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Ref: 2867-15

2 BEDROOM CHALET BUNGALOW & DETACHED GARAGE
ADJACENT 5 PUDDINGPOKE LANE
LUTTON
SPALDING
LINCS
PE12 9HZ

FOR

MRS C MOUNTAIN



PLANNING, DESIGN & ACCESS STATEMENT

VAT No. 552 6200 69
Registered in England No: 5667107
Registered Address: Bank House, Broad Street, Spalding, PE11 1TB

Ref: 2867-15

2 BEDROOM CHALET BUNGALOW & DETACHED GARAGE
ADJACRNT 5 PUDDINGPOKE LANE
LUTTON
SPALDING
LINCS
PE12 9HZ

The application is to acquire Town & Country Planning Permission for a 2 bedroom chalet bungalow with a detached single garage for the benefit of Mrs C Mountain.

This application is to be submitted following refusal of application H12-1061-15 for a 4 bedroom house and detached single garage.

This application hopefully deals with the refusal of application H12-1061-15 an also complies with the flood risk issues.

All other details can be found in the Planning, Design & Access Statement that accompanied application H12-1061-15 (see appendix).

APPLICATION PLANS

2867-15-11	Site Layout Plan
2867-15-12	Floor Plans & Elevations
2867-15-13	Detached Single Garage

G R Merchant
May 2016

APPENDIX

PLANNING, DESIGN & ACCESS STATEMENT WHICH ACCOMPANIED APPLICATION H12-1061-15

Ref: 2867-15

PLANNING, DESIGN & ACCESS STATEMENT WHICH ACCOMPANIED APPLICATION H12-1061-15

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Ref: 2867-15

4 BEDROOM HOUSE & DETACHED GARAGE
ADJACRNT 5 PUDDINGPOKE LANE
LUTTON
SPALDING
LINCS
PE12 9HZ

The application is to acquire Town & Country Planning Permission for a 4 bedroom house with detached single garage for the benefit of Mrs C Mountain.

Mr Mountain has been attempting to develop this site for several years with no success, unfortunately he has recently died. This application, by Mrs Mountain, is influenced by the proposals map which is out for public consultation which has re-introduced a residential development boundary for Lutton.

Mr Mountain was born and bred in the village and was extremely passionate about Lutton and witnessed in the last 50 years the demise of several village facilities, the most recent being the loss of the Post Office. Currently the village has the following:-

- Church
- Village Hall
- Villager Green
- Public House
- Primary School

The re-introduction of a residential boundary will help to sustain these facilities.

Negotiations have taken place with the South Holland Internal Drainage Board in relationship to their Lutton Village Drain and agreement has been agreed in principle to their Bye-law 10.

The following part of this statement is as suggested by the 'Commission for Architecture and the Built Environment' (CABE).

USE

The current site is a semi-derelict area which is surplus to the requirements of the applicant and her family and has a potential to become a village eye-sore.

AMOUNT

A single dwelling house has been proposed to be occupied by the applicant's daughter and family.

LAYOUT

A single four bedroom family house with detached garage has been proposed which enables the development to comply with Bye-law 10 of the South Holland Internal Drainage Board.

SCALE

A single dwelling only is proposed to enable the South Holland Internal Drainage Board Bye-laws to be complied with.

LANDSCAPING

Landscaping and boundary treatments to be determined by conditions to enable negotiations to be finalised with the Drainage Board.

APPEARANCE

White or cream UPVC windows and doors with bricks and tiles agreed by condition due to the unreliability of supplies.

ACCESS

The existing access off Puddingpoke Lane to be utilised. Access to and around the property will be determined by Part M of the Building Regulations.

FLOOD RISK

The site is classified as being in Flood Zone 3 of the Environment Agency flood map but is not at risk from flooding in the South Holland Strategic Flood Risk Assessment map, irrespective of this the application is accompanied by a Flood Risk Assessment by the Geoff Beel Consultancy.

APPLICATION PLANS

2867-15-01	Location & Site Plans
2867-15-02	Site Layout Plan
2867-15-03A	Floor Plans & Elevations – 4 Bedroom House
2867-15-04	Floor Plans & Elevations – Single Garage

G R Merchant
November 2015

Ref: 2867-15

APPENDIX

LOCATION PLAN 1/2500

'GOOGLE' SITE PLANS

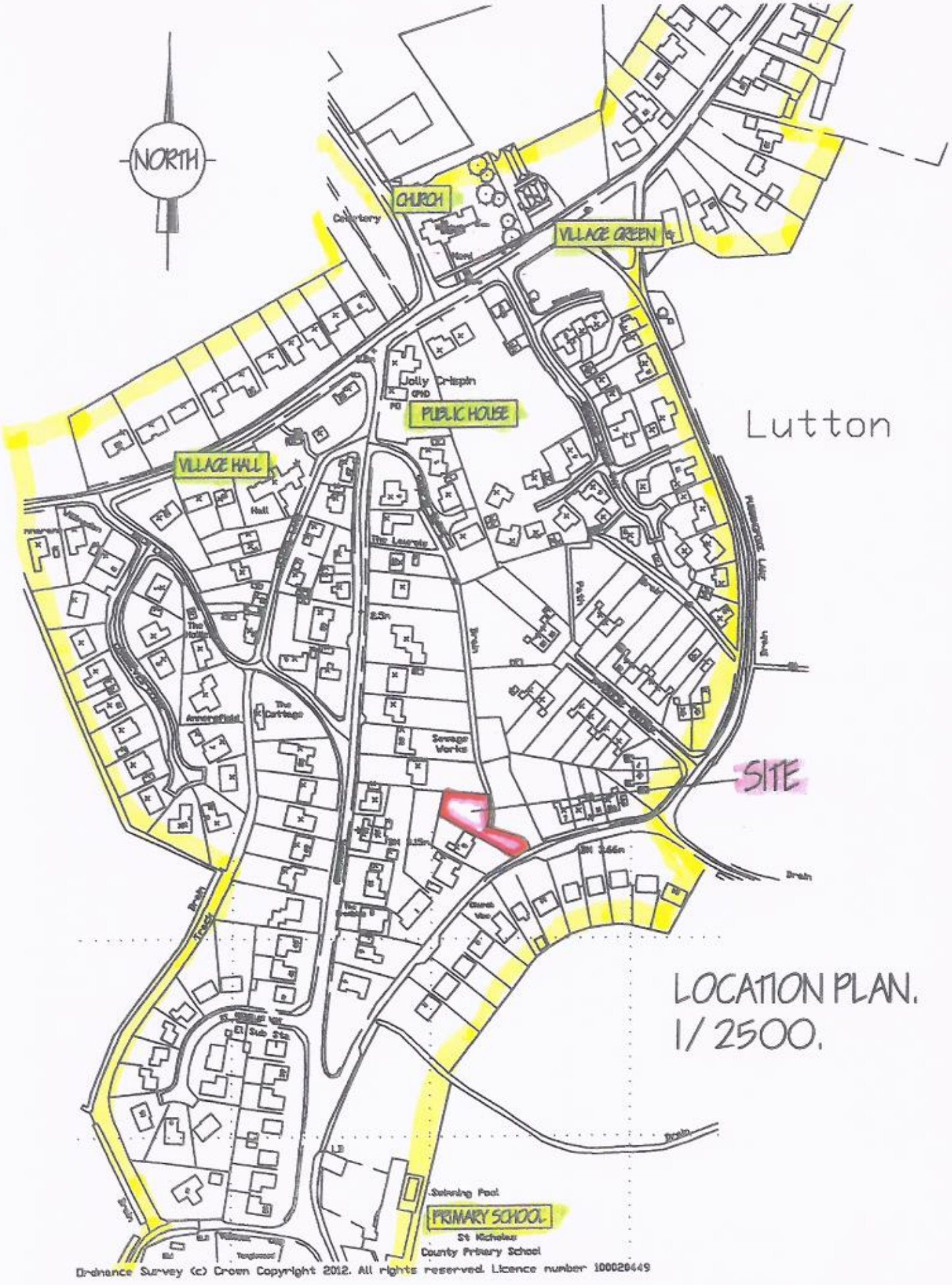
PROPOSED DEVELOPMENT BOUNDARY PLAN FOR LUTTON
(UNDER PUBLIC CONSULTATION – NOVEMBER)

FLOOD RISK MAPS
- ENVIRONMENT AGENCY
- SOUTH HOLLAND STRATEGIC FLOOD RISK MAP
- FLOOD RISK ASSESSMENT BY GEOFF BEEL CONSULTANCY

FLOOD RESILIENT CONSTRUCTION

Ref: 2867-15

LOCATION PLAN 1/2500



LOCATION PLAN.
1/2500.

