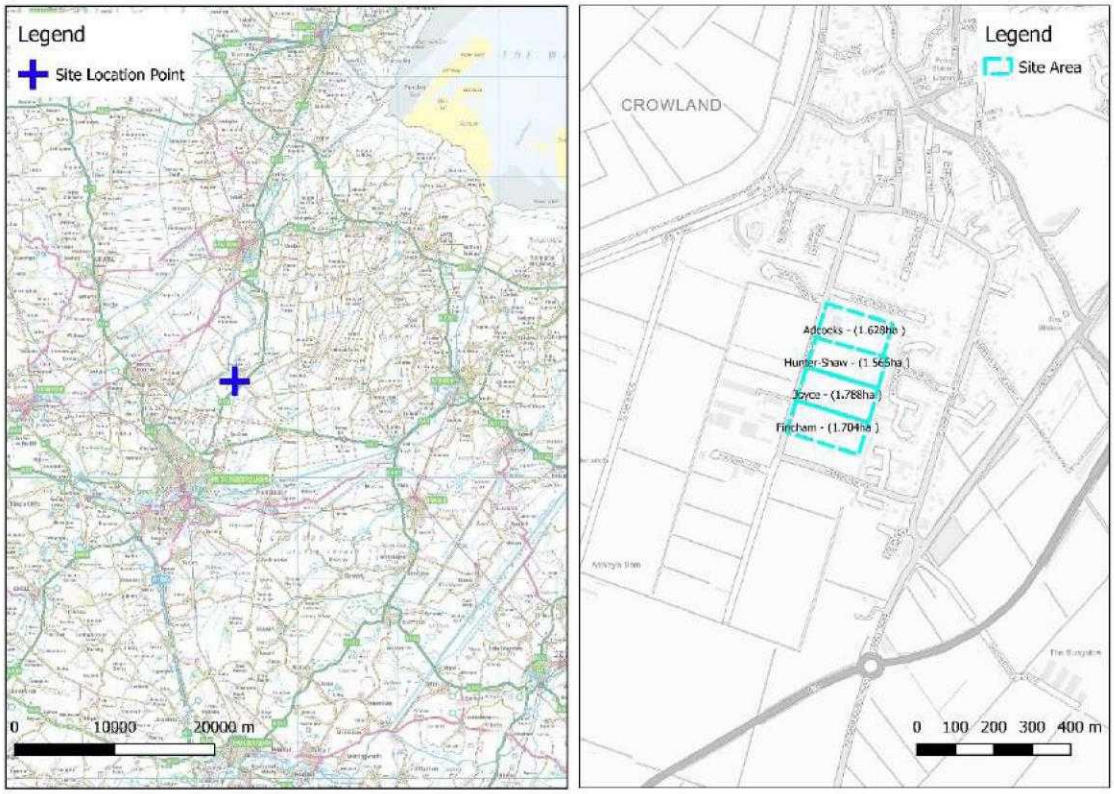
2.0 SITE DESCRIPTION

2.1 General

2.1.1 The site is located to the south of Crowland. Access to the site is from Crease Drove, which runs north/south to a junction with Broadway at its northern end. It comprises 4 land parcels totalling 6.685 ha. These parcels are to be brought forward in phases, but this Flood Risk Assessment aims to provide reporting for all parcels.

2.1.2 The approximate site centre is 523736mE, 309521mN and the site is broadly rectangular in plan. A site location plan is featured is shown below.

Figure 1: Site Location Plan



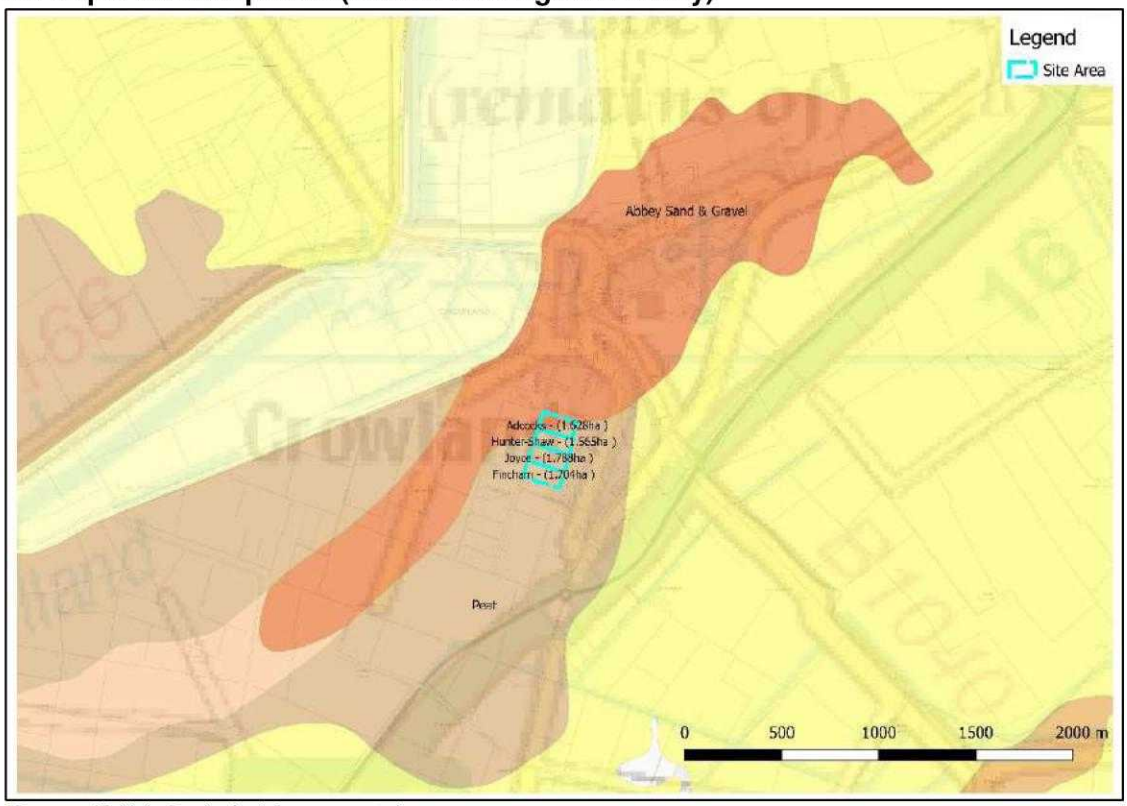
Source: Ordnance Survey Open Data (2018)

2.1.3 he site is bounded to the north and east by existing residential development. To the south of the 4 parcels is arable land. To the west of the site is the Crease Drove highway.

2.1.4 From the British Geological Survey (BGS), records have been obtained that indicate that the bedrock geology is Oxford Clay Formation - Mudstone. Sedimentary Bedrock formed approximately 157 to 166 million years ago in the Jurassic Period. The local environment was previously dominated by shallow seas. Superficial deposits are indicated as comprising peat, superficial deposits formed up to 3 million years ago in the Quaternary Period to the southern end of the site, with sand and gravels to the north western portion of the site (Adcocks and to a limited aspect, the Hunter -Shaw parcels). The BGS mapping extract can be seen in the figure below. The local environment was previously dominated by organic accumulations. (British Geological Survey, 2018). It should be noted that the

BGS data is to be seen as a guide and is no substitute for intrusive investigation, particularly at the edges of known geology.

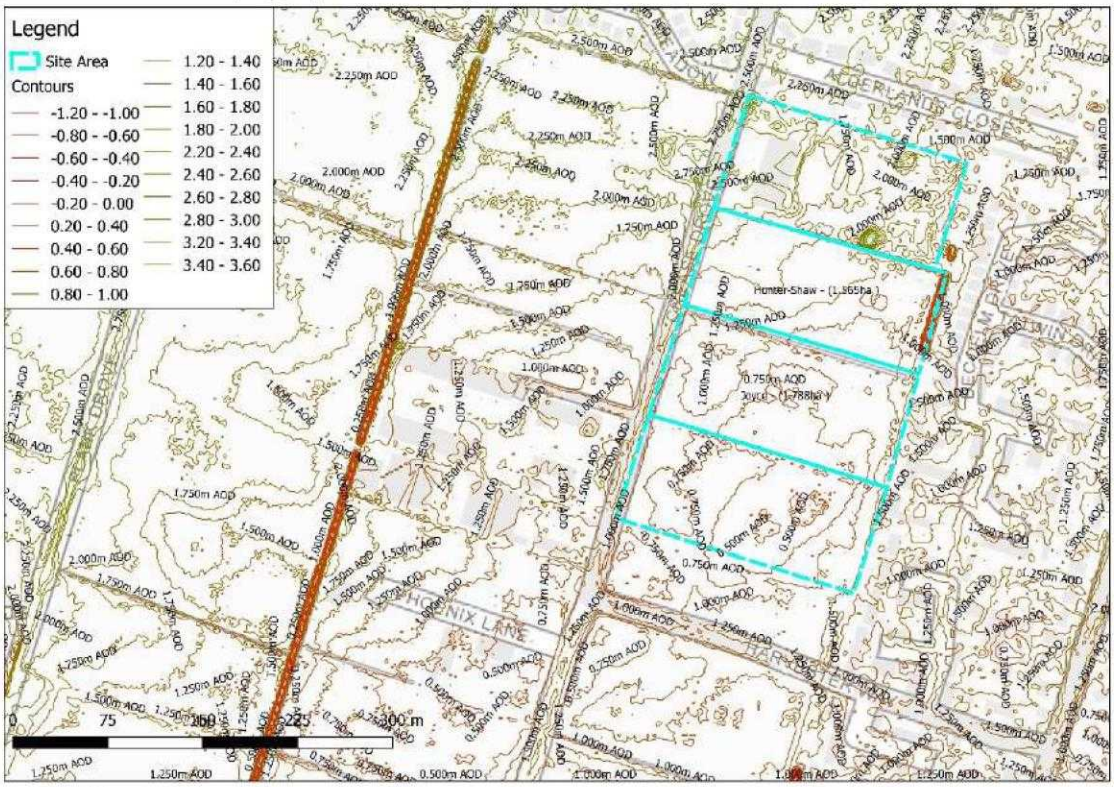
Figure 2: Superficial Deposits (British Geological Survey)



Source: (British Geological Survey, 2018)

2.1.5 LIDAR survey data at a 2m interval has been obtained from the Environment Agency. The overall ground surface is relatively flat and level, with the exception of localised areas. Topographically, the site is indicated to lie at an elevation in the region of -0.6m to 3.7m AOD. The northern part of the site is the higher with levels generally reducing to the south of the site.

Figure 3: Contoured Topographic Survey



Source: (The Environment Agency, 2018)

2.2 Watercourses

2.2.1 The nearest surface water course runs around the Hunter-Shaw land parcel, on its north, east (the East Divisional Drain) and southern boundaries. The East Divisional Drain adjoins all four parcels at their eastern boundary. It then connects to Kennulphs Drain that outfalls to the Newborough Pumping Station, lifting flows into the River Welland.

2.2.2 The River Welland is the closest designated Main River, and lies approximately 1km north of the site.

3.0 REFERENCES AND REPORTS

3.1 National Planning Policy Framework (NPPF)

3.1.1 The NPPF and the guidance on Site Specific Flood Risk Assessment at Paragraph: 030, Reference ID: 7-030-20140306 of the Planning Practice Guidance (NPPG), published by the Department for Communities and Local Government provides support to the Local Planning Authority (LPA). It categorises flood risk by flood zone and defines the types of development appropriate to each flood zone according to vulnerability. The flood zones are defined as:

- Zone 1: Areas with a Low Probability of flooding (annual probability less than 0.1% or 1 in 1000 years).
- Zone 2: Areas with a Medium Probability of flooding (annual probability between 0.1% (1 in 1000 years) and 1.0% (1in 100 years) for rivers, 0.1 – 0.5% (1 in 1000 to 1 in 200 years) for coastal areas.
- Zone 3a: Areas with a High Probability of flooding (annual probability greater than 1.0% (1 in 100 years) for rivers, 0.5% (1 in 200 years) for coastal areas).
- Zone 3b: The Functional Floodplain (probability as Zone 3a).

