

# Flood Investigation Report

Pocklington, 19 April 2012

CES\D200\LDES\1394

February 2013



**EAST RIDING**  
OF YORKSHIRE COUNCIL



## Revision Schedule

### East Riding of Yorkshire Council Flood Investigation Report

19 December 2012  
CES\D200\LDES\1394

Rev	Date	Details	Author	Checked and Approved By
0.1	13/12/12	Initial Draft	AMM	
1.0	19/12/12	Issued for comments	AMM	DJW
2.0	16/1/13	For CMT consideration	AMM	DJW
3.0	7/2/13	EA comments included	AMM	DJW





## **Copyright Notice**

Maps in this report are reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of Her Majesty's Stationery Office Crown copyright 2008. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. East Riding of Yorkshire Council 100023383.

Records of the public sewer system included are a facsimile of the statutory record provided by Yorkshire Water Services. For the purposes of this report minor sewers and other non relevant data have been omitted from the plans for clarity. The statutory public sewer record is held by Yorkshire Water Services Ltd.

## **Acknowledgement**

The Council would like to thank members of the Pocklington community, The Environment Agency, Pocklington Town Council and Yorkshire Water Services Ltd for their assistance in this investigation.



## Table of Contents

Copyright Notice .....	2
Acknowledgement .....	2
<b>Executive Summary .....</b>	<b>5</b>
1 Introduction .....	6
1.1 Section 19 Investigations.....	6
1.2 Relevant Flood Risk Management Authorities .....	6
1.3 Location of Flooding .....	7
2 The Drainage System.....	11
2.1 Pocklington Beck Drainage Catchment .....	11
2.2 Upstream of Pocklington Town .....	12
2.3 Drainage within Pocklington Town.....	12
2.4 Flooding History.....	14
3 April 2012 Flood Incident .....	15
3.1 Conditions before the event.....	15
3.2 Rainfall on 19 April .....	15
3.3 The Incident.....	16
3.4 Subsequent Rainfall Data .....	17
3.5 Causes and Investigation Finding .....	17
3.5.1 Land Drainage and Culverted Beck .....	17
3.5.2 Public Sewer System .....	18
3.5.3 Highway Drainage System.....	18
4 Conclusions .....	18
4.1 Relevant Authorities.....	19
4.2 Investigation Conclusions.....	21
5 Recommendations .....	21
Useful Links and Contact Details.....	23

## List of Figures

Figure 1 Location Plan .....	7
Figure 2 April 2012 Flooded Areas .....	8
Figure 3 Photograph of Jubilee Gardens on 19 April 2012 .....	8
Figure 4 Photograph of Betterton Court Car Park on 19 April 2012 .....	9
Figure 5 Photograph of Market Street on 19 April 2012 .....	9
Figure 6 Photograph Chapmangate on 19 April 2012 .....	10
Figure 7 Pocklington Beck Catchment Area .....	11
Figure 8 Watercourses feeding the Beck .....	12
Figure 9 Culvert Layout .....	13
Figure 10 Street Plan of Town Centre .....	13
Figure 11 Photograph London Bridge in June 2012 .....	14
Figure 12 Photograph EA Gauging Station 2012 .....	15
Figure 13 Photograph of the Beck behind the Post Office .....	16
Figure 14 Photograph of the Culvert Entrance (2007) .....	18

## Appendix A – Large format plans

## Executive Summary

On 19 April 2012 Pocklington town centre flooded, affecting many businesses and causing major disruption in the town centre. Although some properties were affected by flood water no specific damage was reported; most of these properties have a history of flooding.

The Pocklington Beck passes through the centre of the town and is the main surface water drain for the agricultural land to the north of the town and for the urban area of the town itself. There are some culverted sections and some open sections. There is a main culvert running from the Post Office down Market Street and Waterloo Lane, and an additional overflow culvert linked into this main culvert which runs down Union Street and Market Place. Both highway drainage and the sewer system have outfalls into these culverts. In times of heavy rainfall the flow levels in both the Beck and the urban drainage systems can become elevated which can lead to flooding.

The day prior to the flooding event saw persistent heavy rainfall on the whole catchment which continued into 19 April when an intense period of rainfall around 10:00am at the head of the catchment. This caused the water level in the Pocklington Beck to rise rapidly. At this time the drainage system, including highway drains and sewers within the town were already charged with the previous rainfall. This increased flow in the Beck resulted in surface water overflowing from the main culvert entrance at the rear of the Post Office, leading to overland flows flooding the town centre.

There is a history of similar flooding incidents due to the nature of the catchment, the topography and geology of the area, which leads to rapid surcharging of the drainage system. Although the repeated flooding is not normally severe it does cause disruption and distress to residents and visitors, particularly in the commercial centre of the town.

The stretch of Pocklington Beck through the town has been maintained by the Environment Agency, which allows them to use their permissive powers to undertake works to reduce flood risk where this is deemed to be for the benefit of the wider community. The Environment Agency carried out extensive works, following the flooding in 2007. Nevertheless the legal responsibility for the Beck remains with the riparian owners.

In summary although the rainfall in April was intense it was not considered exceptional. The events highlight that the drainage system in the town can easily become overloaded due to heavy or persistent rainfall. The capacity of the culverted section of the Beck is limited and struggles to cope with both urban and rural runoff simultaneously.