Ref: 2867-15

'GOOGLE' SITE PLANS



Google earth

feet 4000

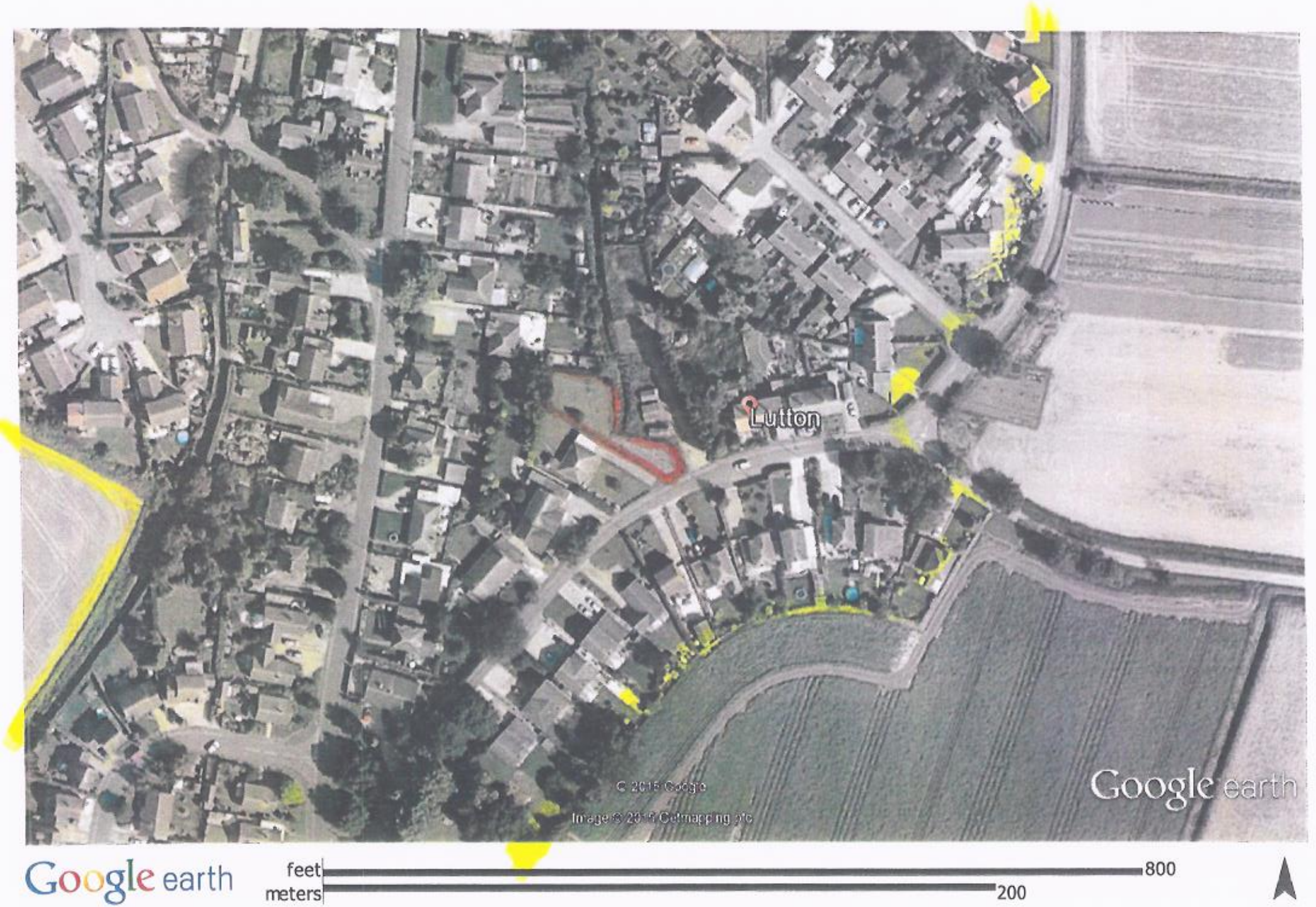
km 1



Google earth

feet 1000

meters 400


Lutton
© 2015 Google
Image © 2015 Cnesmapping.ptc
Google earth
Google earth
feet
meters
800
200

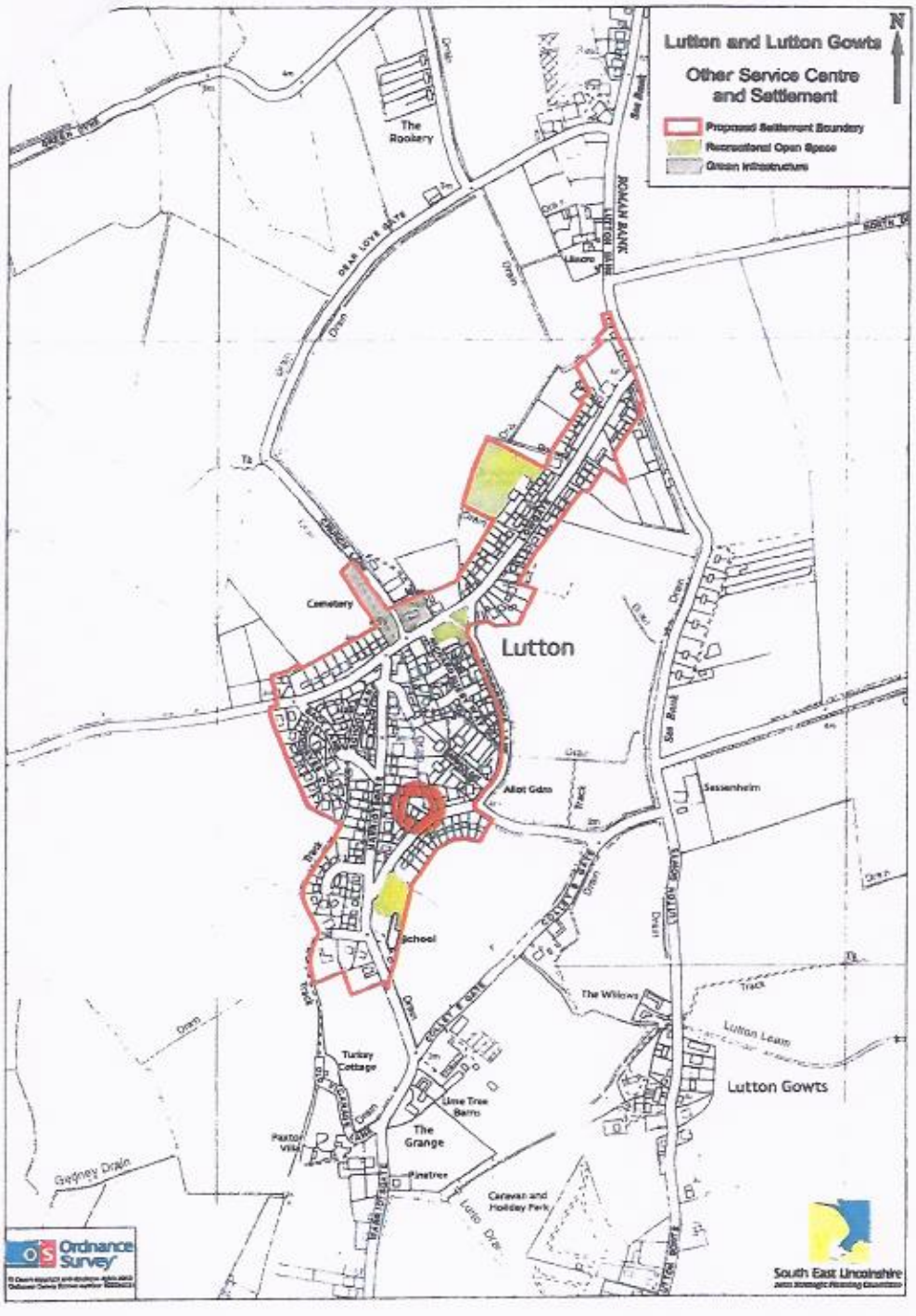


Google earth

feet 200
meters 70

Ref: 2867-15

PROPOSED DEVELOPMENT BOUNDARY PLAN FOR LUTTON (UNDER PUBLIC CONSULTATION – NOVEMBER)


Lutton and Lutton Gowts
Other Service Centre and Settlement
Proposed Settlement Boundary
Recreational Open Space
Green Infrastructure
N
The Rookery
Dean Love Gate
Roman Bank
Cemetery
Lutton
Allot Gdns
Sessenheim
School
The Willows
Lutton Leam
Lutton Gowts
Turkey Cottage
Lime Tree Barns
The Grange
Pinetree
Caravan and Holiday Park
Gedney Drain
Ordnance Survey
South East Lincolnshire

Ref: 2867-15

FLOOD RISK MAPS
- ENVIRONMENT AGENCY
- SOUTH HOLLAND STRATEGIC FLOOD RISK MAP
- FLOOD RISK ASSESSMENT BY GEOFF BEEL CONSULTANCY

Environment Agency

Enter a postcode or place name: PE12 9HZ Go

Other topics for this area... Flood Map for Planning (Rivers and Sea)

Flood Map for Planning (Rivers and Sea)

Map legend

Click on the map to see what Flood Zone (National Planning Policy Guidance definitions) the proposed development is in.