3.1.2 The non-statutory technical standards for sustainable drainage systems, published by the Department for Environment, Food and Rural Affairs, March 2015 are used in conjunction with NPPG noted above. This document provides additional guidance with reference to flood risk assessments, peak flow and volume control, structural integrity, design and construction of drainage within a proposed site and has been considered as part of this study.

3.1.3 The proposed development site is therefore located within Flood Zone 3a.

3.2 South East Lincolnshire Local Plan 2016

3.2.1 As part of the consultation of this local plan, views were sought from statutory consultees and interested parties upon the future development of the area surrounding Crowland.

3.2.2 This document highlights that a Level 2 Strategic Flood Risk Assessment was being drafted and as such potential development may be permitted. It identifies that at the time of publication flood risk in Crowland was somewhat unknown in terms of fluvial risk, however tidal and River Nene sources were considered not be of concern.

3.3 South East Lincolnshire Strategic Flood Risk Assessment (March 2017)

3.3.1 The Strategic Flood Risk Assessment, completed in March last year as an update to the 2010 report, showed predictions of flood levels from present day through to 2115 for both the 1% fluvial / 0.5% tidal and the 0.1% event probability.

3.3.2 From examination of the flood mapping, the proposed development site shows to be affected by flooding as follows;

Table 1: Flood Risk – Residual Flood Depth(South East Lincolnshire SFRA Findings)

Year	Event	Flood Depth
2017	1% Annual Fluvial / 0.5% Tidal Probability	0.5m – 1.0m (majority) 1.0m to 2.0m (some of the site)
2017	0.1% Annual Probability	0.5m – 1.0m (some of the site) >2.0m (some of the site)
2115	1% Annual Fluvial / 0.5% Tidal Probability	1.25m – 2.0m (majority) >2.0m (some of the site)
2115	0.1% Annual Probability	1.25m – 2.0m (some of the site) >2.0m (majority)

Source: (South East Lincolnshire Joint Strategic Planning Committee, 2018)

3.3.3 The values above have been taken from mapping that forms part of the SFRA. Copies of these can be found within Appendix A of this report.

3.3.4 As part of this report a Sequential Test was undertaken and it was noted that large parts of South Holland District lie within Flood Zone 3. In the absence of this as a useful benchmark for suitability, further assessment should be undertaken examining the hazard and depth maps to assist the application of the sequential test.

3.3.5 The site is located within a defended zone and the River Welland in the vicinity of the site has defences along its right hand bank of between 6.08m AOD (at 14.9km chainage) and 6.24m AOD (at 12.3km chainage), with freeboard at the 0.1% probability event of around 2.0m. This shows that the channel is well defended for extreme events and unlikely to flood due to a fluvial event, with the exception of a breach in defences.

3.3.6 As is noted from the table above, the depth of flood on the site varies between 1.25m to in excess of 2.0m on the southern parcels, with the flood depth varying over the site without the benefit of flood defences. The only significant variation evident through these

modelled scenarios is in 2115, in the 0.1% probability event that places the majority of the site within flood depths of over 2m.

3.3.7 With regard to the proposed development, classified as 'More Vulnerable' and within Flood Zone 3a, standing advice is provided within Appendix C of the SFRA, advises that consultation with the Environment Agency is sought for this combination of vulnerability and flood risk. The Environment Agency has been consulted as part of the preparation of this Flood Risk Assessment, however at the time of writing had not responded.

3.4 Recent Planning Application Decisions

3.4.1 Two recent planning applications have been considered for both Adcocks and Hunter-Shaw parcels. These are discussed below;

3.4.2 A proposed development of 50 dwellings was given outline approval (H-02-0554-16) on the Adcocks parcel for 50 dwellings on the 9th October 2017. No conditions with regard to flood risk where attached to this proposal, however surface drainage was to be designed to be restricted to 1.4 litres second/hectare.

3.4.3 A proposed development of 41 residential dwellings was proposed on the Hunter-Shaw land. This application (H-02-0554-16) was refused permission, but successfully appealed and therefore benefits from a permission. This application was originally refused on grounds of flood risk, amongst others. The reason for refusal was the inadequacy of the flood risk assessment and the effect of flood events, including a breach in the Crowland Cowbit Washlands.

3.5 Geo-environmental assessment

3.5.1 At this time no site specific geo-environmental assessment has been completed to confirm or otherwise the geology identified from the BGS data.

3.6 BWB Flood Risk Assessment

3.6.1 EA data for the proposed development site has been gathered from online information and also a current flood risk assessment presented by BWB Consulting in support of planning application H-02-00158-17 for 100 residential dwellings.

3.6.2 The report contained information as described from the SFRA above, with some further detail; namely

(1) River levels in the River Welland close to the site at the upstream node (28885) of the data provided showed levels for the 100 year event (1% probability event) +

20% climate change of 5.03m AOD. This did not increase for the 1000 year (0.1% probability event).

(2) At the lowest modelled level 10 year return period event (10% probability), this was recorded as 4.77m AOD.

3.6.3 The River Welland benefits from primary flood defences and also a second flood defence network that provides the adjacent flood plain, the Crow, but as such could potentially suffer a breach of these defences.

3.6.4 Updated EA data was requested from the EA on 27th April 2018. At the time of production, this was unavailable.

3.7 IDB Correspondence

3.7.1 Following earlier enquiries with South Holland IDB, it was identified that the local drainage network to the site is operated by the North Level IDB. Information regarding their network was sought on the 1st May 2018, however at the time of writing this enquiry had not been responded to. In the absence of this data from recent applications has been used as a proxy.

3.7.2 Information gathered from recent Flood Risk Assessments have indicated that the drainage networks are well managed and do not present any significant flood risk.

3.8 EA Correspondence

3.8.1 Further to the first issue of this report, the Environment Agency (EA) provided comment on the site proposals on 13 July 2018 to the Local Planning Authority as part of the statutory consultation process for planning application reference H02-0575-18. This is included in Appendix B, and addressed in the changes in Section 6.2 of this report.

4.0 THE PROPOSED DEVELOPMENT

4.1 General

4.1.1 The proposal is at outline stage and proposes the development of four land parcels in four phases for residential development. It is assumed at this stage that typical development densities will be proposed, equating to around 200 dwellings.

4.2 Flood Risk Vulnerability

4.2.1 Table 2: Flood Risk Vulnerability Classification Paragraph: 066 Reference ID: 7-066-20140306 of the Planning Practice Guidance in Technical Guidance to the NPPF has been used to assess the Flood Risk Vulnerability classification for the proposed use of the site. The proposed use of the site is classed as 'more vulnerable'.

4.3 Sequential Test

4.3.1 Referring to Table 4.2 (Department for Communities and Local Government, 2014) residential developments are classified by the NPPF as more vulnerable and Flood Zone 3 subject to satisfying the Exception Test.

Table 2: Flood Risk and Flood Zone Compatibility

Flood Risk Vulnerability Classification		Essential Infrastructure	Water Compatible	Highly Vulnerable	More Vulnerable	Less Vulnerable
Flood Zone	1	✓	✓	✓	✓	✓
	2	✓	✓	Exception test required	✓	✓
	3a	Exception test required	✓	×	Exception test required	✓
	3b Functional Floodplain	Exception test required	✓	×	×	×

4.3.2 The adopted Local Plan show the southern parcels (Joyce and Fincham) to be permitted for the development of major employment proposals as at April 2004. (South Holland District Council, 2018).

4.3.3 The plots to north (Adcocks and Hunter-Shaw) benefit from current outline planning permission (H-02-00554-16 Adcocks 50 dwellings, and H-02-0823-16 Hunter-Shaw 41 dwellings).

4.3.4 It is also understood that development to the south of the proposed development parcels have been permitted for residential development.

4.3.5 For the development of residential dwellings, classed as 'More Vulnerable' and within Flood Zone 3a, an exception test is required. The exception test, defined in section 102 of the NPPF requires that the development satisfies 3 criteria;

a) It must be demonstrated that the development provides wider sustainability benefits to the community that outweigh flood risk, informed by the Strategic Flood Risk Assessment where one has been prepared; and

b) A site specific flood risk assessment must demonstrate that 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.

4.3.6 In answer to the exception test criterium 'a', it is considered that the close link to the area of Crowland and adjacency to typical settlement development provides facilities for the development that would be unavailable in less adjoining locations. In addition the presence of more residential development provides support for local facilities to perpetuate their existence, such as bus services, local shops, community venues etc. It is therefore considered that the proposed development is sustainable when considered in the context of alternative locations.

4.3.7 It is considered in answer to criterium 'b' this site specific flood risk assessment aims to identify the flood risk to the proposed development and ensure that sufficient measures are put in place to enable the safe and timely evacuation of residents in dwellings that have potential flood risk. The flood risk assessment that follows will therefore put in place strategy and plan to ensure safe occupation of the proposed dwellings.

5.0 FLOOD RISK ASSESSMENT

5.1 Fluvial Flood Risk

5.1.1 As discussed in previous sections, the development site is located within Flood Zone 3a (Figure 4.1), that is, land assessed as having a 1% (1 in 100) or greater annual probability of river flooding or a 0.5% (1 in 200) or greater annual probability of flooding from the sea without the benefit of flood defences.

5.1.2 The primary risk of fluvial flooding to the site is from the River Welland, which flows to the north of the site and is a main river under the jurisdiction of the EA. A flood defence embankment is located along the River Welland to the west of the site that provides an initial line of defence to keep excess flows in channel. A further line of defences form the boundary of the Crowland High Wash area, the functional flood plain, with surrounding areas including this proposed development site.

5.1.3 The Strategic Flood Risk Assessment produced for South Holland District Council in 2017 shows that the development without defences would be subject to flooding, however when defended benefits from protection up to and including the 1 in 1000 return period (0.1% probability) fluvial event.

5.1.4 Examination of EA data (obtained from the BWB Flood Risk Assessment) detailing the fluvial flood levels of the River Welland adjacent to the site show that flood surface levels reach 4.99m AOD during the 1% probability event. Defences are in excess of these levels as flows are retained within the Crowland Washes during events up to and including the 1000 year return period.

5.1.5 The site is within both flood alert and flood warning areas.

5.2 Breach hazard

5.2.1 In a well defended area such as this, the fluvial risk in real terms is associated with failure of flood defence or overtopping due to breach of the defence embankment. This could potentially result in a sudden surge of floodwater into the land lying behind the defences. In this case, depths and velocities of water may both be significant and an assessment of this is required to ensure that this failure.

5.2.2 It is considered that a breach due to overtopping is unlikely as there is sufficient freeboard between top water level during the 0.1% probability event and the side of the bank.

5.2.3 However a potential failure of the bank could occur. To assess the level of hazard presented by a breach due to failure, the simple assessment process is used that forms a relationship between distance from the breach and the head above crest level and the danger it presents to human life.

Table 3: Danger to People from Breaching Relative to Distance from Floodplain

Distance from breach	Head above Flood plain (m)						
	0.5	1.0	2.0	3.0	4.0	5.0	6.0
100							
250		X					
500							
1000							
1500							
2000							
2500							
3000							
3500							
4000							
4500							
5000							
Key		Danger to all		Danger to most		Danger to some	

5.2.4 From the table above it is noted that the site is located approximately 350m from embankment, with the embankment rising to 6m AOD, with a 3.11m maximum flood level , and the adjacent floodplain at around 2.5m AOD, providing a head above floodplain of 0.611m. Assuming conservative head and distances of 1.0m head and 250m distance places the risk as 'Danger for Some'.