Various options to reduce flood risk in the Town are considered in this report's recommendations.



# 1 Introduction

## 1.1 Section 19 Investigations

East Riding of Yorkshire Council, as the Lead Local Flood Authority (LLFA), has a responsibility under Section 19 of the Flood and Water Management Act 2010 to investigate significant flood incidents in its area. Section 19 states:

*(1) On becoming aware of a flood in its area, a lead local flood authority must, to the extent that it considers it necessary or appropriate, investigate -*

*(a) which risk management authorities have relevant flood risk management functions, and*

*(b) whether each of those risk management authorities has exercised, or is proposing to exercise, those functions in response to the flood.*

*(2) Where an authority carries out an investigation under subsection (1) it must-*

*(a) publish the results of its investigation, and*

*(b) notify any relevant risk management authorities.*

This report has been prepared by the Council in its role as LLFA in response to repeated flooding incidents in Pocklington Town and in particular to a flooding incident which occurred on 19 April 2012.

This report provides details and an overview of flooding that has occurred, describes the conditions which led to the flooding, considers the response to the flooding thus far and makes technical recommendations for the flood risk authorities concerned.

## 1.2 Relevant Flood Risk Management Authorities

East Riding of Yorkshire Council is the Lead Local Flood Authority in this area, and the Highway Authority for the area with responsibilities for the highway drainage.

Yorkshire Water Services (YW) is the statutory sewerage undertaker in the area and is responsible for the public sewer network within the village.

There is no Internal Drainage Board (IDB) responsible for the maintenance of the land drainage systems in the area.

The Environment Agency (EA) is responsible for managing the flood risk from main rivers, the sea and reservoirs including coastal erosion risk management. The EA have permissive powers to maintain main rivers, and development of a national Flood Risk Strategy.

The EA enained a length of the Pocklington Beck in April 2006 enabling some maintenance and improvement works to be carried out exercising permissive powers under the Act 1991.

Using these permissive powers the EA may carry out works to reduce the flood risk, however the responsibility for general maintenance and repair of the watercourse including the culverted sections remains with the riparian landowners.

### 1.3 Location of Flooding

Pocklington lies within the unitary authority district of East Riding of Yorkshire, situated to the west of the town of Beverley and at the foot of the Yorkshire Wolds.

The affected areas lie along the route of the Pocklington Beck through the Town, including Market Street from Betterton Court and the Market Place.

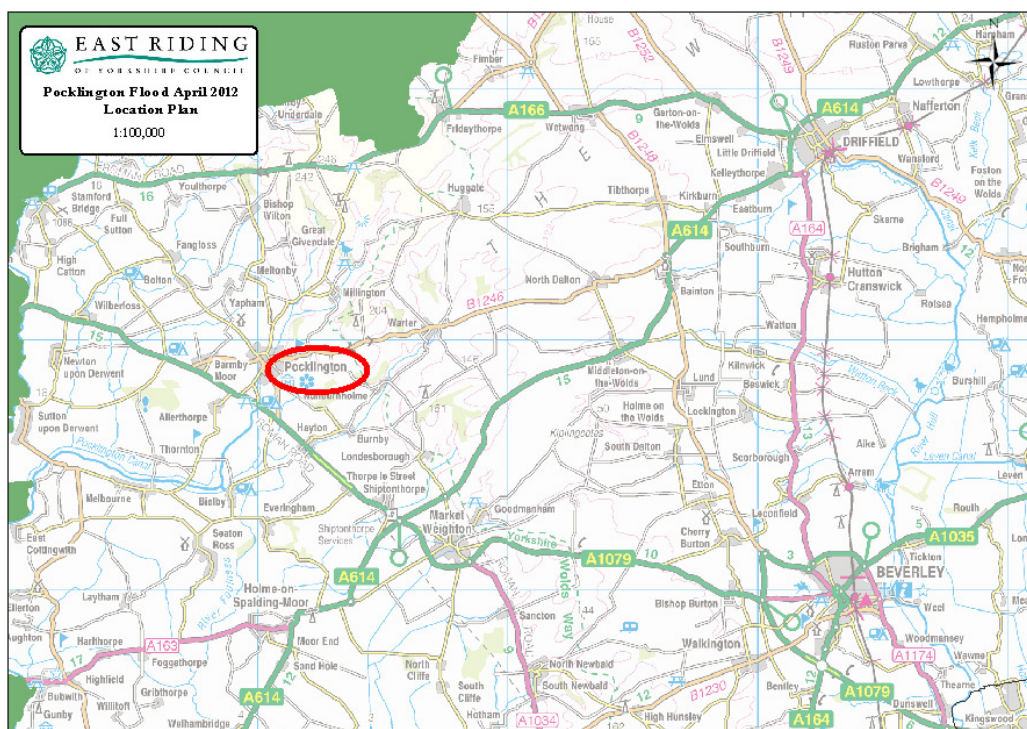


Figure 1 Location Plan

The Pocklington Beck is an open watercourse until it reaches a culvert entrance at the rear of the main post office. The EA has a gauging station in Jubilee gardens adjacent to London Bridge in Pocklington.