- Flood Map for Planning (Rivers and Sea)
  - Flood Zone 3
  - Flood Zone 2
  - Flood defences (Not all may be shown*)
  - Areas benefiting from flood defences (Not all may be shown*)
- Main River Line
  - Main River Line
- Other national environmental organisations
  - Natural Resources Wales Area of responsibility
  - Scottish Environment Protection Agency Area of responsibility

Map of PE12 9HZ at scale 1:20,000 Other maps Data search Text only version



Customers in Wales - From 1 April 2013 Natural Resources Wales (NRW) has taken over the responsibilities of the Environment Agency in Wales.
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This service is designed to inform members of the public, in line with our terms and conditions. For business or commercial use, please contact us.

More about flooding:

Understanding the Flood Map for Planning (Rivers and Sea)

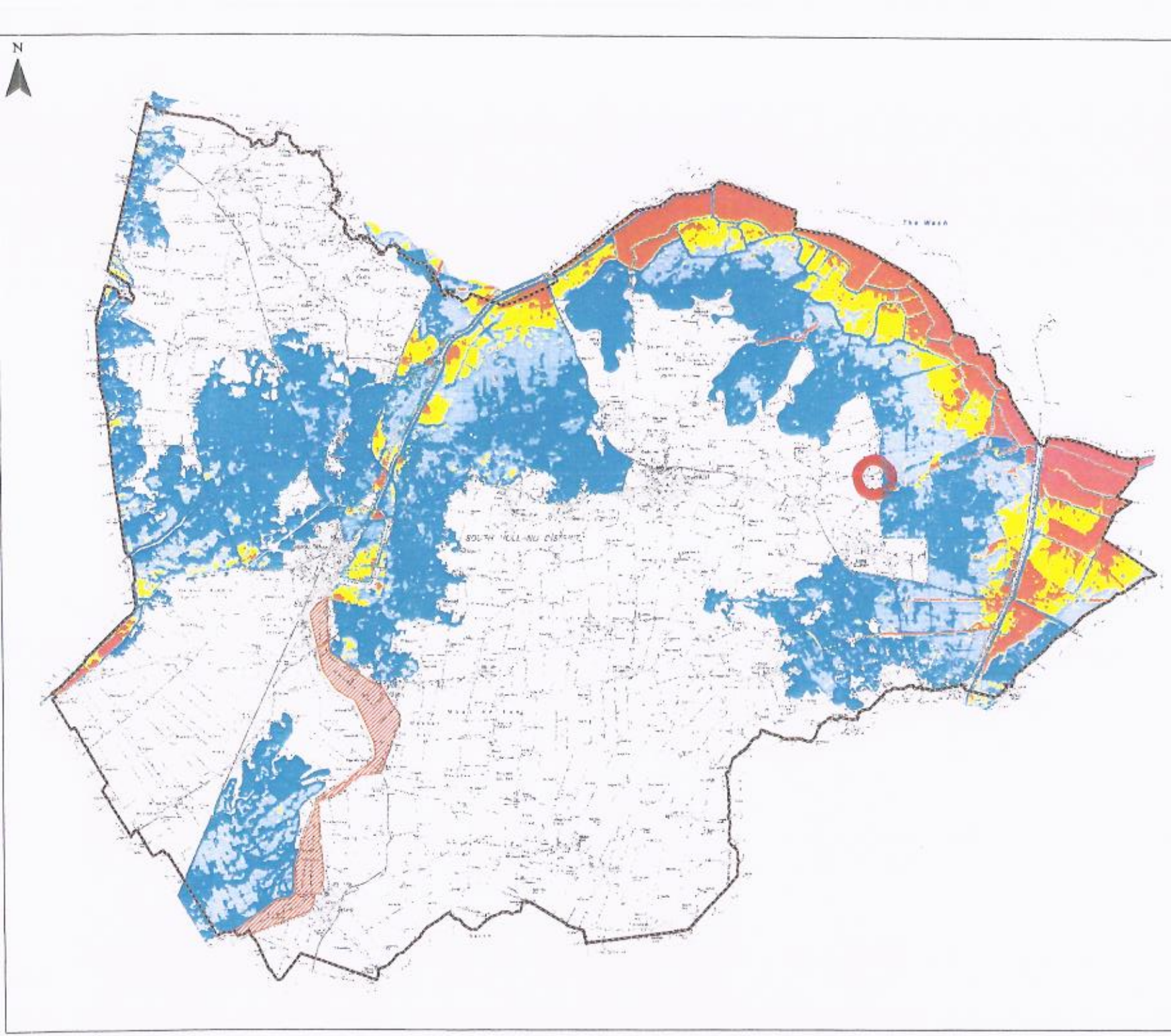
A more detailed explanation to help you understand the flood map shown above.

Current flood warnings

We provide flood warnings online 24 hours a day. Find out the current flood warning status in your local area.

* **Legend Information:** Flood defences and the areas benefiting from them are gradually being added through updates. Please contact your local environment agency office for further details.

creating a better place



NOTES

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

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

3. The consequences designated as being an Actual Risk arise from direct overtopping of defences, where this would occur, together with assumed breach failure of some defences. Breach failure has been assumed to occur in places where the freeboard between peak sea or river water level and the defence crest level is less than the minimum desirable for structural security of the defence.

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. The potential flooding consequences relate to flood probability bands as follows:

Probability Band	Annual probability of Flooding from a river (fluvial)	from the sea (tidal)
Low	<0.1%	<0.1%
Medium	1%-0.1%	0.5%-0.1%
High	>1%	>0.5%

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

7. Land outside South Holland District is not considered.

8. This map shows the extents only of the flooding probability bands referred to the map Title

Map Legend

Peak Depth

- 0m - 0.5m
- 0.5m - 1m
- 1m - 1.5m
- >1.5m
- Functional Floodplain
- South Holland District Boundary

REV	DATE	REMARKS

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COUNCIL OFFICES
PRIORY ROAD
SPALDING
LINCOLNSHIRE
PE11 2XE

UPDATE OF STRATEGIC FLOOD RISK ASSESSMENT

Actual Peak Depth
District - Year 2115
1% Fluvial / 0.5% Tidal Event Probability

DATE OF ISSUE: January 2010 REV NO:

SCALE: 1 : 60,000 @ A1

MAP NO:

FLOOD RISK ASSESSMENT FOR PROPOSED RESIDENTIAL DEVELOPMENT AT 5 PUDDINGPOKE LANE, LUTTON, SPALDING, LINCS.

FINAL REPORT

GEOFF BEEL CONSULTANCY

NOVEMBER 2015

GCB/MERCHANT

DISCLAIMER

This document has been prepared solely as a Flood Risk Assessment in support of a planning application for proposed Residential Development at land adjacent to 5 Puddingpoke Lane, Lutton, Spalding, Lincs. "Geoff Beel Consultancy" accepts no responsibility or liability whatsoever for any use made of this document other than by the client "Mrs C Mountain" for the purposes it was originally commissioned and prepared. All comments and opinions made are based upon information available to "Geoff Beel Consultancy" during the necessary investigative process, and the conclusions and recommendations could therefore, differ in the event of material subsequently being found erroneous, incomplete or misleading. "Geoff Beel Consultancy" therefore, accepts no liability should this prove to be the case.