5.2.5 It is noted that other residential development in the locality faces similar and higher levels of exposure, both newly approved dwellings and long term dwellings.

5.2.6 It is considered that as this area is subject to two levels of flood defence (defences on the River Welland, and defences to the Crowland Wash), if the levels of water retained within the Crowland Wash were to reach higher levels, flood alerts and warnings would be in place to ensure the local area was cleared in good time. It is considered that whilst this assessment considers the effect of a breach of a flood defence

5.3 Pluvial Flood Risk

5.3.1 EA mapping available online indicates that the majority of the site is at 'low to medium' risk of surface water flooding. Isolated areas are indicated as being at 'medium' risk, which correspond with the location of natural low points in the topography, to the centre of the site and where ditches exist on the boundaries.

5.3.2 The topography of the site and surrounding areas is such that surface water run off during extreme rainfall events is generally shallow, and slow flowing, as indicated by EA

modelling. As part of the drainage strategy to be submitted with each proposal, pluvial flood risk will be mitigated with a suitable

5.3.3 The site is considered to be at low risk of surface water flooding.

5.4 Flood Risk from Sewers and Drainage

5.4.1 Extracts of the Anglian Water response to the currently being considered planning application (H-02-0158-17) have been reviewed. It is not known at this time if Anglian Water sewers or private drainage exist within the site. The information reviewed considered for the site in question that there were no records of sewer flooding within the area, indicating the system operates without issue, however consultations will be made as part of the planning process to confirm this. As part of the detailed design for the site, the location, depth and capacity of the sewerswill be reviewed in consultation with Anglian Water so ensure that there is a no risk of flooding from surcharging sewers on site.

5.5 Groundwater Flood Risk

5.5.1 It is understood that the site consists of sand / gravels in part and mainly peat overlying clay / mudstone bedrock layers. It is considered that the bedrock will have negligible permeability.

5.5.2 Records from the British Geological Survey have been obtained from the 1:625,000 digital hydrogeological data. This data advises that the area is underlain by the Kellaways formation and Oxford Clay formation, with essentially no groundwater.

5.5.3 No records of groundwater flooding were found for the site area. The risk of groundwater flooding is considered to be low.

6.0 MITIGATION

6.1 General

6.1.1 The proposed development is considered appropriate for the Zone 3a classification. It is acknowledged by the EA that the flood zone classification may give a slightly misleading picture in that if there were no flood defences, water would spread out across these large Fenland floodplains. Defences are present however and are indicated to be provide protection for the 1% AEP scenario. In practical terms therefore, the risk of flooding is associated with the unlikely scenario of a flood defence embankment breach.

6.1.2 The proposed mitigation measures to manage this risk are two-fold; building flood resilience and resistance and the application of advanced flood warning and emergency evacuation procedures.

6.2 Finished Flood Levels and Flood Resilient Construction

6.2.1 As described in Section 7.0, the planning application for the site is outline with all matters reserved. The detailed layout and use of the site is not yet allocated. This gives the opportunity to ensure that, as buildings are designed, their layout and use of materials are resilient and resistant to flooding. The following principles will be applied:

(1) Buildings will be a minimum of 2 storey, with finished floor levels set a minimum of 1m above existing ground level;

(2) Buildings should be constructed using flood resilient construction, up to 300mm above the predicted flood depth, designers should refer to the Communities and Local Government document 'Improving the flood performance of new buildings – Flood resilient construction';

(3) Demountable defences should be installed to 600mm above the proposed finished floor level;

(4) Services, will be located 300mm above the 1% (1 in 100) plus climate change peak flood level.

6.3 Flood Warning and Evacuation

6.3.1 As the proposed development is in an area of flood risk, the potential for a flood event as a result of flood protection embankment breach will be considered carefully within the detailed design.

6.3.2 Measures will be put in place to ensure that any potential flood events are communicated to the occupiers at the earliest opportunity and safe routes for evacuation are included. Given that a breach of the flood defences would likely be a large-scale emergency scenario leading to wide-scale flooding of the area, Lincolnshire County Council emergency planning team will be consulted as the layout of the site progresses to ensure that due consideration is given to emergency response contingency. Similarly, as the

layout for the site is developed, and potentially sold or occupied, all users will be provided with the necessary information to ensure that they register for flood warnings and work with the emergency planners on their evacuation procedure as part of the emergency plan for the area. Information is available at www.lincolnshire.gov.uk/lincolnshire-prepared/about-us.

7.0 CONCLUSION & RECOMMENDATIONS

7.1.1 This FRA is intended as a qualitative study based upon a desk-based assessment, readily available information, and where applicable, responses from consultees.

7.1.2 The proposals comprise the construction of residential dwellings.

7.1.3 The site is located in Environment Agency Flood Zone 3, namely, areas with a high probability of flooding from main rivers, however it is stated by the EA that the assessment of flood risk in the area of Fenlands can give a misleading picture, since the area of the site is protected by flood embankments for the 1% AEP event, and as such it is the breach scenario that presents risk

7.1.4 The majority of the site is classed as 'more vulnerable' to flooding, as outlined in 'Planning practice Guide – Flood Risk and Coastal Change'.

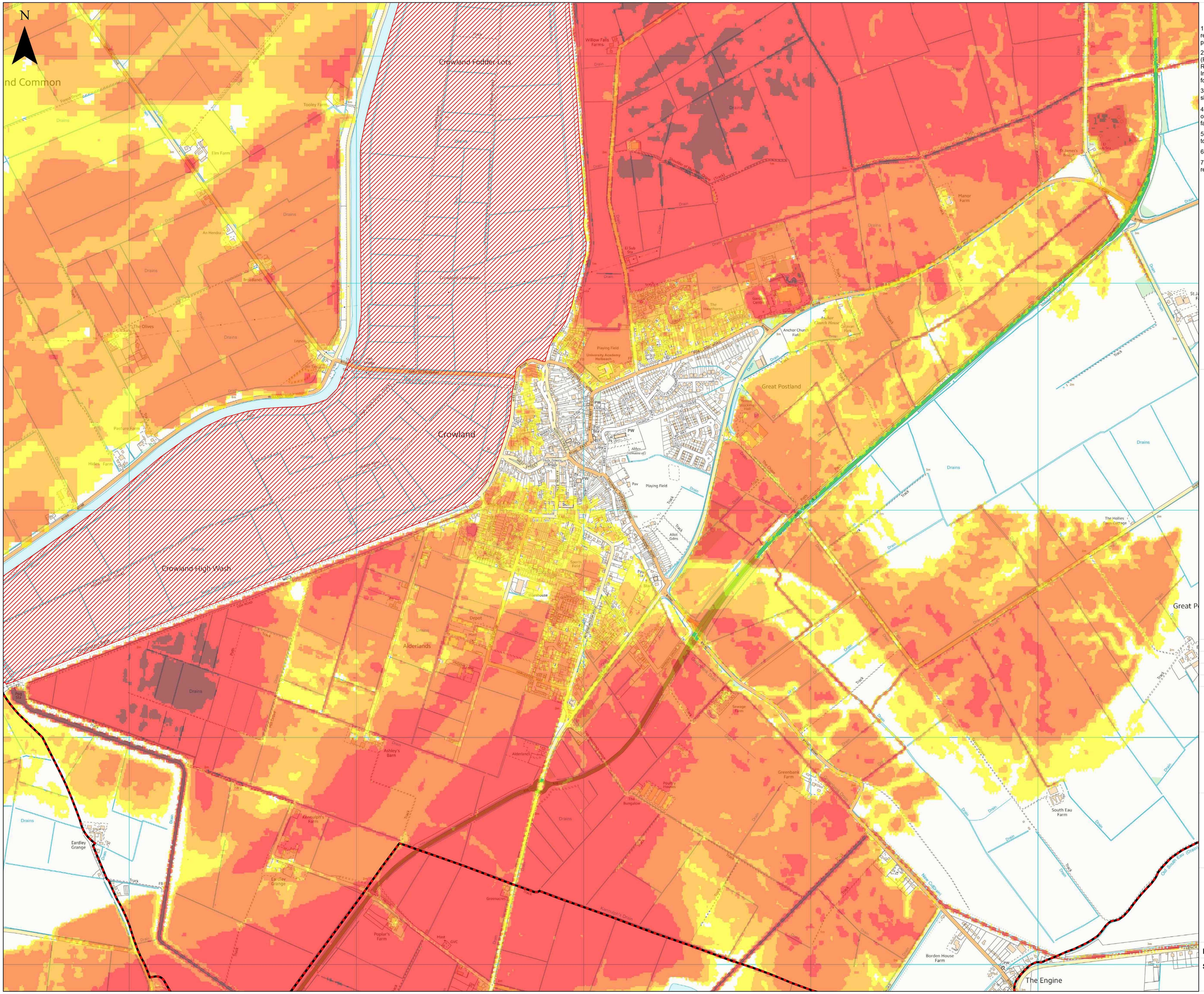
7.1.5 Development of 'more vulnerable' uses is compatible with Flood Zone 3, but requires the completion of the Exception Test.

7.1.6 An assessment of flood risk to the development site highlighted that there is potentially a risk of flooding from failure breach of the flood protection embankment. Proposed mitigation for these risks is based on the hierarchical approach detailed in BS 8533:2001 'Assessing and managing flood risk in development – Code of practice', and include resistant and resilient building techniques and emergency planning for safe evacuation.

7.1.7 As part of the planning application, an associated drainage strategy relevant to the particular parcel of land under consideration will be provided

7.1.8 The flood risk assessment highlights that there are some potential flood risks related to the site. However, it is considered likely that risks and impacts can be managed to an appropriate level with the adoption of mitigation measures employed as part of the proposed development.

APPENDIX A : EXTRACTS OF SFRA UPDATE (2017)



NOTES

1. The potential flooding consequences shown on this map primarily relate to flooding from the sea and main rivers taking into account the presence of current flood risk management measures such as flood defences.
2. This update only included new flood risk information from River Welland (Fluvial), River Glen (Fluvial) and Tidal hazard mapping (River Welland, River Nene and the Wash sea defences). No new information from the Internal Drainage Boards and associated systems was used for this update.
3. In addition to the potential flood extents shown on this map, there may be shallow flooding in low-lying rural areas
4. The consequences designated as being a Residual Risk arise from direct overtopping of defences, where this would occur, together with breach failure which is assumed could occur at any point along the defences.
5. Functional Floodplain encompasses areas where water is intended to flow or be stored in times of flood.
6. Land outside South Holland District is not considered.
7. This map shows the extents only of the flooding probability bands relevant to the map Title

Map Legend

Peak Depth

- 0m - 0.25m
- 0.25m - 0.5m
- 0.5m - 1m
- 1m - 2m
- 2m +
- Functional Floodplain
- South Holland District Boundary

REV	DATE	REMARKS
2	Feb 17	Modelling and Mapping Update
1	Dec 16	Modelling and Mapping Update

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UPDATE OF STRATEGIC FLOOD RISK ASSESSMENT

Residual Peak Depth
Crowland - Present Day
1% Fluvial / 0.5% Tidal Event Probability

DATE OF ISSUE: Feb 2017 **REV NO:** 2

SCALE: 1 : 7500 @ A1

MAP NO:

NOTES

1. The potential flooding consequences shown on this map primarily relate to flooding from the sea and main rivers taking into account the presence of current flood risk management measures such as flood defences.