The Jubilee Gardens above London Bridge was flooded during the incident, and water apparently unable to enter the culvert at the rear of the post office overflowed into Betterton Court. The car park flooded and water flowed out into Chapmangate then Market Street, through St Peters square and down the Market Place, before re-entering the drainage system in Railway Street. The highway gullies in Market Street and St Peters Square which at first drained water into the system were eventually overwhelmed. At this point the system was full to capacity.



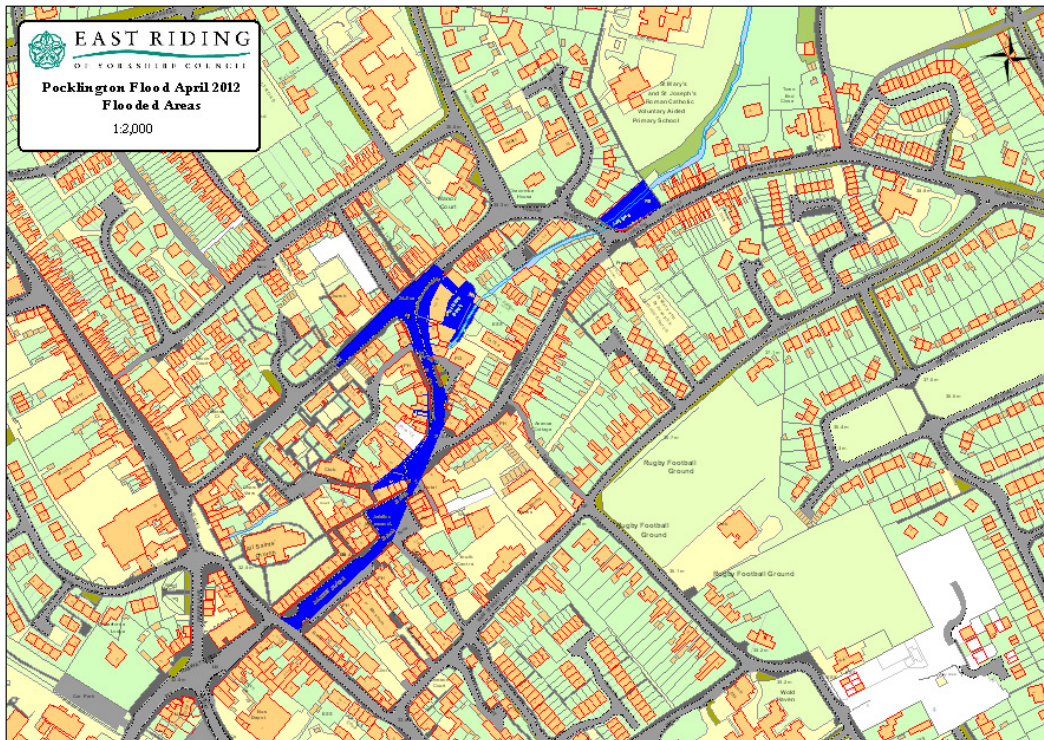


Figure 2 April 2012 Flooded Areas

Much of the area was affected by highway flooding and nine properties were affected in Market Street , St Peters square, Waterloo Lane. The worst affected was the clothes shop at the corner of St Peters square and Market Place, a cellared property.



Figure 3 Photograph of Jubilee Gardens on 19 April 2012





Figure 4 Photograph of Betterton Court Car Park on 19 April 2012

Many other commercial properties in Chapmangate, Market Street and Market Place were affected by highway flooding causing disruption to normal trading. Traffic passing through the standing water on the road caused bow waves pushing water towards properties.



Figure 5 Photograph of Market Street on 19 April 2012



Figure 6 Photograph Chapmangate on 19 April 2012

Once the peak flows had passed through the system the flood water drained away down the highway gullies and other drains back into the system.



## 2 The Drainage System

The Pocklington Beck serves as the main land drainage outlet for the farmland to the north of the town and as the main surface water drain for the town itself. Within the Town the Beck is largely in open channel with some culverted sections under buildings and highways.

The Environment Agency (EA) have enained the Beck from just north of the town. The public sewer network is operated by Yorkshire Water (YW).

### 2.1 Pocklington Beck Drainage Catchment

The catchment area for the Pocklington Beck extends to the North and East of the town, between Bishop Wilton and Huggate, up onto the Yorkshire Wolds. Two separate watercourses namely Ridings Beck from Deep Dale and the Millington Beck from Millington Pasture, join together to become the Pocklington Beck to the north of the town. The large catchment area covers some 28 km<sup>2</sup>, (7000acres, 11.0 square miles).

The topography and geology of the catchment can give rise to rapid run-off of rainfall from the high ground on the Wolds into the Beck and a subsequent rapid rise in the Beck level through the town which leads to flooding issues when the capacity of the culverts are exceeded.