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2.0 LOCATION

3.0 THE SITE AND SEQUENTIAL TEST

4.0 EXISTING FLOOD ALLEVIATION MEASURES

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6.0 EXTENT OF KNOWN FLOODING

7.0 PROBABILITIES AND TRENDS OF FLOODING

8.0 IMPACTS OF FLOODING

9.0 RESIDUAL RISKS – EXTREME EVENTS

10.0 CONCLUSIONS AND RECOMMENDATIONS

Fig 1 - Location Plan & Site Plan – G R Merchant drg. no. 2867-15-01

Fig 2 - Site Layout Plan – G R Merchant drg. No. 2867-15-02

Fig 3 - Floor Plans & Elevations – G R Merchant drg. no. 2867-15-03

Fig 4 - Environment Agency Flood Zone Map

Fig 5 - South Holland District Council Strategic Flood Risk Assessment Flood Zone Map – Residual Depth (2115)

Fig 6 - Environment Agency Tidal Hazard Mapping – Depth, Hazard & Velocity for 1 in 200 year event (2115) – CCN/2013/35491

Fig 7 - South Holland Internal Drainage Board District Plan

1.0 INTRODUCTION

1.1 A full planning application is to be made by G R Merchant Ltd for proposed residential development on behalf of Mrs C Mountain at land adjacent to 5 Puddingpoke Lane, Lutton, Spalding, Lincs.

1.2 A Flood Risk Assessment is required before the permitted development may commence and meet the requirements and general conditions contained in Paragraph 9 of the Technical Guide to the National Planning Policy Framework (NPPF) for approval by the Environment Agency.

The site, as situated, is located within a defended Flood Zone 3, of the Environment Agency's Flood Zone Maps. The latest Agency Flood Maps have been created as a tool to raise awareness of flood risk with the public and our partner organisations, such as Local Authorities, Emergency Services and Drainage Authorities. The Maps do not take into account any flood defences.

The site is also shown in Flood Zone 1 of the South Holland District Council's Strategic Flood Risk Assessment Maps (2115).

The site is also located in the South Holland IDB drainage district.

1.3 Geoff Beel Consultancy was appointed on 3rd November 2015 to undertake a Flood Risk Assessment.

2.0 LOCATION

2.1 The development site is located west of Lutton Bank at 5 Puddingpoke Lane, Lutton. The National Grid Reference of the central point of the development is TF 43302525.

2.2 The position and extent of the site is shown on Fig 1 – Location Plan & Site Plan at the end of the document.

2.3 The site, located within the South Holland Internal Drainage Board district is shown within Flood Zone 3 as detailed on the Environment Agency Flood Zone Maps and in Flood Zone 1 of the Council's Strategic Flood Risk Assessment Map (2115) as defended by the Internal Drainage Board system and the Lutton Bank secondary defence with a crest level of 5.7m aOD.

3.0 THE SITE AND SEQUENTIAL TEST

3.1 The site is garden to 5 Puddingpoke Lane.

3.2 The area of development is approximately 0.10 hectare.

3.3 The proposed site layout consists the construction of a 2 storey dwelling with detached garage.

3.4 The Sequential Test and Exception Test will require to be applied by the Local Planning Authority but the development may be permitted as the site is protected against both the 1 in 200 year return period tidal event and the 1 in 100 year return period fluvial event and located in Flood Zone 1 of the Council's Strategic Flood Risk Assessment Map (2115).

4.0 EXISTING FLOOD ALLEVIATION MEASURES

4.1 The site is within a defended floodplain, as defined in Appendix 1 of the Environment Agency's 'Policy for the Protection of Floodplains' and is considered to be passive until such time as a flood greater than that for which the defences were designed occurs. The likelihood of flooding due to overtopping or failure of a flood defence embankment is considered to be small.

The South Holland Internal Drainage Board is protected by a combination of the River Welland tidal defences downstream of Spalding, the River Welland fluvial embankments as well as the River Nene tidal defences downstream of Foul Anchor.

4.2 The site and the surrounding land drains by gravity to a Board drain the Lutton Village Drain immediately east of the site and hence the Lutton Leam and Lutton Leam Outfall to the tidal River Nene downstream of the West Lighthouse.

4.3 The existing standard of drainage for the South Holland Internal Drainage Board is 1 in 50 years return period, compatible with the Department of the Environment, Food and Rural Affairs target level of service for rural drainage and flood defence works. Freeboard of 900mm is provided to the lowest land levels.

4.4 Current maintenance standards within the South Holland Internal Drainage Board and of the Environment Agency defences are generally very good.

During the operation and maintenance of its pumping stations, associated structures and channel systems, particularly those that could affect property, the Board seeks to maintain a general standard capable of providing flood protection to its district. A routine maintenance programme is in place to ensure that the Boards assets are commensurate with the standard of protection that is sought. However, bank slips, blocked culverts etc may occur from time to time and these matters are usually dealt with promptly.

5.0 POTENTIAL SOURCES OF FLOODING

5.1 Three potential sources of flooding have been identified as a result of this assessment:

a) local blockages to IDB main drain system.
b) storm return period of 1 in 50 years being exceeded
c) overtopping and breaching of defences of the tidal River Nene

5.2 The probability of flooding from source a) is low due to the maintenance standards already achieved and managed by the IDB.

The probability of flooding from b) is also low due to the South Holland IDB main drain design standard incorporating a minimum 900mm freeboard to the lowest land level which provides adequate storage in events greater than 1 in 50 years.

Previous historic rainfall events of 1968 and 1978, estimated to be greater than 1 in 100 year events, caused no flooding to any residential properties at the time and the Boards policy is to provide a standard of drainage which satisfies NPPF requirements of a 1 in 100 year return period for fluvial protection inclusive of the effects of climate change and developments to the arterial system enables a flexible approach to be adopted and meet the criteria for "sustainable urban drainage".

5.3 The flood embankments to the fluvial River Welland provide a 1 in 100 year return period level of protection in combination with the Crowland and Cowbit Washes. The flood embankments to the tidal River Welland and tidal River Nene provide a 1 in 200 year return period level of protection.

5.4 Soakaway drainage to BRE365 design requirements and Building Regulation approval will be installed.

5.5 More recent Tidal Hazard Mapping produced by the Environment Agency is shown in Fig 6 of this assessment.

The site is shown to be flooded to a depth of between 0.50 – 1.00m if a breach occurred to the River Nene tidal defences and the Lutton Bank also breached and it is necessary to mitigate against this remote risk.

Finished floor level has been raised 1.00m above existing ground floor level with flood resilient construction 300mm above finished floor level.

5.6 The developer should ensure that the eventual occupiers of the dwelling are sufficiently aware of the risk of flooding and the standard of the existing defences. The Environment Agency provides a Flood Warnings Service which includes Flood Warning Codes and uses direct warning methods where the risks and impacts of flooding are high. Indirect warnings are provided to all flood risk areas, even those a low risk of flooding. The main method is media broadcasts via local radio and also by television.

In addition to direct ad indirect food warnings, the Environment Agency operates a 24 hour a day Floodline Service providing advice and information on flooding by contacting 0845 988 1188 and the occupiers of the dwelling holding should register with the Floodline Direct Warnings Service to receive any future flood warnings.

6.0 EXTENT OF KNOWN FLOODING

6.1 During the preparation of this assessment, no evidence was discovered of the site being flooded or of any adjoining properties.

7.0 PROBABILITIES AND TRENDS OF FLOODING

7.1 The probability of this development flooding from localised drainage systems is very low.

7.2 The probability of the site flooding with water from any South Holland IDB main drain is less than 1% because of the standards of the existing flood defence systems, storage within existing drainage channels and the location of the site.

7.3 The probability of the site flooding with fluvial waters from any main river system is less than 1% because of the standards of the existing flood defences and the location of the site.

7.4 If under very extreme events, levels of floodwater from the South Holland IDB main drains or arterial systems rose to such an extent that the site was affected, the situation would not be sudden. It is very probable that sufficient time would be available to take precautionary actions to limit the extent and potential impact of flooding.

7.5 The water levels in the drainage channels will tend to rise as a result of the impacts of climate change. However the existing systems and defences together with the proposed floor levels 1.00m above existing ground level with flood resilient construction up to 300mm above finished floor level will be appropriate for the design life of the development (i.e. 100 years).

8.0 IMPACTS OF FLOODING

8.1 No significant impacts of flooding are anticipated.

8.2 Floor levels of the development will be at 1.00m above existing ground level with flood resilient construction up to 300mm above finished floor level which will offer protection against impacts arising from any extreme short duration, localised events.

8.3 The general location of the site within the catchment is such that if flooding occurred from any of the South Holland IDB main drain systems, then probably 2 to 3 days warning time would be available.

8.4 No displacement of water from the site will affect any adjoining properties. It is intended to provide soakaway drainage to BRE365 design requirement and building Regulations approval.