2. This update only included new flood risk information from River Welland (Fluvial), River Glen (Fluvial) and Tidal hazard mapping (River Welland, River Nene and the Wash sea defences). No new information from the Internal Drainage Boards and associated systems was used for this update.

3. In addition to the potential flood extents shown on this map, there may be shallow flooding in low-lying rural areas

4. The consequences designated as being a Residual Risk arise from direct overtopping of defences, where this would occur, together with breach failure which is assumed could occur at any point along the defences.

5. Functional Floodplain encompasses areas where water is intended to flow or be stored in times of flood.

6. Land outside South Holland District is not considered.

7. This map shows the extents only of the flooding probability bands relevant to the map Title

Map Legend

Peak Depth

- 0m - 0.25m
- 0.25m - 0.5m
- 0.5m - 1m
- 1m - 2m
- 2m +
- Functional Floodplain
- South Holland District Boundary

REV	DATE	REMARKS
2	Feb 17	Modelling and Mapping Update
1	Dec 16	Modelling and Mapping Update

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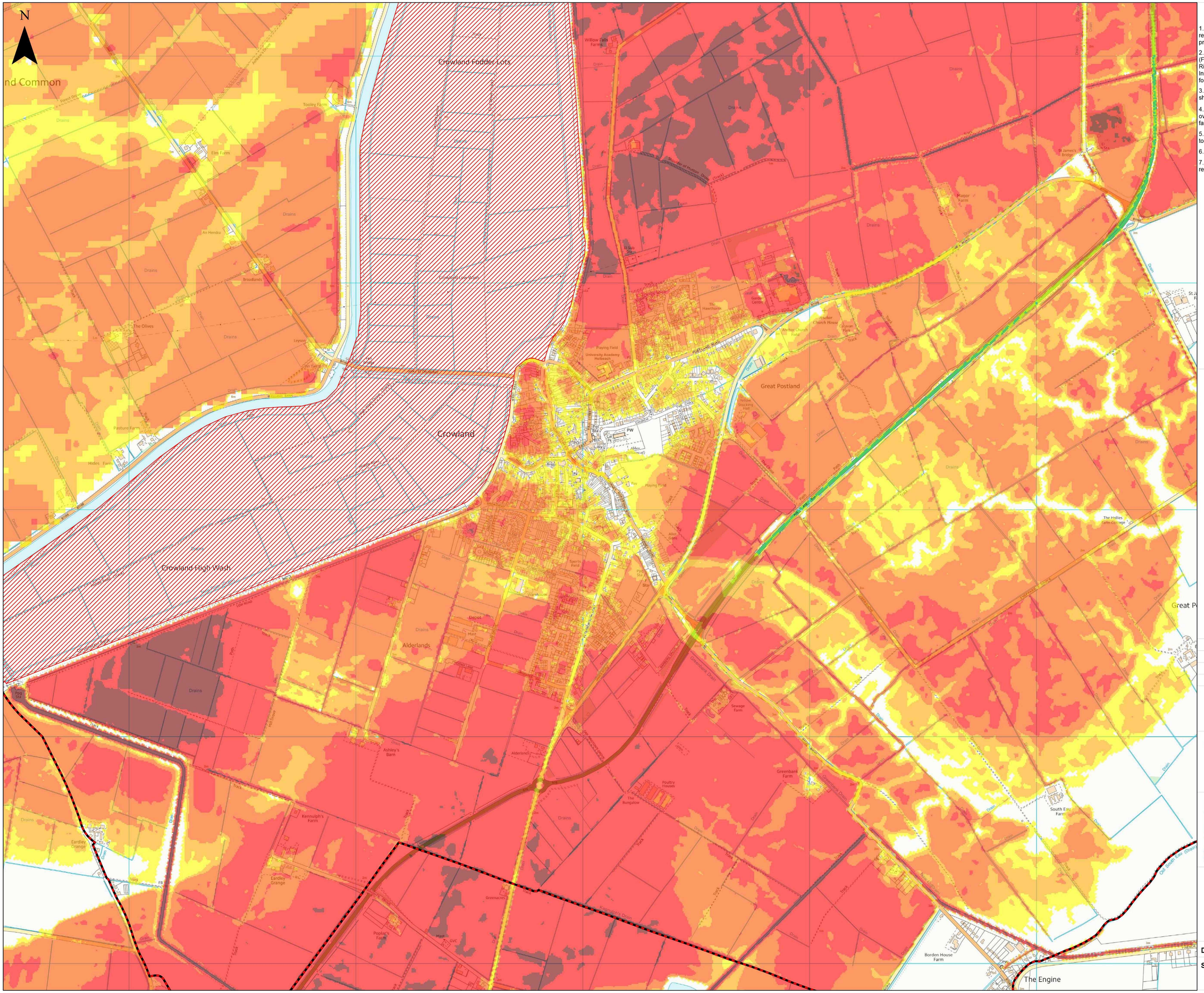
UPDATE OF STRATEGIC FLOOD RISK ASSESSMENT

Residual Peak Depth
Crowland - Present Day
0.1% Event Probability

DATE OF ISSUE: Feb 17 **REV NO:** 2

SCALE: 1 : 7500 @ A1

MAP NO:



NOTES

1. The potential flooding consequences shown on this map primarily relate to flooding from the sea and main rivers taking into account the presence of current flood risk management measures such as flood defences.

2. This update only included new flood risk information from River Welland (Fluvial), River Glen (Fluvial) and Tidal hazard mapping (River Welland, River Nene and the Wash sea defences). No new information from the Internal Drainage Boards and associated systems was used for this update.

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Map Legend

Peak Depth

- 0m - 0.25m
- 0.25m - 0.5m
- 0.5m - 1m
- 1m - 2m
- 2m +
- Functional Floodplain
- South Holland District Boundary

REV	DATE	REMARKS
2	Feb 17	Modelling and Mapping Update
1	Dec 16	Modelling and Mapping Update

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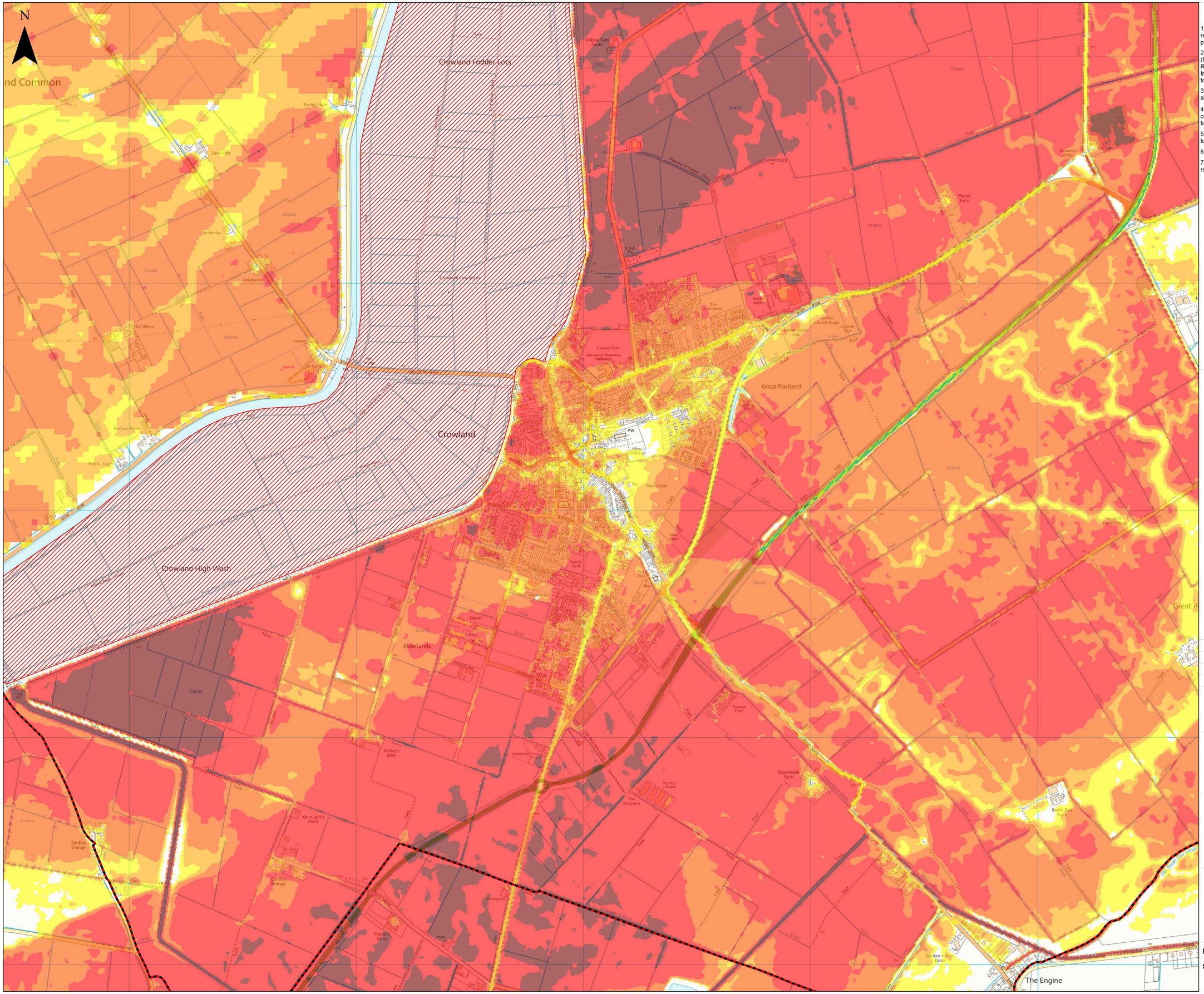
UPDATE OF STRATEGIC FLOOD RISK ASSESSMENT

Residual Peak Depth
Crowland - Year 2115
1% Fluvial / 0.5% Tidal Event Probability

DATE OF ISSUE: Feb 2017 **REV NO:** 2

SCALE: 1 : 7500 @ A1

MAP NO:



NOTES

1. The potential flooding consequences shown on this map primarily relate to flooding from the sea and main rivers taking into account the presence of current flood risk management measures such as flood defences.
2. This update only included new flood risk information from River Welland (Fluvial), River Glen (Fluvial) and Tidal hazard mapping (River Welland, River Nene and the Wash sea defences). No new information from the Internal Drainage Boards and associated systems was used for this update.
3. In addition to the potential flood extents shown on this map, there may be shallow flooding in low-lying rural areas
4. The consequences designated as being a Residual Risk arise from direct overtopping of defences, where this would occur, together with breach failure which is assumed could occur at any point along the defences.
5. Functional Floodplain encompasses areas where water is intended to flow or be stored in times of flood.
6. Land outside South Holland District is not considered.
7. This map shows the extents only of the flooding probability bands relevant to the map Title

Map Legend

Peak Depth

- 0m - 0.25m
- 0.25m - 0.5m
- 0.5m - 1m
- 1m - 2m
- 2m +
- Functional Floodplain
- South Holland District Boundary

REV	DATE	REMARKS
2	Feb 17	Modelling and Mapping Update
1	Dec 16	Modelling and Mapping Update

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UPDATE OF STRATEGIC FLOOD RISK ASSESSMENT

Residual Peak Depth
Crowland - Year 2115
0.1% Event Probability

DATE OF ISSUE: Feb 2017 **REV NO:** 2

SCALE: 1 : 7500 @ A1

MAP NO:

APPENDIX B ENVIRONMENT AGENCY DATA

Environment Agency

Mr Robert Ward
<Robert.Ward@bwbconsulting.com>

Our ref: CCN-2016-30824

Date: 1 December 2016

Dear Robert

Provision of Product 3 for site at Land off Crease Grove, Crowland PE60BN

Thank you for your request of 29 November 2016 to use Environment Agency data, Product 3 in the development of the Flood Risk Assessment (FRA) for the above site. The information is attached.