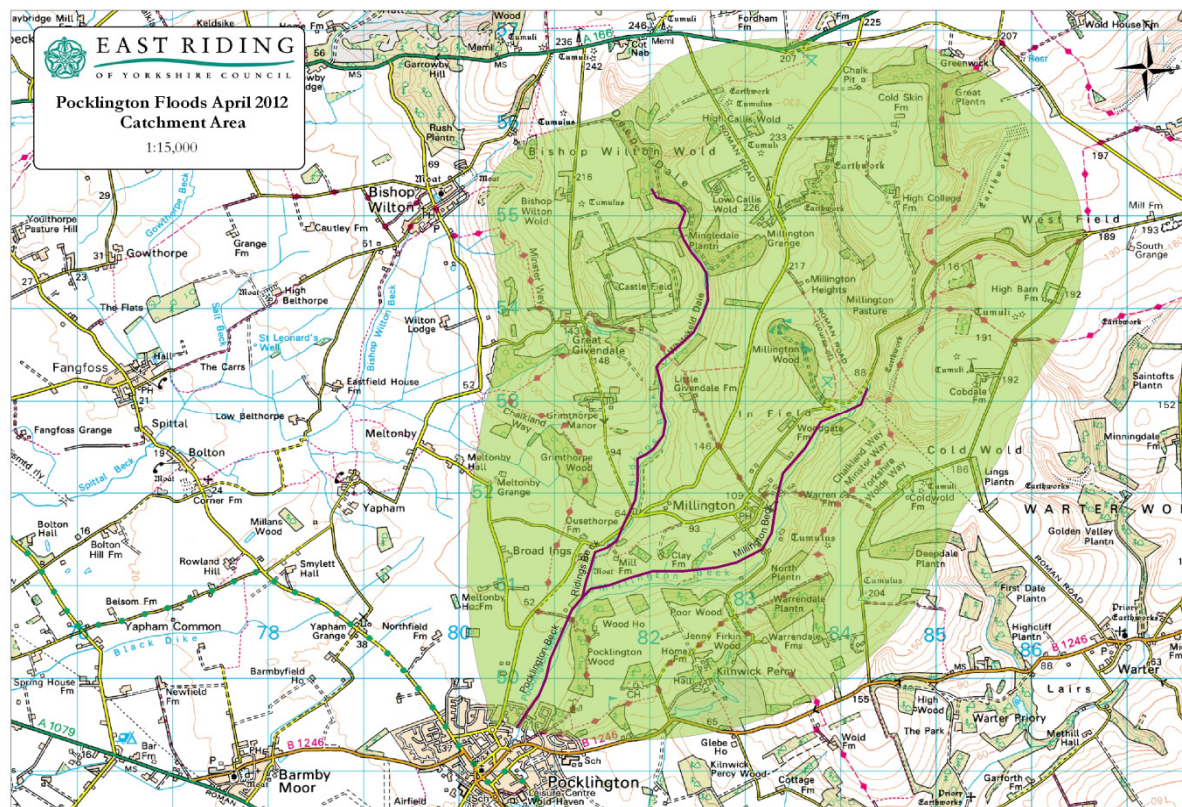


Figure 7 Pocklington Beck Catchment Area

## 2.2 Upstream of Pocklington Town

Groundwater fed watercourses in two valleys, namely Deep Dale and Millington Dale, combine to become the Pocklington Beck. Maintenance is all riparian responsibility up to the edge of the town where the Environment Agency have enained the Beck and can use their permissive powers to take any actions deemed necessary to reduce flood risk.



Figure 8 Watercourses feeding the Beck

## 2.3 Drainage within Pocklington Town

The original Pocklington Beck flows in open channel with culverted sections passing under various buildings and highways with an additional storm channel, known as the southern culvert, which runs from London Bridge down Union Street and Market Place.

The main culvert runs from the rear of the main post office under Market Street into Waterloo Lane to Waterloo Square where it discharges to an open section of watercourse adjacent to the church. Then a further culverted section in George Street, into Grape Lane to a twin culvert from Railway Street to an outfall to open channel at Cemetery lane off West Green.

There is an additional culvert known as the southern culvert which acts as a storm relief, this runs from London Road Bridge down Union Street into Market Street where there is an interconnection via a weir with the main culverted beck in St Peter's Square. The



southern culvert continues down market place to rejoin the main culvert in Railway Street, and on to the outfall on West Green.