8.5 Safe and dry access/egress is available to the site from Puddingpoke Lane off Lutton Bank with carriageway level at 5.70m aOD in a southerly direction to Long Sutton.

9.0 RESIDUAL RISK – EXTREME EVENTS

9.1 The residual risk from extreme events is very low on this site, because of its location, within the South Holland IDB area and its location 5.00kms from the Wash and River Nene tidal defences.

9.2 The site is within Flood Zone 1 according to NPPF classification with a very low risk of flooding due to the current standards of drainage and flood defence and land levels. The site is not located within a Functional Flood Plain of any 'main river' or 'main drain'. The Environment Agency Flood Zone Maps have been produced irrespective of existing flood defences and standards of protection.

9.3 South Holland District Council in conjunction with the Environment Agency and the local IDB's within the Council area have carried out a Strategic Flood Risk Assessment of the whole District by appointed Consulting Engineers.

The Strategic Flood Risk Assessment has produced more definitive Flood Risk Maps than those published by the Environment Agency and at the same time has analysed flood return periods of all tidal and fluvial defences for years 2002 and 2115 to account for the effects of climate change.

Breach scenarios of embankments failing and/or being overtopped have also been carried out to establish Flood Risk Zones.

9.4 As a result of the Strategic Flood Risk Assessment; the South Holland Main Drain and associated IDB main drains have been determined as providing protection against a 1 in 100 year return period event both in years 2002 and 2115.

9.5 The development site has been identified outside of any Flood Risk Zone from the South Holland Main Drain and associated IDB main drain or the River Nene.

10.0 CONCLUSIONS AND RECOMMENDATIONS

10.1 As a result of the assessment, the following conclusions have been reached:-

- The proposed development is not in a Functional Floodplain. It is located in the Passive Floodplain protected by The Wash and River Nene tidal defences to a 1 in 200 year return period, (0.5%)

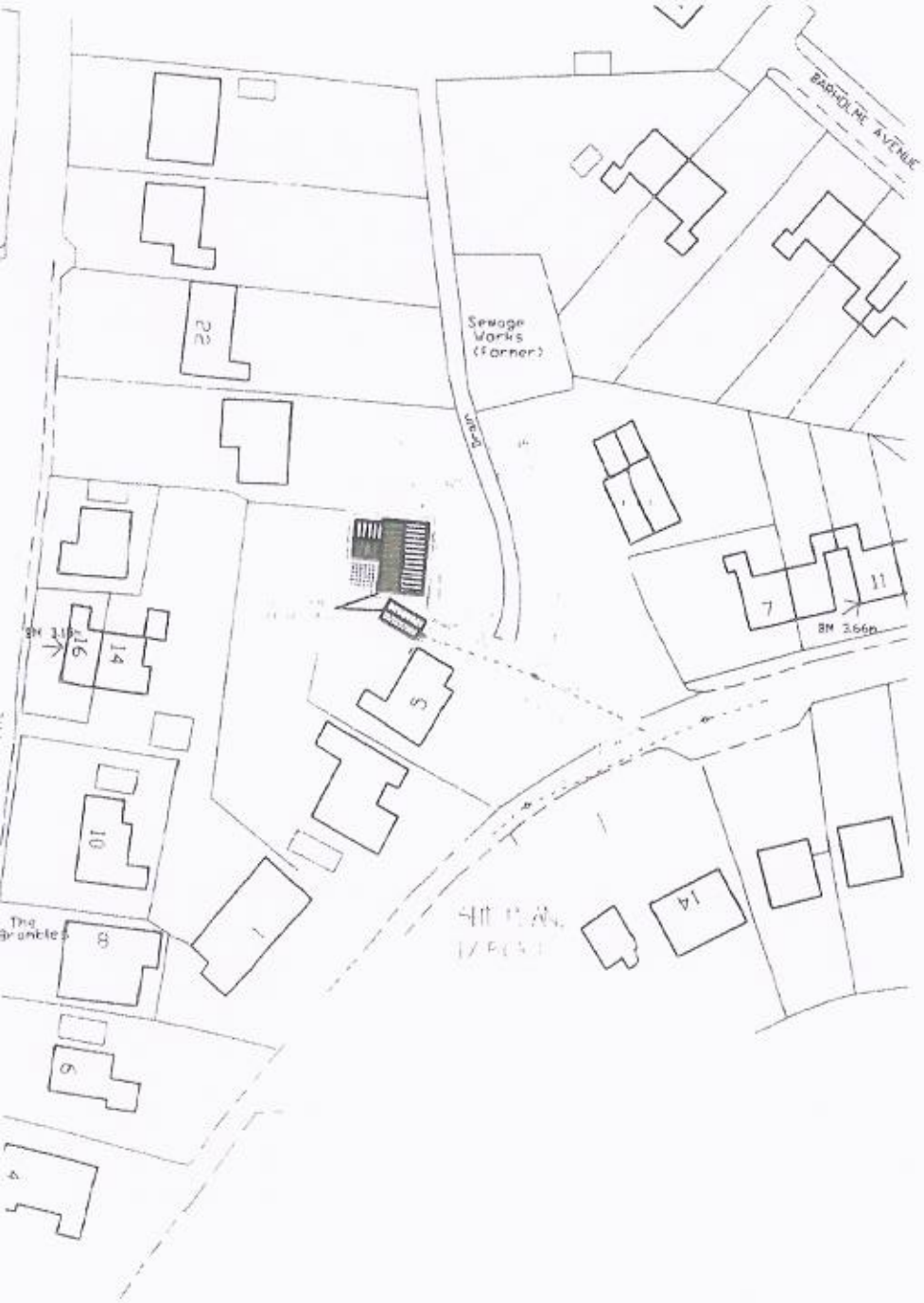
- The site is in Flood Zone 1 with the actual risk of site flooding from any Environment Agency river system being very low (less than 0.5%). The site has been identified in Flood Zone 1 of the South Holland District Council's Strategic Flood Risk Assessment Maps.

- Although the site is located within an Internal Drainage District with a minimum standard of drainage of 1 in 50 years, this accords with Defra guidelines for rural development. Freeboard to design water level of 900mm to lowest land level is available for events greater than 1 in 50 years providing further storage within the drainage channels.

- On site rainwater from the development will be discharged via soakaways to BRE 365 design requirement and Building Regulations approval.

- Finished floor level of the dwelling has been raised 1.00m above existing ground level with flood resilient construction up to 300mm above finished floor level.

- Land Drainage Byelaw Consent for all development within 9.00m of the Lutton Village Main Drain will be required from the South Holland IDB.





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Project

Client

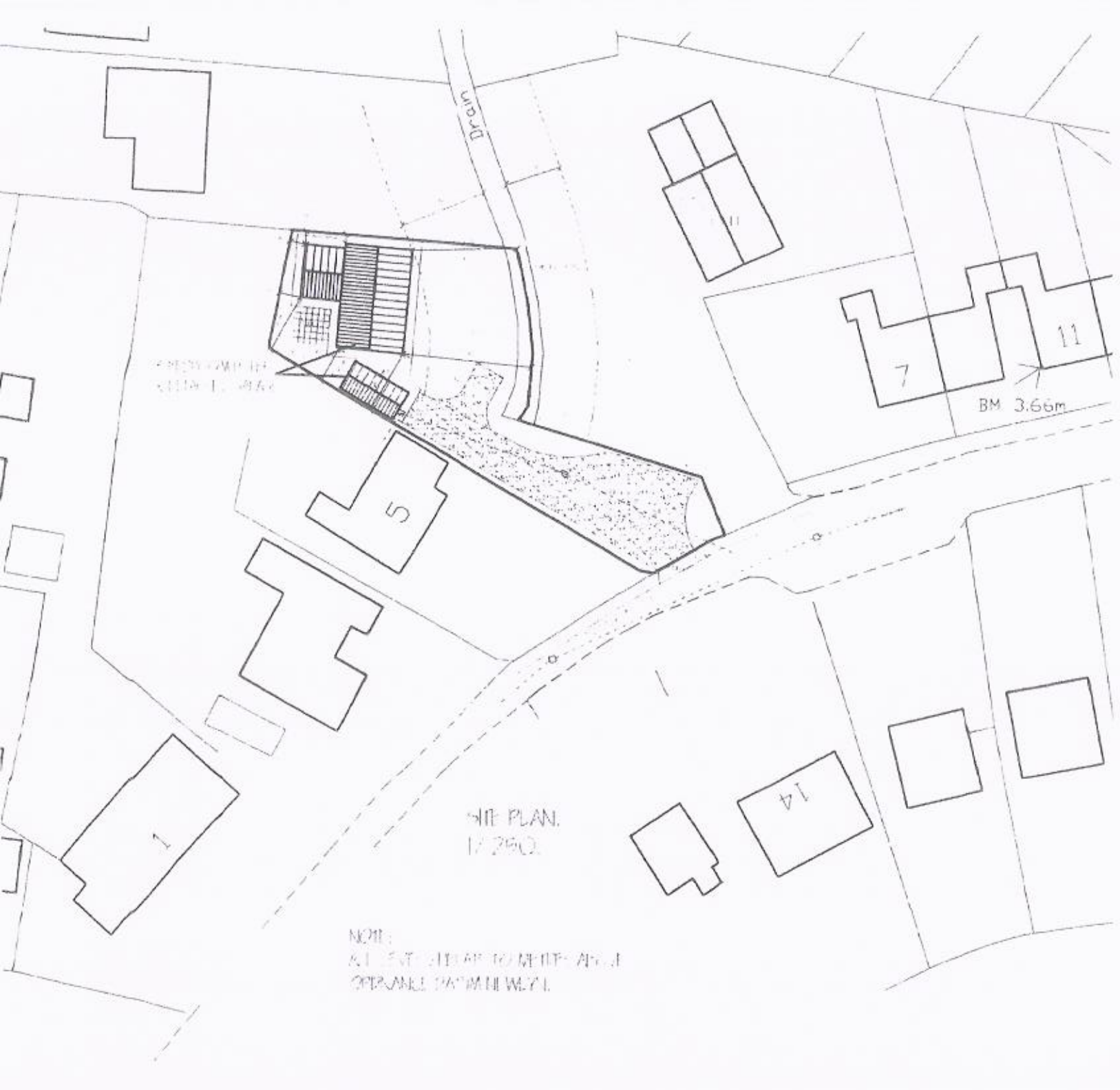
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Project