If you have requested this information to help inform a development proposal, then you should note the detail in the attached advisory text on the use of Environment Agency Information for Flood Risk Assessments.

Flood Map
The attached map includes the current Flood Map for your area. The Flood Map indicates the area at risk of flooding, **assuming no flood defences exist**, for a flood event with a 0.5% chance of occurring in any year for flooding from the sea, or a 1% chance of occurring for fluvial (river) flooding. It also shows the extent of the Extreme Flood Outline which represents the extent of a flood event with a 0.1% chance of occurring in any year, or the highest recorded historic extent if greater.

The Flood Map only indicates the extent and likelihood of flooding from rivers or the sea. It should also be remembered that flooding may occur from other sources such as surface water sewers, road drainage, etc.

Historic Flood Extent Map
A copy of the Historic Flood Extent Map for your area is enclosed. This shows the extent of previous recorded flooding in your area, notably March 1947 and April 1998. It is possible that other flooding may have occurred that we do not have records for, and other organisations, such as the Local Authority or Internal Drainage Boards, may have records.

Fluvial Flood Data
The fluvial flood data for the model nodes shown on the attached map are set out in the table attached.

This data is taken from the Welland Catchment Model (August 2007) and are the most up-to-date currently available. We aim to review our models on a regular basis, so if you are using this data more than twelve months from the date of this letter, please contact us again to check that they are still valid.

Please note that these levels are "in-channel" levels and therefore may not represent the flood level on the floodplain, particularly where the channel is embanked or has raised defences.

FLOODS DESTROY
BE PREPARED

Waterside House, Waterside North, Lincoln, LN2 5HA.
Customer services line: 08708 506 506
Email: enquiries@environment-agency.gov.uk
www.gov.uk/environment-agency

Fluvial Defence Information
The fluvial defences protecting this site consist of earth embankments and flood storage reservoirs. They are in good condition and provide protection against a flood event with a 1% chance of occurring in any year (1 in 100). We inspect these defences regularly to ensure that any potential defects are identified early.

Modelled Flood Extents
Please find attached a map showing the results of the Welland Catchment Model (August 2007) for your area. This shows modelled flood extents, taking into account flood defences.

Climate change will increase flood risk due to overtopping of defences. Please note that the climate change extents have an allowance for 20% increase in flow. Updated guidance on how climate change could affect flood risk to new development - 'Flood risk assessments: climate change allowances' was published on www.gov.uk on 19 February 2016. The appropriate updated climate change allowance should be applied in a Flood Risk Assessment.

Please contact our Partnerships and Strategic Overview Team to discuss how this risk should be considered within your Flood Risk Assessment.

Land Drainage
The information provided is limited to flood risk from the sea and rivers with catchment areas greater than 3km^2. The property is in an area of extensive land drainage which may pose an additional risk of flooding. Further information should be sought from the North Level District Internal Drainage Board.

Risk of flooding from surface water information

Enclosed is a map showing the risk of flooding from surface water for this area, produced in partnership with Local Authorities.

Surface water flood risk is widely distributed and can happen far from rivers and the sea. It's sometimes hard to say whether you're in an area at risk of flooding from surface water because surface water flooding can follow many more paths and can be affected by very small features such as kerb height and even speed bumps. We recommend you consider not only whether your property is shown in or near an area at risk, but also the broader scale and pattern of surface water flooding shown in your area. You may also wish to view this and other flood risk maps on our website.

Whether your property is at risk will depend on the accuracy of the mapping in this area, and on the details of your property – for example, how waterproof the structure is, the levels of doors and airbricks, and whether you have installed any flood resilience measures such as airbrick covers and flood boards.

If you require information on what is being done to manage surface water flood risk in your local area, please contact South Holland District Council.

Further details about the Environment Agency information supplied can be found on the GOV.UK website:

https://www.gov.uk/browse/environment-countryside/flooding-extreme-weather

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Waterside House, Waterside North, Lincoln, LN2 5HA.
Customer services line: 08708 506 506
Email: enquiries@environment-agency.gov.uk
www.gov.uk/environment-agency

If you have requested this information to help inform a development proposal, then you should note the information on GOV.UK on the use of Environment Agency Information for Flood Risk Assessments

https://www.gov.uk/planning-applications-assessing-flood-risk
https://www.gov.uk/government/publications/pre-planning-application-enquiry-form-preliminary-opinion

Supporting Information

I hope that we have correctly interpreted your request. Please see the Standard Notice or licence for details of permitted use. The Standard Notice can be found at the link below.

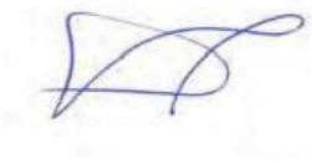
http://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/

We respond to requests for recorded information that we hold under the Freedom of Information Act 2000 (FOIA) and the associated Environmental Information Regulations 2004 (EIR).

If you are not satisfied with our response to your request for information you can contact us within 2 calendar months to ask for our decision to be reviewed.

If you have any queries or would like to discuss the content of this letter further please contact Ilektra Apostolidou at the Environment Agency.

Yours faithfully



FOR Claire Rose
Coastal Partnerships & Strategic Overview Team Leader

Direct dial 01522 785032
Direct fax 01522 785018
Direct e-mail PSOLINCS@environment-agency.gov.uk

Enc.
FRA Advisory Text
Basic FRA Map
Historic Flood Extent Map
Model Nodes Map
Fluvial Flood Data
Modelled Flood Extent Map
Risk from Surface Water Map

FLOODS DESTROY BE PREPARED

Use of Environment Agency Information for Flood Risk / Flood Consequence Assessments

Important
If you have requested this information to help inform a development proposal, then we recommend that you undertake a formal pre-application enquiry using the form available from our website:-

http://www.environment-agency.gov.uk/research/planning/33580.aspx

Depending on the enquiry, we may also provide advice on other issues related to our responsibilities including flooding, waste, land contamination, water quality, biodiversity, navigation, pollution, water resources, foul drainage or Environmental Impact Assessment.

In **England**, you should refer to the Environment Agency's Flood Risk Standing Advice, the technical guidance to the National Planning Policy Framework and the existing PPS25 Practice Guide for information about what flood risk assessment is needed for new development in the different Flood Zones. These documents can be accessed via:

http://www.environment-agency.gov.uk/research/planning/82587.aspx

http://www.communities.gov.uk/publications/planningandbuilding/nppftechnicalguidance

http://www.communities.gov.uk/publications/planningandbuilding/pps25guideupdate

You should also consult the Strategic Flood Risk Assessment produced by your local planning authority.

In **Wales,** you should refer to TAN15 for information about what flood consequence assessment is needed for new development in the different flood zones
http://new.wales.gov.uk/splash;jsessionid=8ylGTfGZthmB0t2vhp6hS1GcB1LXvZzB3Ylczf20Xn7LK3zK0nMk!981825250?orig=/topics/planning/policy/tans/tan15/

You should also consult the Strategic Flood Consequence Assessment if one has been produced by your local planning authority.

In both **England and Wales** you should note that:

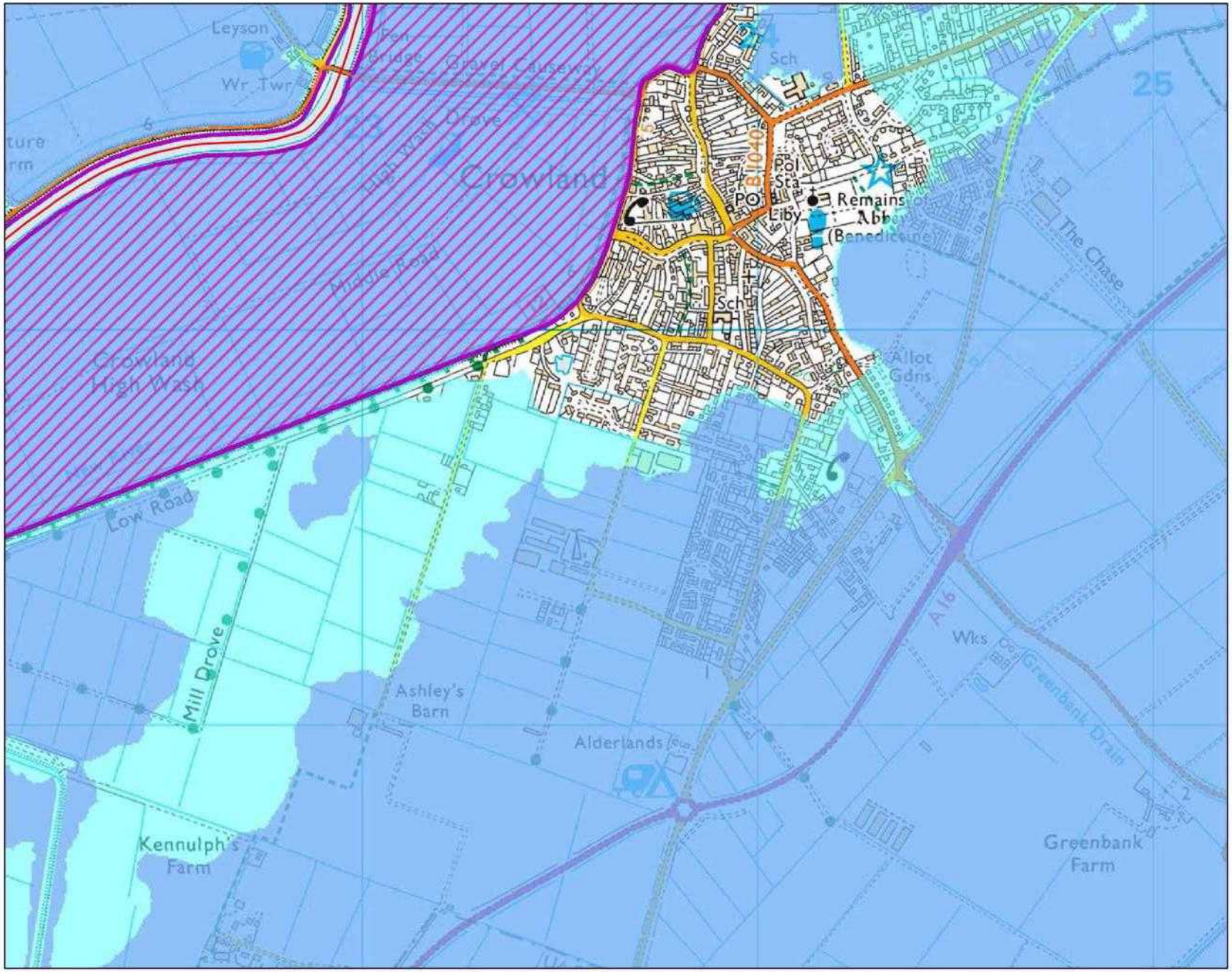
1. Information supplied by the Environment Agency may be used to assist in producing a Flood Risk / Consequence Assessment (FRA / FCA) where one is required, but does not constitute such an assessment on its own.

2. This information covers flood risk from main rivers and the sea, and you will need to consider other potential sources of flooding, such as groundwater or overland runoff. The information produced by the local planning authority referred to above may assist here.

3. Where a planning application requires a FRA / FCA and this is not submitted or deficient, the Environment Agency may well raise an objection.

4. For more significant proposals in higher flood risk areas, we would be pleased to discuss details with you ahead of making any planning application, and you should also discuss the matter with your local planning authority.