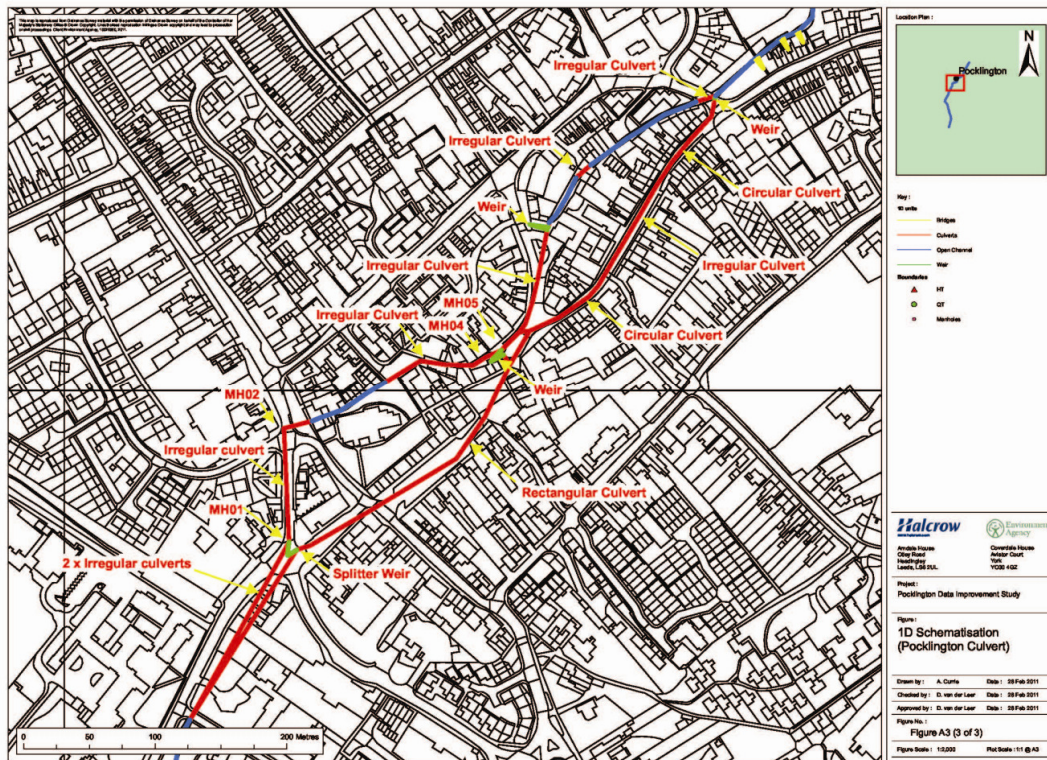


Figure 9 Culvert Layout

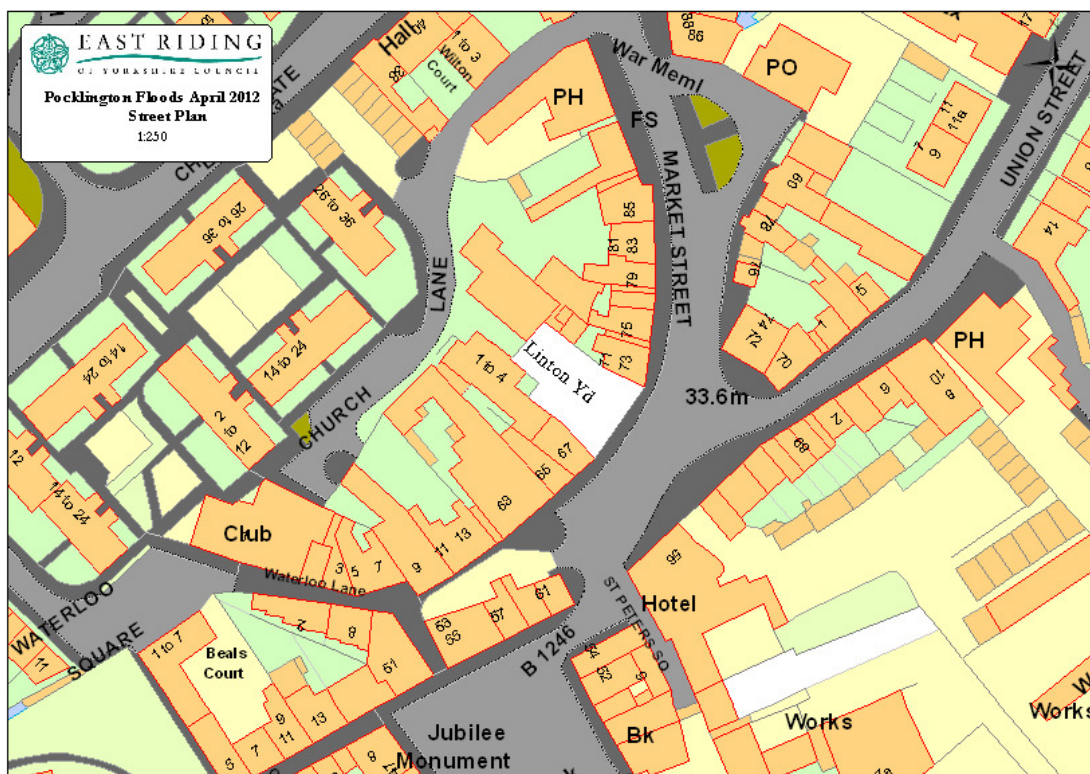


Figure 10 Street Plan of Town Centre

The urban drainage system in the town includes public sewers and sections of surface water drainage and highway drainage which discharge at various points into the culverted beck. There are also Combined Sewer Overflows (CSO) on the sewer system which discharge to the culverts at St Peter's Square and George Street, a further Overflow at West Green discharges to the open channel.

A combined sewer system takes storm water run-off as well as sewage in a single pipe, at times of high flow a CSO is a structure designed to allow excess flows to escape from the combined sewer system during storm conditions to reduce the risk of flooding directly from the sewer system.

## 2.4 Flooding History

Due to the nature of the topography and geology of the catchment, and the development of the town, Pocklington Beck has a history of flash flooding affecting the town centre, in particular. The main shopping area (Market Street) is vulnerable to flooding, as a result of culvert obstruction or excessive rainfall.

There is little formal record of previous flooding events but anecdotal evidence suggests flooding has affected various areas of the town over the past years, principally Market Street, Union Street and London Street. It is mostly surface flooding of the highways and commercial properties in the town centre.

The anecdotal evidence indicates that flooding is a regular occurrence, at a frequency of perhaps once a year. However there have been two separate incidents in 2012. The flash flooding is largely overland flows and standing water in the highway generally to a depth not exceeding 300mm, causing disruption but not often affecting properties directly. Flood water generally drains away back into the drainage system within hours.