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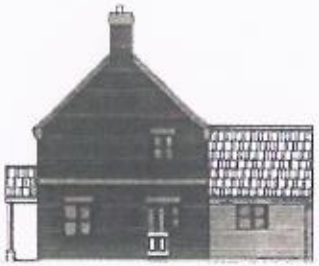
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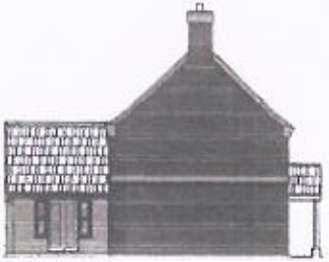
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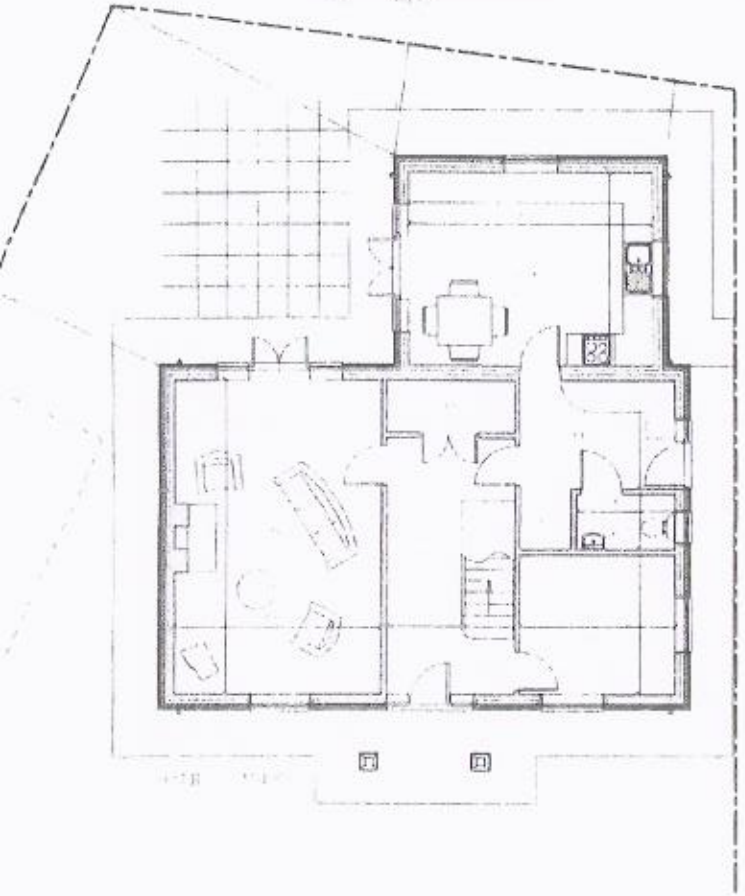
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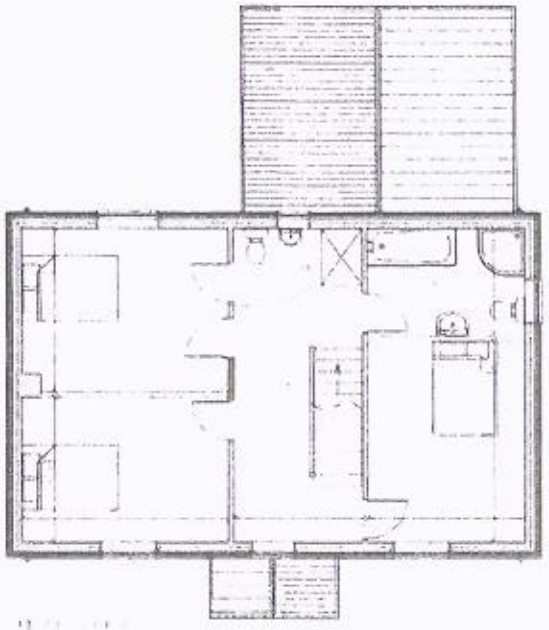












G. R. MERCHANT LTD.

LAND AGENT

ARCHITECTURAL, STRUCTURAL AND LAND DRAINAGE CONSULTANTS

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Other topics for this area...

Flood Map for Planning (Rivers and Sea)

Flood Map for Planning (Rivers and Sea)