Basic FRA Map centred on TF 23642 09605 - created December 2016 [Ref: CCN-2016-30824]



Environment Agency

Scale 1:10,000

N
W E
S

- Main River
- Raised Defences
- Flood Storage Areas
- Area at Risk of Flooding from Rivers or The Sea
- Extreme Flood Outline

Dark blue shows the area that could be affected by flooding, either from rivers or the sea, if there were no flood defences. This area could be flooded:

- from the sea by a flood that has a 0.5% (1 in 200) or greater chance of happening each year.

- or from a river by a flood that has a 1% (1 in 100) or greater chance of happening each year.

Light blue shows the extent of the Extreme Flood Outline, which represents the extent of a flood event with a 0.1% chance of occurring in any year, or the highest recorded historic extent if greater.

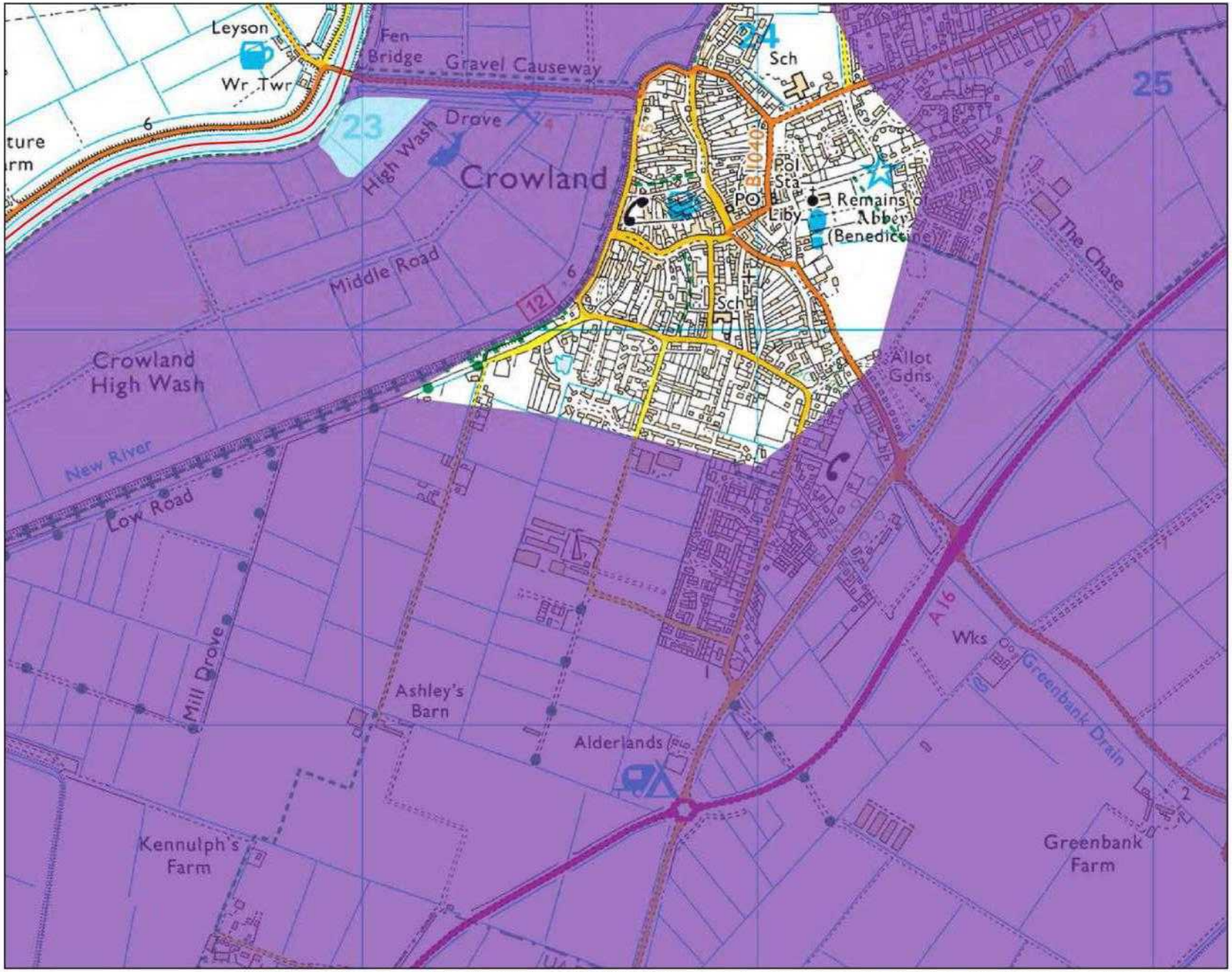
These two colours show the extent of the natural floodplain if there were no flood defences or certain other manmade structures and channel improvements. Sites outside the two extents, but behind raised defences, may be affected by flooding if the defences are overtopped or fail.

Created by the Partnerships and Strategic Overview Team, Lincoln

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Contact Us: National Customer Contact Centre, PO Box 544, Rotherham, S60 1BY. Tel: 03708 506 506 (Mon-Fri 8-6). Email: enquiries@environment-agency.gov.uk

Historic Flood Extent Map centred on TF 23642 09605 - created December 2016 [Ref: CCN-2016-30824]



Environment Agency

Scale 1:10,000

N W E S

Main River

Historic Flood Extent

Easter 1998 on the River Welland

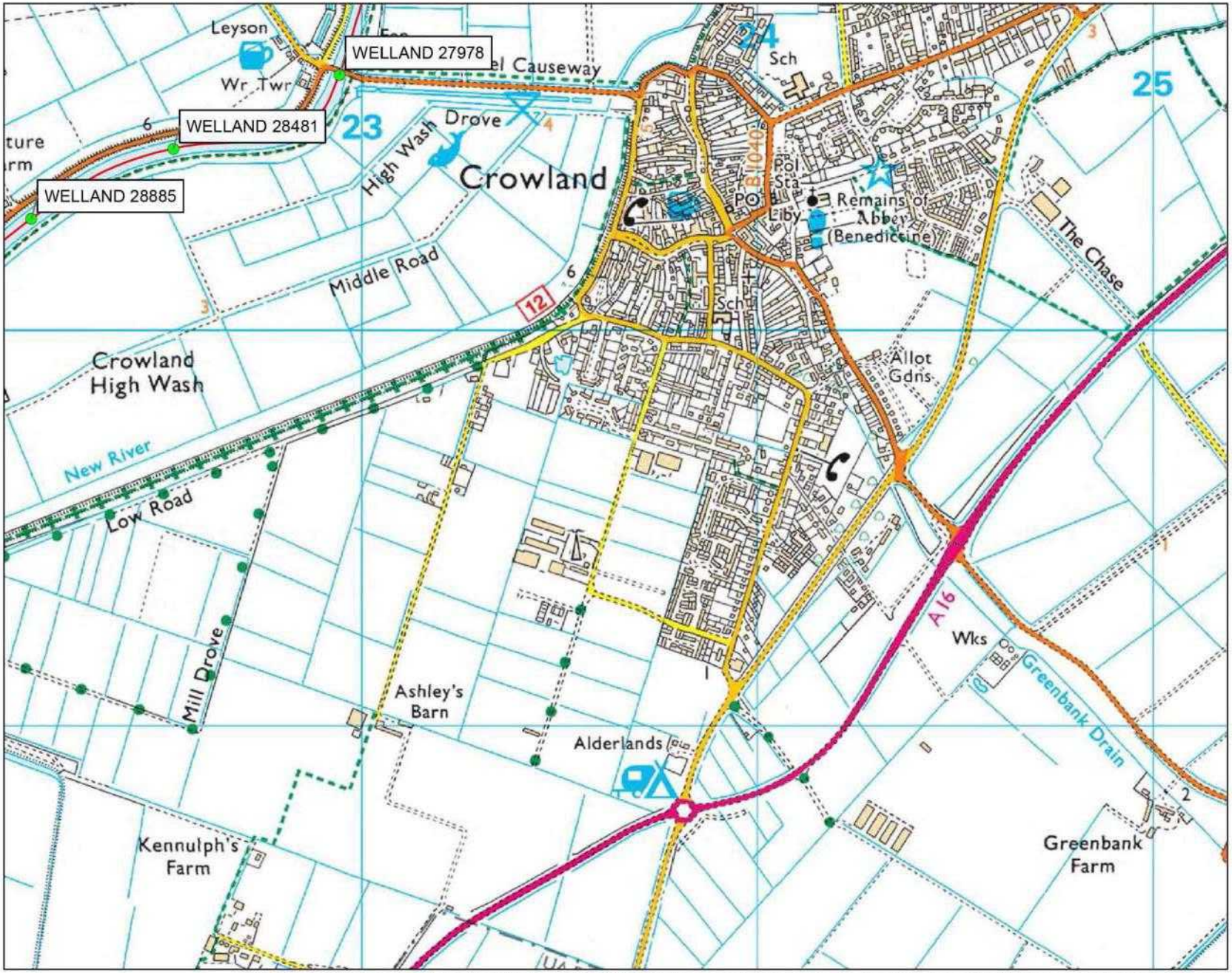
March 1947 on the River Welland near Cowbit

Created by the Partnerships and Strategic Overview Team, Lincoln

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Model Nodes Map centred on TF 23642 09605 - created December 2016 [Ref: CCN-2016-30824]



Environment Agency

Scale 1:10,000

N W E S

Model Nodes

Main River

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Datasheet [Ref: CCN-2016-30824]

Fluvial Flood Levels (mODN)

The fluvial flood levels for the model nodes shown on the attached map are set out in the table below. They are measured in metres above Ordnance Datum Newlyn (mODN).

			Annual Exceedance Probability - Maximum Water Levels (mODN)										
Node Label	**Easting**	**Northing**	**50% (1 in 2)**	**20% (1 in 5)**	**10% (1 in 10)**	**4% (1 in 25)**	**2% (1 in 50)**	**1.33% (1 in 75)**	**1% (1 in 100)**	**1% (1 in 100) inc 20% Climate Change**	**0.5% (1 in 200)**	**0.1% (1 in 1000)**	**0.1% (1 in 1000) inc 20% Climate Change**
WELLAND 27978	522946	310645	4.22	4.61	4.73	4.83	4.89	4.91	4.93	4.96	4.96	4.96	4.97
WELLAND 28481	522526	310459	4.24	4.63	4.75	4.86	4.92	4.95	4.96	5.00	5.00	5.00	5.02
WELLAND 28885	522167	310283	4.25	4.65	4.77	4.88	4.95	4.97	4.99	5.03	5.03	5.03	5.05