In April 2012 the Beck overtopped its banks above the culvert entrance near the rear of the main Post Office. The flood water then overflowed through Betterton Court out onto Chapmangate down Market Street, leading to overland flows through the town centre.



Figure 11 Photograph London Bridge in June 2012



Following the 19 April incident, flooding was again witnessed in June 2012 at the usual locations with the town.

Notably Pocklington was severely affected during the June 2007 flooding event, resulting in over £2 million worth of damage to property in the town. (*Ref Environment Agency Hydrology Interim Report, October 2010. By Halcrow Group Ltd*)

### 3 April 2012 Flood Incident

#### 3.1 Conditions before the event

Accurate local rainfall data for the Pocklington Beck catchment area is not available for the period leading up to and including the 19 April 2012. However the indications from an interpretation of the radar rainfall data for the wider area are that an intense period of rainfall following at least 24 hours of rainfall in the catchment resulted in elevated water levels in both the urban drainage system and the Beck itself.

Estimates from Met Office radar data for 18 April 2012 show 9.2mm of rainfall

The Elvington “tipping bucket” rain gauge recorded 9.9mm over the same period

#### 3.2 Rainfall on 19 April

The rainfall data considered in this report was supplied by the EA is based on a tipping bucket gauge at Elvington which is approximately 10km from Pocklington, and on interpretation of rainfall radar data.

Estimates from Met Office radar data for 19 April 2012 show 14.9mm of rainfall

The Elvington “tipping bucket” rain gauge recorded 10.0mm over the same period



Figure 12 Photograph EA Gauging Station 2012



Data supplied by the EA from the gauging station in Jubilee Gardens indicates that the beck level rose at 2:00pm on 18<sup>th</sup> and remained at an elevated level until 9:00am on 19<sup>th</sup> when the level rose further dramatically, passing alarm level at 10:00am, peaking at 12:00 noon before subsiding to the previous level by 6:00pm on the 19<sup>th</sup>.

The Council currently have a tipping bucket rainfall gauge at Woodhouse Lane north of the town, installed in May after the April event.

### 3.3 The Incident

After that a period of intense rainfall at the top of the catchment resulted in a rapid rise in the water level in the Pocklington Beck, the culvert at the rear of the Post Office was unable to accept the increased flow.

At 11:15am on April 19 the Beck level at Jubilee Gardens upstream of London Bridge reached 0.4m which is the trigger level for the EA to issue a flood warning relating to flows in the beck.

The EA issued an appropriate Flood Warning and had operational staff in attendance at the London Bridge Inlet ensuring the screens were clear and checking the culvert inlet at the rear of the Post Office.



Figure 13 Photograph of the Beck behind the Post Office

As flows increased the Beck overflowed through Betterton Court onto Market Street through St Peters Square and down Waterloo Lane and Market place.

The town council closed the road in Market Street to reduce the problems caused by vehicles driving through the flood water.

Water flowed on to Railway Street and then re-entered the drainage system. This resulted in widespread disruption to Town centre roads and footpaths, and some flooding of properties.

Following the immediate event the highway gullies in Market Street and Market Place were all revisited and cleaned by the council Street Cleansing department.

East Riding of Yorkshire Council commenced a formal Section 19 investigation. As part of the investigation process ERYC installed a temporary rain gauge and a flow level monitor at Woodhouse Lane, and a level monitor at the Post Office culvert inlet.

### 3.4 Subsequent Rainfall Data

There was another flooding event on Saturday 9 June (for which we have both rainfall and Beck level data from instruments installed as part of the investigation). This event lead to highway flooding but no properties were affected. As with the April 2012 incident water overflowed from the rear of the post office into Betterton Court and out onto Market Street down into St Peter's Square where the water drained back into the system via highway gullies.

**Table 1 Pocklington Rainfall Data – June 2012**

Event date	Radar figure	Elvington Tipping bucket	Pocklington Tipping bucket
08/06/12	4.3mm	6.2mm	10.2mm
09/06/12	36.1mm	7.4mm	28.4mm

The Beck level records at Jubilee Gardens by the EA indicate that the level was slightly elevated in the morning of 9th then rose dramatically from 2:00pm peaking between 4:00pm and 7:00pm when the level dropped to a safe level by 9:00pm.

### 3.5 Causes and Investigation Finding

The EA have supplied the Council with detailed information about the town drainage system and YWS has provided data for public sewer system.

#### 3.5.1 Land Drainage and Culverted Beck

The Council attempted an inspection of the culverted sections of the Beck within the town but due to the lack of access points into the culverted system only a limited length could be inspected. The culverts inspected appeared in good order and free from obstructions.

An EA inspection of the culvert at the rear of the Post Office confirmed a flow restriction at that point. However improvement works might be limited as the culvert structure appears to support the buildings above.



Figure 14 Photograph of the Culvert Entrance (2007)

The EA also surveyed the entrance to the Southern Culvert at London Bridge to ensure that the maximum capacity of that culvert is utilised.

### 3.5.2 Public Sewer System

The investigation found no issues from the flooding event of 19 April 2012 relating to the public sewer system.