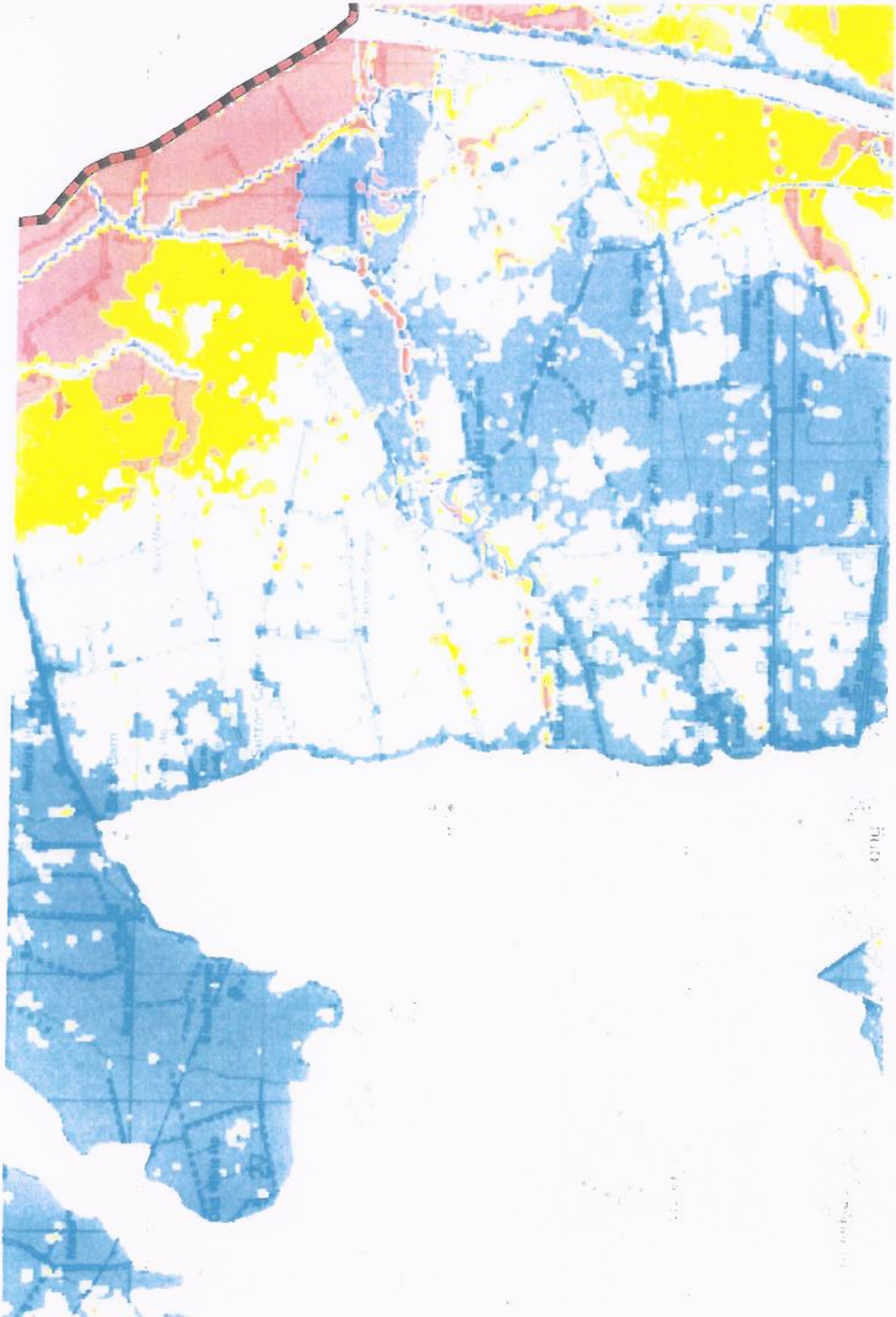
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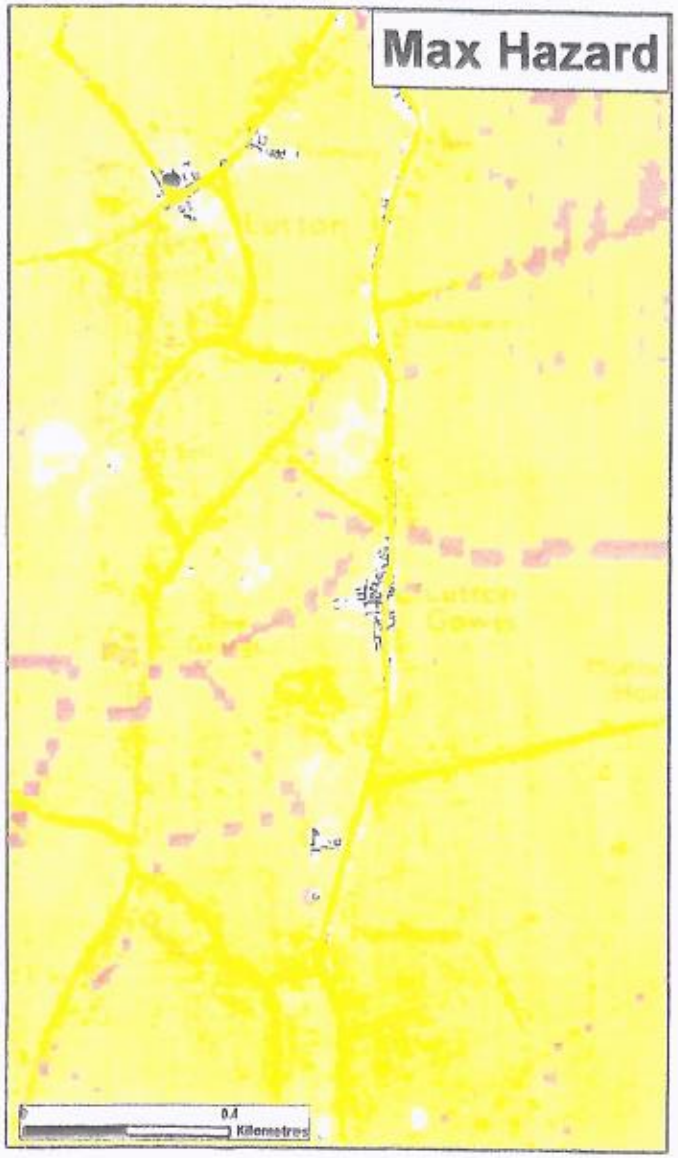
Click on the map to see what Flood Zone (National Planning Policy Guidance definitions) the proposed development is in

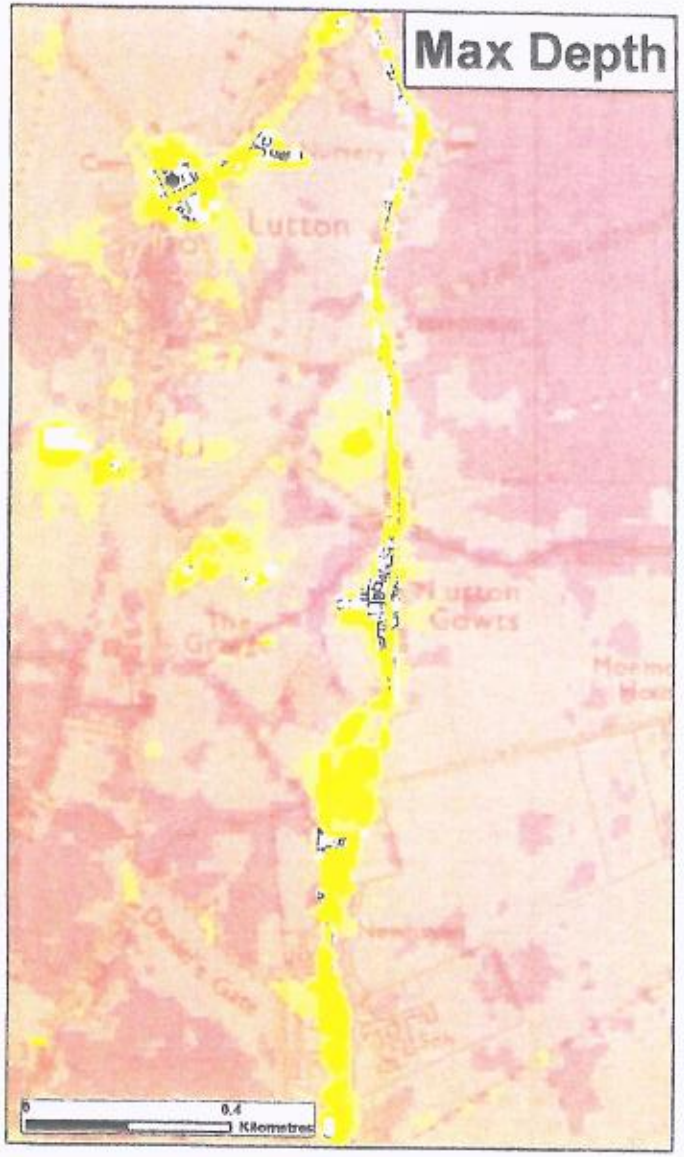
- ✓ Flood Map for Planning (Rivers and Sea)
- ✓ Main River Line
- ✓ Other national environmental organisations

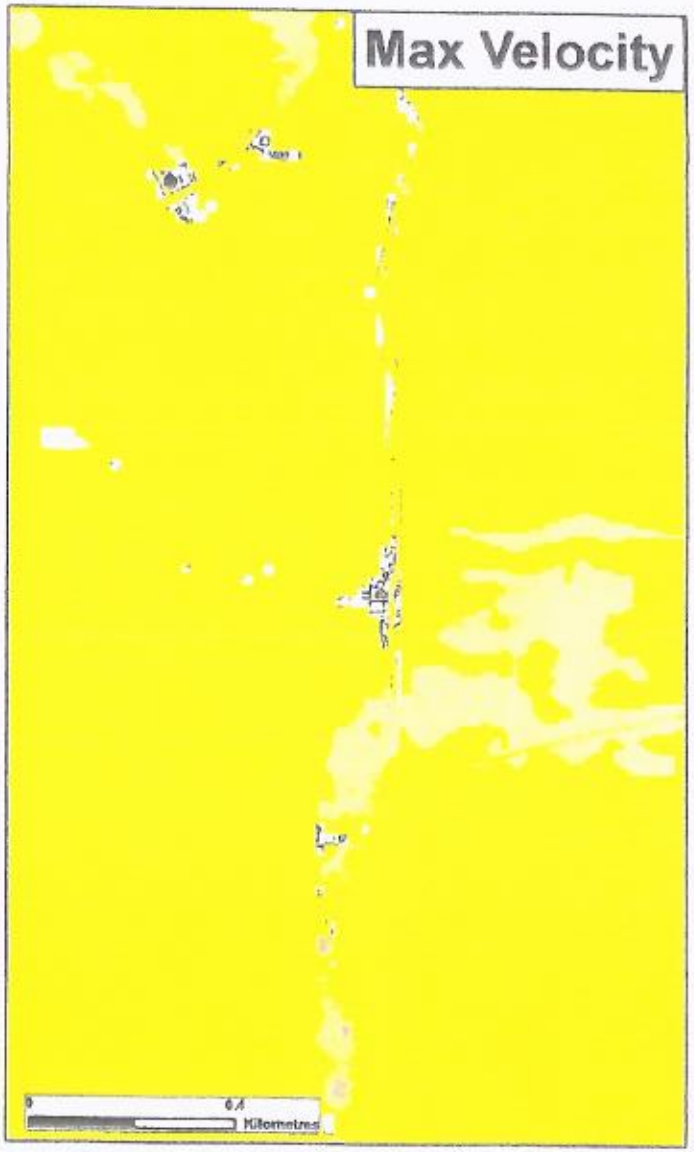
X: 543,500;Y: 325,558 at scale 1:10,000











★ Modelled Breach Locations - see the accompanying plan "Location of Modelled Breaches"