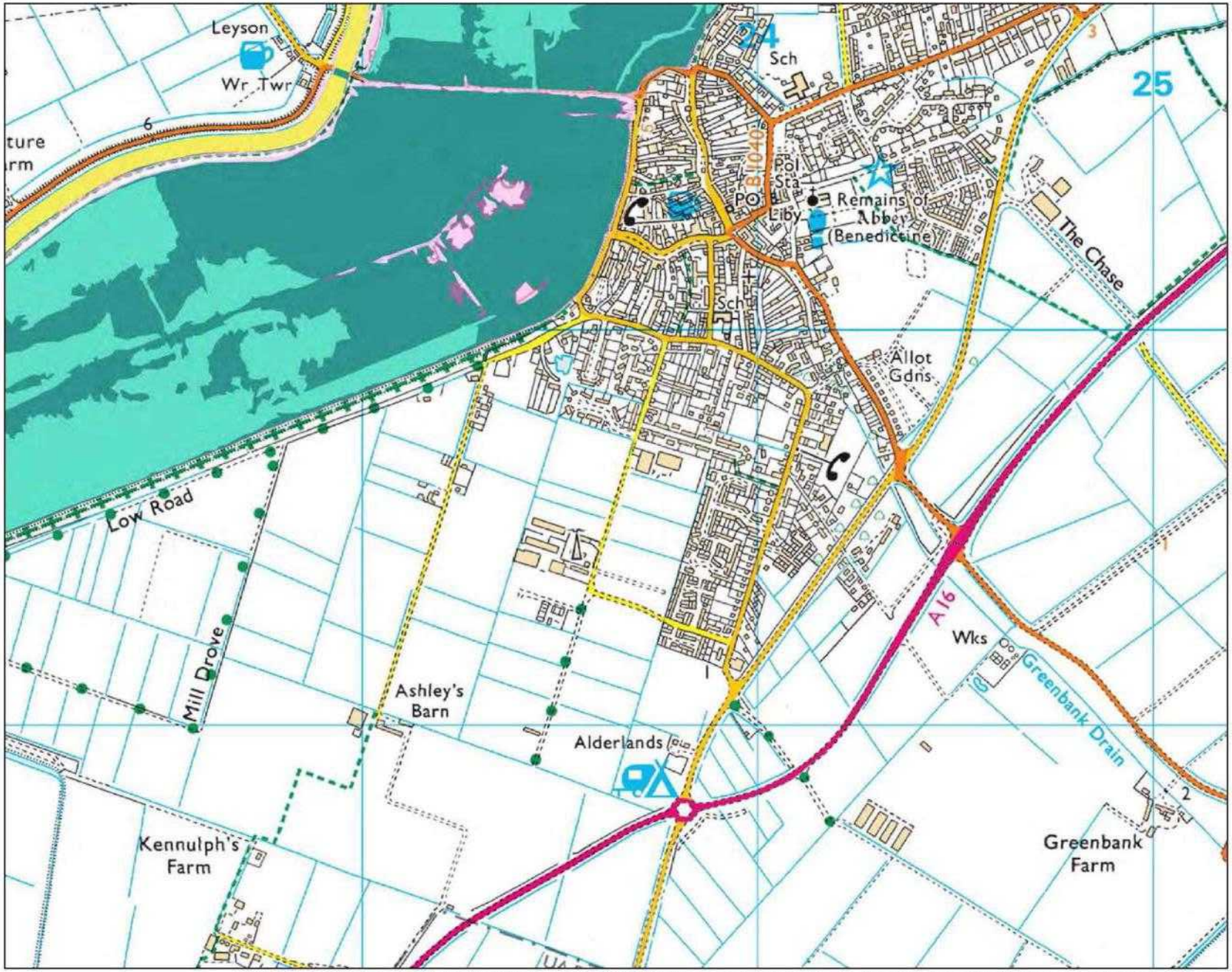
Fluvial Flood Flows (m^3/s)

The fluvial flood flows for the model nodes shown on the attached map are set out in the table below. They are measured in metres cubed per second (m^3/s).

			Annual Exceedance Probability - Maximum Flows (m^3/s)										
Node Label	**Easting**	**Northing**	**50% (1 in 2)**	**20% (1 in 5)**	**10% (1 in 10)**	**4% (1 in 25)**	**2% (1 in 50)**	**1.33% (1 in 75)**	**1% (1 in 100)**	**1% (1 in 100) inc 20% Climate Change**	**0.5% (1 in 200)**	**0.1% (1 in 1000)**	**0.1% (1 in 1000) inc 20% Climate Change**
WELLAND 27978	522946	310645	54.06	68.96	75.06	84.87	97.74	104.02	108.72	115.32	115.20	116.81	118.44
WELLAND 28481	522526	310459	54.05	68.96	74.97	84.94	97.75	104.02	108.72	115.32	115.20	116.81	118.44
WELLAND 28885	522167	310283	54.05	68.95	74.90	84.99	98.24	105.40	110.76	120.55	120.32	122.80	125.34

Modelled Flood Extents (with defences)

Map centred on TF2364209605 - created December 2016 [Ref: CCN-2016-30824]



Environment Agency

Scale 1:10,000

N W E S

Modelled Flood Extents (with defences)

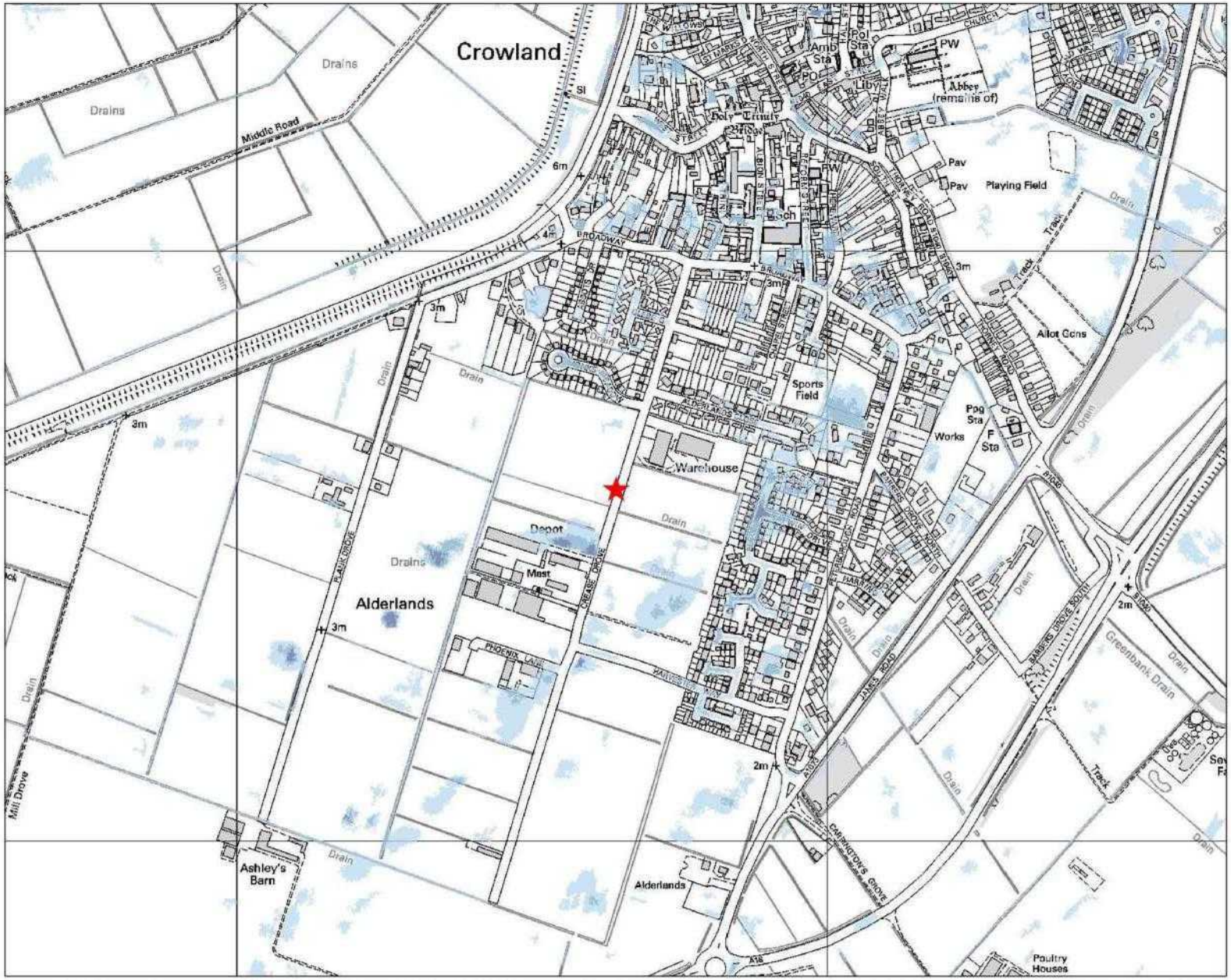
- 50% (1 in 2) Fluvial Event
- 20% (1 in 5) Fluvial Event
- 5% (1 in 20) Fluvial Event
- 4% (1 in 25) Fluvial Event
- 1% (1 in 100) Fluvial Event
- 1% (1 in 100) inc Climate Change
- 0.1% (1 in 1000) Fluvial Event
- 0.1% (1 in 1000) Fluvial Event inc Climate Change

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Risk of flooding from Surface Water centred TF2364209594 CCN-2016-30824 December 2016



Environment Agency

Scale 1:10,000

N W E S

Likelihood of flooding from Surface Water

- High
- Medium
- Low
- Very Low

Likelihood of flooding from Surface Water

High:	Greater than or equal to 1 in 30 (3.3%) chance in any given year
Medium:	Less than 1 in 30 (3.3%) but greater than or equal to 1 in 100 (1%) chance in any given year
Low:	Less than 1 in 100 (1%) but greater than or equal to 1 in 1,000 (0.1%) chance in any given year
Very Low:	Less than 1 in 1,000 (0.1%) chance in any given year

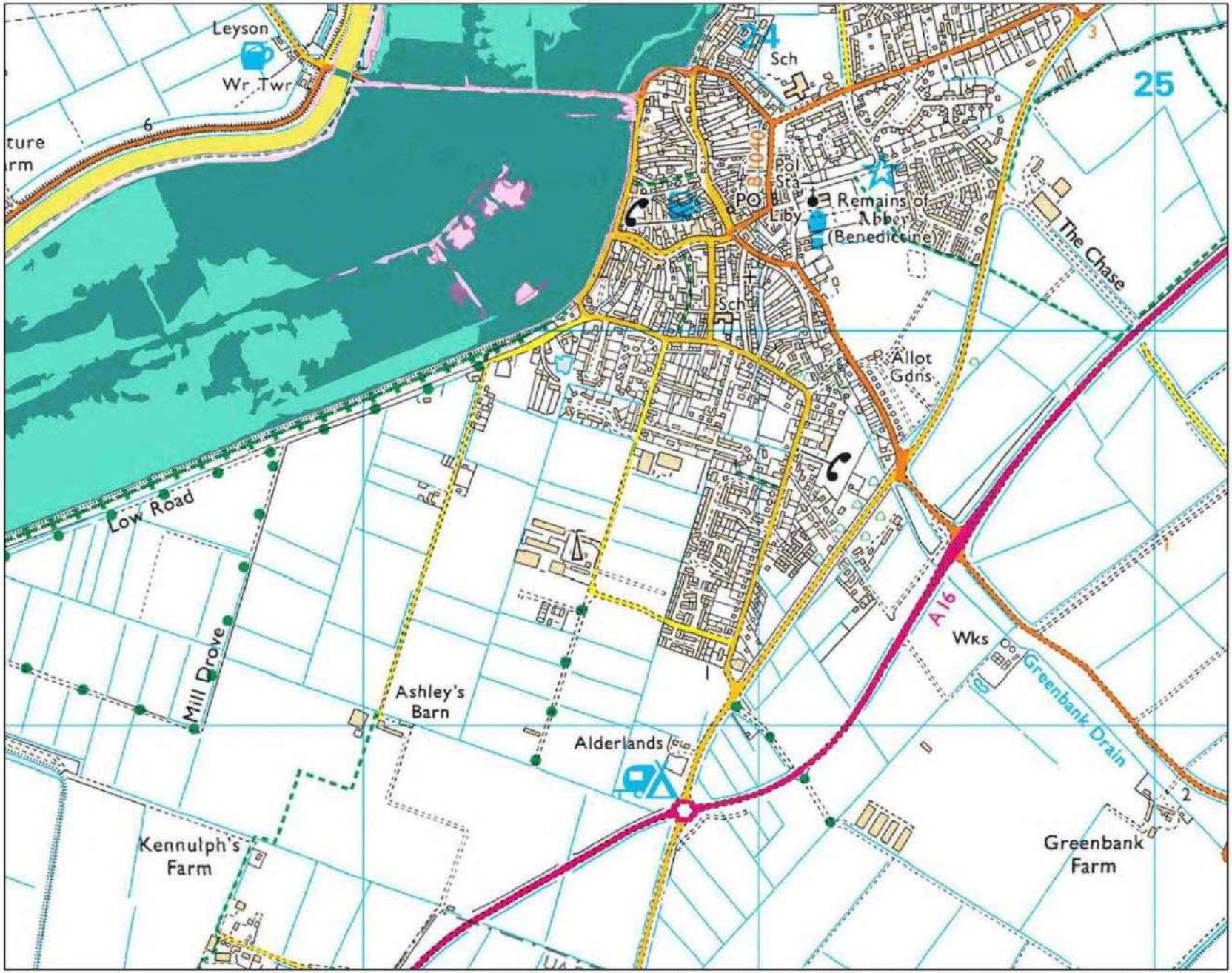
This information is shown on the Risk of Flooding from Surface Water map on our website.