### 3.5.3 Highway Drainage System

The investigation found no specific issues from the flooding event of 19 April 2012 relating to the highway drainage system.

## 4 Conclusions

The Council, as LLFA has investigated the flooding at Pocklington on 19 April 2012 using its powers under Section 19 of the Flood and Water Management Act 2010 and has concluded the following:

On 19 April prolonged heavy rainfall over the whole catchment throughout the day and the previous day lead to high flows in the town's drainage system. This was followed by an intense period of rainfall at the top of the catchment on the day of the event. These

combinations of events lead to very high flows in the Beck entering the town whilst the system was already full due to the previous rainfall.

As a result the flows exceeded the capacity of the culvert causing the overflowing at the rear of the Post Office and into Betterton Court. Once this excess flow had passed the overflow stopped and flow levels in the Beck returned to normal indicating the system was running freely.

The fact that the system drained down quickly and without further action indicates that the flood was not caused by a lack of maintenance.

#### **4.1 Relevant Authorities**

The risk management authorities that have relevant flood risk management functions are:

##### **East Riding of Yorkshire Council**

The Council is the Lead Local Flood Authority responsible for managing flood risk from surface runoff, groundwater and ordinary watercourses, development of a Local Flood Risk Strategy, Asset Plans and Investigations under the Flood & Water Management Act 2010.

The Council is also the Highway Authority with responsibility for highway drainage under the Highway Act 1980. This includes responsibility for highway gullies which generally discharge to the public sewers or direct into the culverted watercourse via a short length of pipe. The highway gullies were cleaned before the event on the routine cleaning schedule and again after the event.

## **Environment Agency**

Responsible for managing the Flood risk from main rivers, the sea and reservoirs including coastal erosion risk management, permissive powers to maintain Main Rivers, Strategic Overview over all forms of flooding and development of a national Flood Risk Strategy.

The EA enained a length of the Pocklington Beck in April 2006 enabling some maintenance and improvement works to be carried out by exercising their permissive powers under the Land Drainage Act 1991.

Using these permissive powers the EA may carry out works to reduce the flood risk, however the responsibility for general maintenance and repair of the watercourse including the culverted sections remains with the riparian landowners.

The EA can use their powers to intervene and repair or replace third party assets on Main River and the sea when it is demonstrably justifiable to do so, and the flood risk benefits sufficiently outweigh the cost.

Where appropriate the EA will use their enforcement powers to require riparian owners to undertake work and we will seek to recover the costs of any work they do on a third party asset from the asset owner.

## **Yorkshire Water**

Yorkshire Water Services is the statutory sewerage undertaker for the Yorkshire region with a duty to effectually drain sewers pursuant to the Water Industries Act 1991. Yorkshire Water is responsible for the foul and surface water sewers in the town.

## **Riparian Land and Property Owners**

The ownership and responsibility for the maintenance of the watercourses in Pocklington including the culverted sections of the Pocklington Beck is riparian, however the Environment Agency have in the past exercised their permissive powers to carry out some works to reduce the flood risk.

The owner of the land above a culvert is normally the riparian owner of the culvert unless there are local legal provisions setting out alternative arrangements. Where a culvert is under private property the riparian owner has the responsibility to maintain the culvert.

An operating authority such as the Environment Agency may use its permissive powers to undertake works on such a watercourse but ownership of the watercourse or culvert and maintenance responsibilities remain with the riparian owner.



## **4.2 Investigation Conclusions**

The Council is required to conclude whether each of those risk management authorities identified has exercised, or is proposing to exercise, their functions in response to the flood incident. Following the investigation it can be concluded that the flood risk management authorities have or are proposing to exercise their relevant functions appropriately.

Nevertheless the investigation has identified a number of measures that could improve flood risk management and these are set out in the following recommendations.

## **5 Recommendations**

### **Recommendation 1**

The Council should carry out a feasibility study, which may include additional survey and modelling works to build upon the studies already undertaken by the Environmental Agency, (e.g. Peter Kite Report and the EA Pocklington Data Improvements Study 2011) to clearly identify mechanisms of flood risk and allow solutions to be identified.

### **Recommendation 2**

The Council as LLFA should coordinate efforts to develop and attract funding for a possible long term solution to the issues caused by the specific circumstances of the drainage system within Pocklington. Development of such a solution should consider the following options:

- Some form of attenuation scheme upstream of the town centre
- Creation of an acceptable overland flow exceedence pathway
- Ways and means of increasing the capacity of the existing culverts
- Land management practices and small scale measures with the rural catchment

### **Recommendation 3**

The EA should consider possible hydraulic improvements to the culvert entrance at the rear of the post office, and to the entrance to the southern culvert at London Bridge. This should include consideration of de-silting operations and monitoring in the channels and culverts.

### **Recommendation 4**

Under the guidance of Council/EA engineers, riparian owners should consider making alterations to the bank behind Betterton Court which may reduce the impact of flooding on adjacent buildings.

## **Recommendation 5**

Individual property owners within the town centre should consider installing property protection measures to their properties at risk of flooding; such as door guards and air brick covers.