Max Hazard (Flood Risk to People - FD2320)	Max Depth (m)	Max Velocity (m/s)
Less than 0.75 (Low Hazard)	0 - 0.25	0 - 0.5
Between 0.75 and 1.25 (Danger for Some)	0.25 - 0.50	0.5 - 1.0
Between 1.25 and 2.0 (Danger for Most)	0.50 - 1.0	1.0 - 1.5
Greater than 2.0 (Danger for All)	1.0 - 2.0	1.5 - 2.5
	2.0 +	2.5 +

Date Printed	November 2013	Scenario year	2115	Scenario Annual Chance	0.5% (1 in 200)

This map shows the level of flood hazard to people (called a hazard rating) if our flood defences are breached at certain locations, for a range of scenarios. The hazard rating depends on the depth and velocity of floodwater, and maximum values of these are also mapped.

The map is based on computer modelling of simulated breaches at specific locations. Each breach has been modelled individually and the results combined to create this map. Multiple breaches, other combinations of breaches, different sized tidal surges or flood flows may all give different results.

The map only considers the consequences of a breach, it does not make any assumption about the likelihood of a breach occurring. The likelihood of a breach occurring will depend on a number of different factors, including the construction and condition of the defences in the area. A breach is less likely where defences are of a good standard, but a risk of breaching remains.

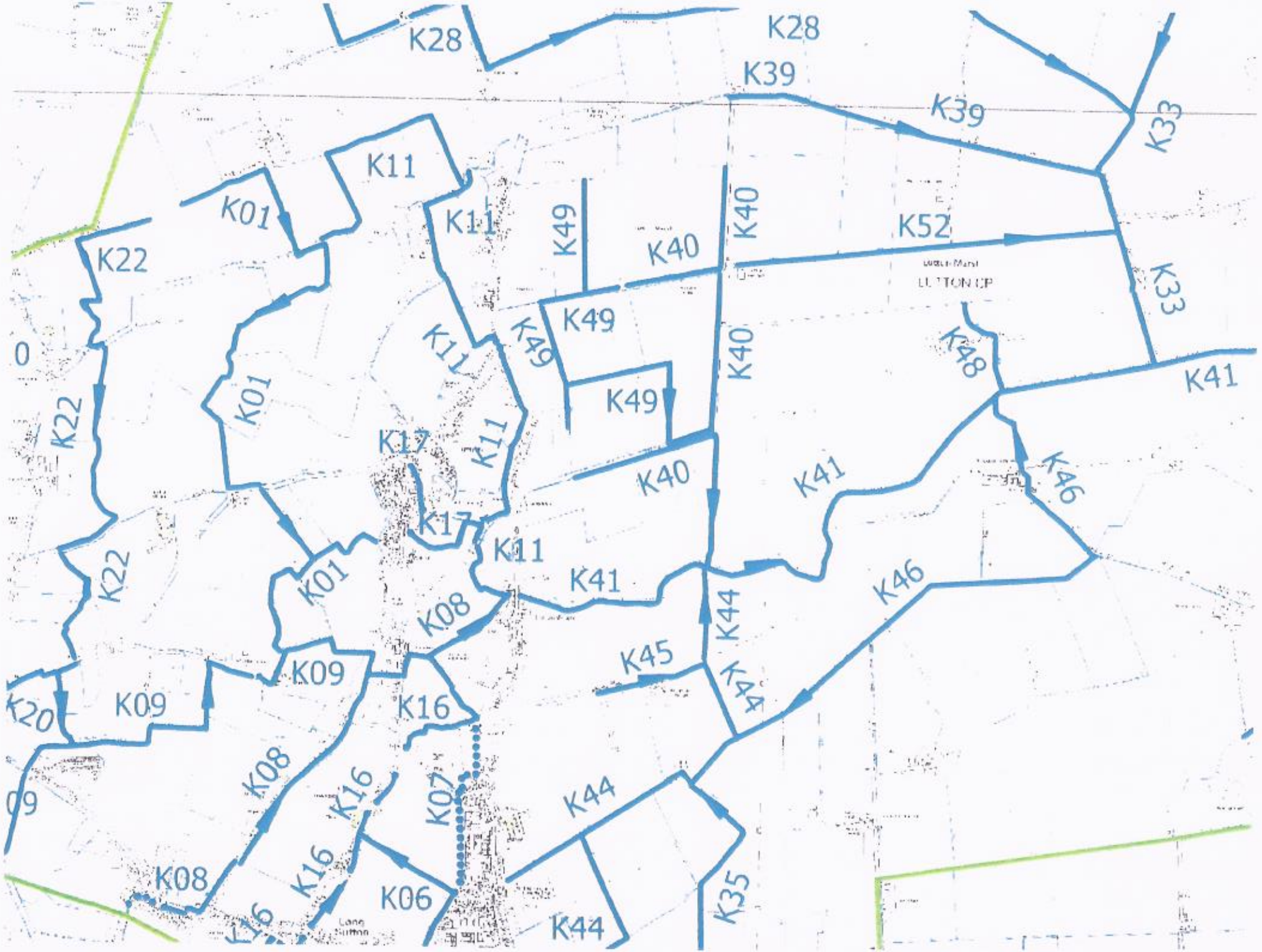
General Enquiries No: 03708 506 506 Weekday Daytime calls cost 5p plus up to 6p per minute from BT Weekend Unlimited, Mobile and other providers' charges may vary

Environment Agency

Northern Area Tidal Breach Hazard Mapping

Map Centred on TF 43633 24805

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Ref: 2867-15

FLOOD RESILIENT CONSTRUCTION

Ref: 2867-15

4 Bedroom House & Detached Garage
Adjacent 5 Puddingpoke Lane
Lutton
Spalding
Lincs
PE12 5HZ

Flood Resilient Construction

The following measures are to be taken in an attempt to satisfy this condition as suggested in the Communities and Local Government document "Improving the Flood Performance of New Buildings" – May 2007.

- As the site is particularly low it would be impractical to set the ground floor at a level similar to Spalding Common, it would nevertheless be prudent to set as high as reasonably practicle/possible.
- Any flood waters to be diverted around the building, where possible, to where the gardens are lower.
- Ground floors to be constructed with ground bearing type concrete slab (at least 100mm thick) on well consolidated hard-core, the DPM is to be sealed with the DPC, the insulation is to be Celotex, or similar approved, closed cell type and be positioned over the ground floor bearing slab with sand and cement render topping.
- All sub-structure walling to be constructed from red engineering bricks, up to DPC level, the remainder of the external facing bricks up to 300mm above DPC to be either red engineering or pressed, not handmade bricks. The cavity insulation up to 300mm above DPC is to be partial fill Celotex, or similar closed cell type insulation secured to the internal wall.
- Avoid the use of plasterboard and gypsum plaster to lower part of internal walls and use water resistant lime and cement render or painted blockwork.
- All external doors to be of a good quality not susceptible to moisture and have good seals for water tightness.
- Treated and sealed timber or UPVC skirting's and architraves.
- Ensure all kitchen areas, particularly behind units, to be sealed to prevent passage of water.
- Arrange for all service circuits to be routed at a first floor level if practical and sockets, boilers and cookers to be a minimum 300mm above floor level.
- Occupants of the property to register with the Environment Agency automated early warning system of potential floor events.
- The site access off Spalding Common (B1172) should be carefully constructed to ensure that any carriageway run-off is properly intercepted and directed to the riparian watercourse.