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Modelled Flood Extents (with defences)

Map centred on TF2364209605 - created December 2016 [Ref: CCN-2016-30824]



Environment Agency

Scale 1:10,000

N W E S

Modelled Flood Extents (with defences)

- 50% (1 in 2) Fluvial Event
- 20% (1 in 5) Fluvial Event
- 5% (1 in 20) Fluvial Event
- 4% (1 in 25) Fluvial Event
- 1% (1 in 100) Fluvial Event
- 1% (1 in 100) inc Climate Change
- 0.1% (1 in 1000) Fluvial Event
- 0.1% (1 in 1000) Fluvial Event inc Climate Change

Created by the Partnerships and Strategic Overview Team, Lincoln

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Contact Us: National Customer Contact Centre, PO Box 544, Rotherham, S60 1BY. Tel: 03708 506 506 (Mon-Fri 8-6). Email: enquiries@environment-agency.gov.uk

Lucy Buttery
South Holland District Council
Planning & Development
Council Offices Priory Road
Spalding
Lincolnshire
PE11 2XE

Our ref: AN/2018/127651/01-L01
Your ref: H02-0575-18

Date: 13 July 2018

Dear Lucy

Erection of 47 dwellings with associated garaging, roads and sewers
Crease Drove Crowland

Thank you for referring the above application, which was received on 02 July 2018.

Environment Agency position
In the absence of an acceptable flood risk assessment (FRA) we **object** to the above application for the following reason:

Reason
The Flood Risk Assessment (FRA) undertaken by Inspire Design and Development (ref: AHL-1356-01-FRA-001, dated May 2018) submitted with this application does not comply with the requirements of the National Planning Policy Framework (NPPF) as set out in paragraph 30 of the flood risk and coastal change chapter of the Planning Practice Guidance (PPG). The submitted FRA does not therefore, provide a suitable basis for assessment to be made of the flood risks arising from the proposed development.

In particular the FRA does not set the finished floor levels of the proposed development at an appropriate level. The South Holland Depth Hazard Mapping for the 2115, 1% scenario shows a depth of between 1m - 1.6m. as such, proposals must have a minimum of 2 storey, with finished floor levels set a minimum of 1m above existing ground level, flood resilient construction to a height 300mm above the predicted flood depth, and demountable defences to 600mm above FFL.

Please note that the standard of protection for this site is 1%, not 0.1% as stated in the FRA.

Environment Agency
Nene House (Pytchley Lodge Industrial Estate),
Pytchley Lodge Road, Kettering, Northants, NN15 6JQ
Email: LNplanning@environment-agency.gov.uk

Customer services line: 03708 506 506
Calls to 03 numbers cost the same as calls to standard geographic numbers (i.e. numbers beginning with 01 or 02).

Cont/d..

Overcoming our objection
The applicant can overcome our objection by submitting a FRA which covers the deficiencies highlighted above and demonstrates that the development will not increase risk elsewhere and where possible reduces flood risk overall. If this cannot be achieved we are likely to maintain our objection to the application.

We ask to be re-consulted with the results of the FRA. We will provide you with bespoke comments within 21 days of receiving formal reconsultation.

Please note that our advice has not considered the risk of flooding from other sources, such as groundwater, drainage systems, reservoirs, canals or ordinary watercourses. Your Authority will therefore need to be satisfied that the proposed development is also in accordance with other requirements of the NPPF.

If you are minded to approve the application contrary to this advice, we request that you contact us to allow further discussion and/or representations from us.

Should you require any additional information, or wish to discuss these matters further, please do not hesitate to contact me on the number below.

Yours sincerely

Mrs Sharon Nolan
Sustainable Places Planning Adviser

Direct dial 01536 385229
Direct fax 01536 411354
Direct e-mail sharon.nolan@environment-agency.gov.uk

End

Sibley, Sally

From: Nolan, Sharon <Sharon.Nolan@environment-agency.gov.uk>
Sent: 13 July 2018 14:48
To: _planningadvice
Subject: H02-0575-18 Crease Drove Crowland
Attachments: AN.2018.127651.01-L01.pdf

This message originated from outside your organization

Dear Sir/Madam

Please find attached a copy of the Environment Agency's response to the above application.

If I can be of any further assistance please do not hesitate to contact me on the number below.

Kind regards,

Sharon Nolan
Planning Adviser

Our team mail box has changed to LNplanning@environment-agency.gov.uk

Lincolnshire and Northamptonshire Area
Environment Agency
Nene House, Pytchley Lodge Road, Kettering, NN15 6JQ
53525 (internal)
020302 53525 (external)
sharon.nolan@environment-agency.gov.uk





We have recently published new webpages for **LPAs**, **developers** and **Neighbourhood Planning Groups** giving clarification on our planning consultation role. Please refer to this to check if we can provide you with advice on your development proposals. For developments in areas at risk of flooding, please refer to our new **Flood Risk Assessment checklist**.

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We may have to make this message and any reply to it public if asked to under the Freedom of Information Act, Data Protection Act or for litigation. Email messages and attachments sent to or from any Environment Agency address may also be accessed by someone other than the sender or recipient, for business purposes.
Click here to report this email as spam

APPENDIX C IDB DATA

Location	Chainage	Peak 1 in 100 year fluvial flood level (mOD)		Peak 1 in 1000 year fluvial flood level (mOD)		Defence crest level (mOD)	Defence type	Freeboard (m) 1 in 100 Year Level		Freeboard (m) 1 in 1000 Year Level	
	(km)	2007	2055/2115	2007	2055/2115			2007	2055/2115	2007	2055/2115
	3.3	2.40	3.11	3.18	4.10	5.96	Bank with road on crest	3.56	2.85	2.78	1.86
	3.4	2.40	3.11	3.18	4.10	5.93	Bank with road on crest	3.53	2.82	2.75	1.83
	3.5	2.40	3.11	3.18	4.10	5.90	Bank with road on crest	3.50	2.79	2.72	1.80
	3.6	2.40	3.11	3.18	4.10	5.87	Bank with road on crest	3.47	2.76	2.69	1.77
	3.7	2.40	3.11	3.18	4.10	5.85	Bank with road on crest	3.45	2.74	2.67	1.75
	3.8	2.40	3.11	3.18	4.10	5.82	Bank with road on crest	3.42	2.71	2.64	1.72
	3.9	2.40	3.11	3.18	4.10	5.80	Bank with road on crest	3.40	2.69	2.62	1.70
	4.0	2.40	3.11	3.18	4.10	5.77	Bank with road on crest	3.37	2.66	2.59	1.67
	4.1	2.40	3.11	3.18	4.10	5.80	Bank with road on crest	3.40	2.69	2.62	1.70
	4.2	2.40	3.11	3.18	4.10	5.83	Bank with road on crest	3.43	2.72	2.65	1.73
Toll Bar Road	4.3	2.40	3.11	3.18	4.10	5.87	Bank with road on crest	3.47	2.76	2.69	1.77
	4.4	2.40	3.11	3.18	4.10	5.90	Bank with road on crest	3.50	2.79	2.72	1.80
	4.5	2.40	3.11	3.18	4.10	5.93	Bank with road on crest	3.53	2.82	2.75	1.83
	4.6	2.40	3.11	3.18	4.10	5.92	Bank with road on crest	3.52	2.81	2.74	1.82
	4.7	2.40	3.11	3.18	4.10	5.91	Bank with road on crest	3.51	2.80	2.73	1.81
Sone Gate, Cowbit	4.8	2.40	3.11	3.18	4.10	5.90	road bank with road on cre	3.50	2.79	2.72	1.80
	4.9	2.40	3.11	3.18	4.10	5.89	road bank with road on cre	3.49	2.78	2.71	1.79
	5.0	2.40	3.11	3.18	4.10	5.88	road bank with road on cre	3.48	2.77	2.70	1.78
	5.1	2.40	3.11	3.18	4.10	5.89	road bank with road on cre	3.49	2.78	2.71	1.79
	5.2	2.40	3.11	3.18	4.10	5.89	road bank with road on cre	3.49	2.78	2.71	1.79
	5.3	2.40	3.11	3.18	4.10	5.90	road bank with road on cre	3.50	2.79	2.72	1.80
	5.4	2.40	3.11	3.18	4.10	5.90	road bank with road on cre	3.50	2.79	2.72	1.80
	5.5	2.40	3.11	3.18	4.10	5.91	road bank with road on cre	3.51	2.80	2.73	1.81
Backgate, Cowbit	5.6	2.40	3.11	3.18	4.10	5.92	Bank with road on crest	3.52	2.81	2.74	1.82
	5.7	2.40	3.11	3.18	4.10	5.93	Bank with road on crest	3.53	2.82	2.75	1.83
	5.8	2.40	3.11	3.18	4.10	5.94	Bank with road on crest	3.54	2.83	2.76	1.84
	5.9	2.40	3.11	3.18	4.10	5.95	Bank with road on crest	3.55	2.84	2.77	1.85
	6.0	2.40	3.11	3.18	4.10	5.96	Bank with road on crest	3.56	2.85	2.78	1.86
	6.1	2.40	3.11	3.18	4.10	5.91	Bank with road on crest	3.51	2.80	2.73	1.81
	6.2	2.40	3.11	3.18	4.10	5.86	Bank with road on crest	3.46	2.75	2.68	1.76
	6.3	2.40	3.11	3.18	4.10	5.82	Bank with road on crest	3.42	2.71	2.64	1.72
	6.4	2.40	3.11	3.18	4.10	5.77	Bank with road on crest	3.37	2.66	2.59	1.67
	6.5	2.40	3.11	3.18	4.10	5.72	Bank with road on crest	3.32	2.61	2.54	1.62

Porter, Karen

From: N K W Design <natalie@nkwdesign.co.uk>
Sent: 07 August 2018 14:53
To: _planningadvice
Cc: 'Barrie Gibson'
Subject: RE: Invalid App - H02-0673-18 - Applicant: Ashwood Homes
Attachments: 1356 P01 Crease Drove FRA.PDF; 1233 planning layout Rev B 1.8.18.pdf

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Dear Sirs,

Further to the email received below, please find attached the updated FRA and Planning Layout.

I would be most grateful for confirmation that the Planning Application can now be registered as soon as convenient.

Please do not hesitate to contact me should you have any further queries.

Regards
Natalie

Natalie Wallinger

NKW Design Ltd
45 York Road
Wollaston
Northamptonshire
NN29 7SG

T: 01933 666130
M: 07957 837164
Company Registration Number 10617716

From: planningadvice@sholland.gov.uk [mailto:planningadvice@sholland.gov.uk]
Sent: 18 July 2018 09:49
To: natalie@nkwdesign.co.uk
Subject: Invalid App - H02-0673-18 - Applicant: Ashwood Homes

H02-0673-18