## Useful Links and Contact Details

<b><i>Lead Local Flood Authority</i></b> East Riding of Yorkshire Council County Hall Beverley East Riding of Yorkshire HU17 9BA	<b>01482 887700</b>	<a href="http://www.eastriding.gov.uk">www.eastriding.gov.uk</a>  <a href="mailto:land.drainage@eastriding.gov.uk">land.drainage@eastriding.gov.uk</a>
<b><i>Statutory Sewerage Undertaker</i></b> Yorkshire Water Services Ltd Western House Halifax Road Bradford BD6 2SZ	<b>0845 1 242424</b>	<a href="http://www.yorkshirewater.co.uk">www.yorkshirewater.co.uk</a>
<b><i>Environment Agency</i></b> Yorkshire and North East Dales Area Office Coverdale House Amy Johnson Way Clifton Moor York YO30 4UZ	General Enquiries 08708 506506 (Mon-Fri, 8am - 6pm) Incident Hotline 0800 807060 (24hrs)	<a href="http://www.environment-agency.gov.uk">www.environment-agency.gov.uk</a>



## **Appendix A**

Figure 1	Location Plan
Figure 2	Catchment Area of Pocklington Beck
Figure 3	Watercourses
Figure 4	Layout of Culverts
Figure 5	Street Plan
Figure 6	April 2012 Flooded Area

Figure 1 – Location Plan



EAST RIDING

OF YORKSHIRE COUNCIL

Pocklington Flood April 2012  
Location Plan

1:50,000

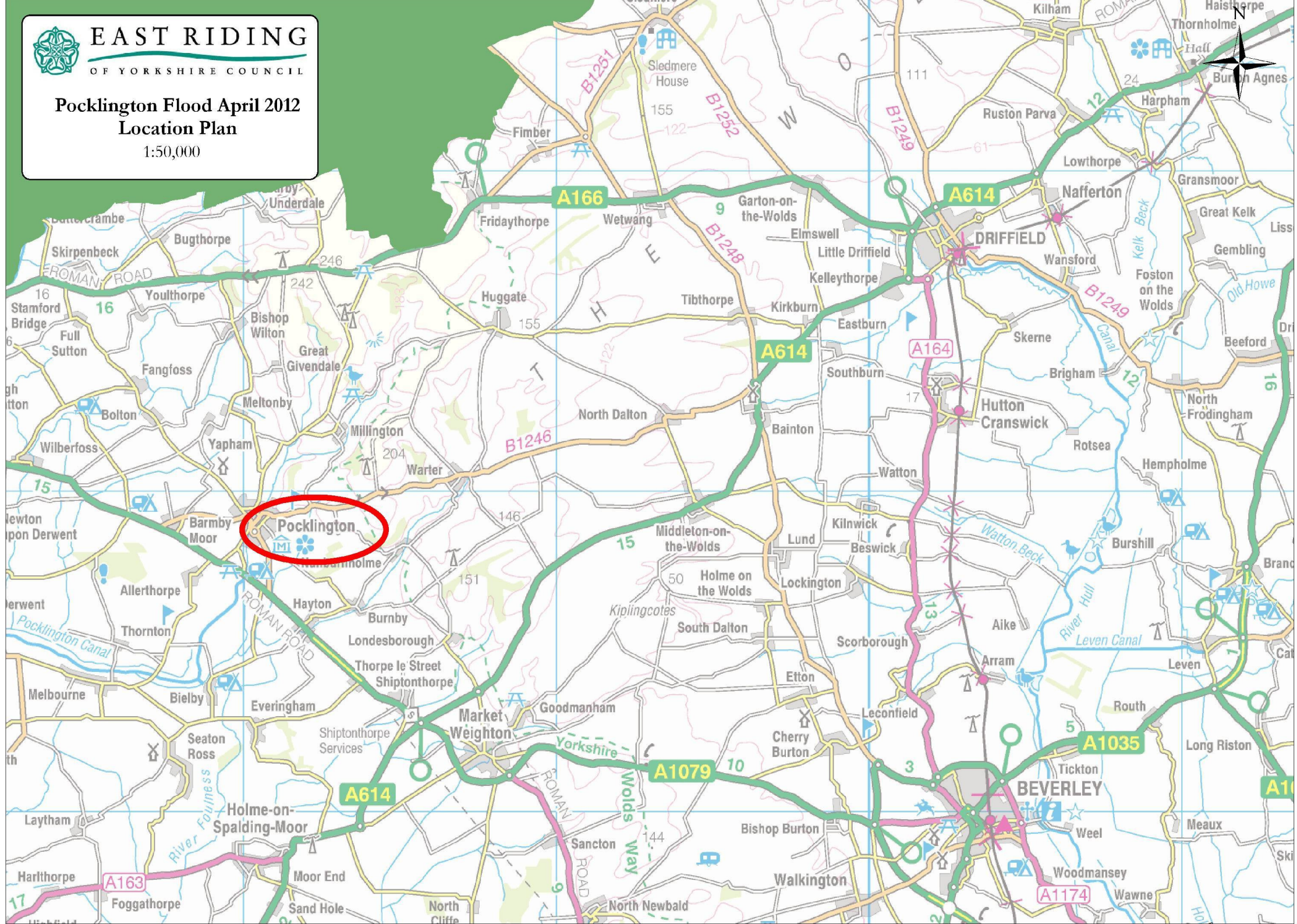


Figure 2 - Catchment Area of Pocklington Beck



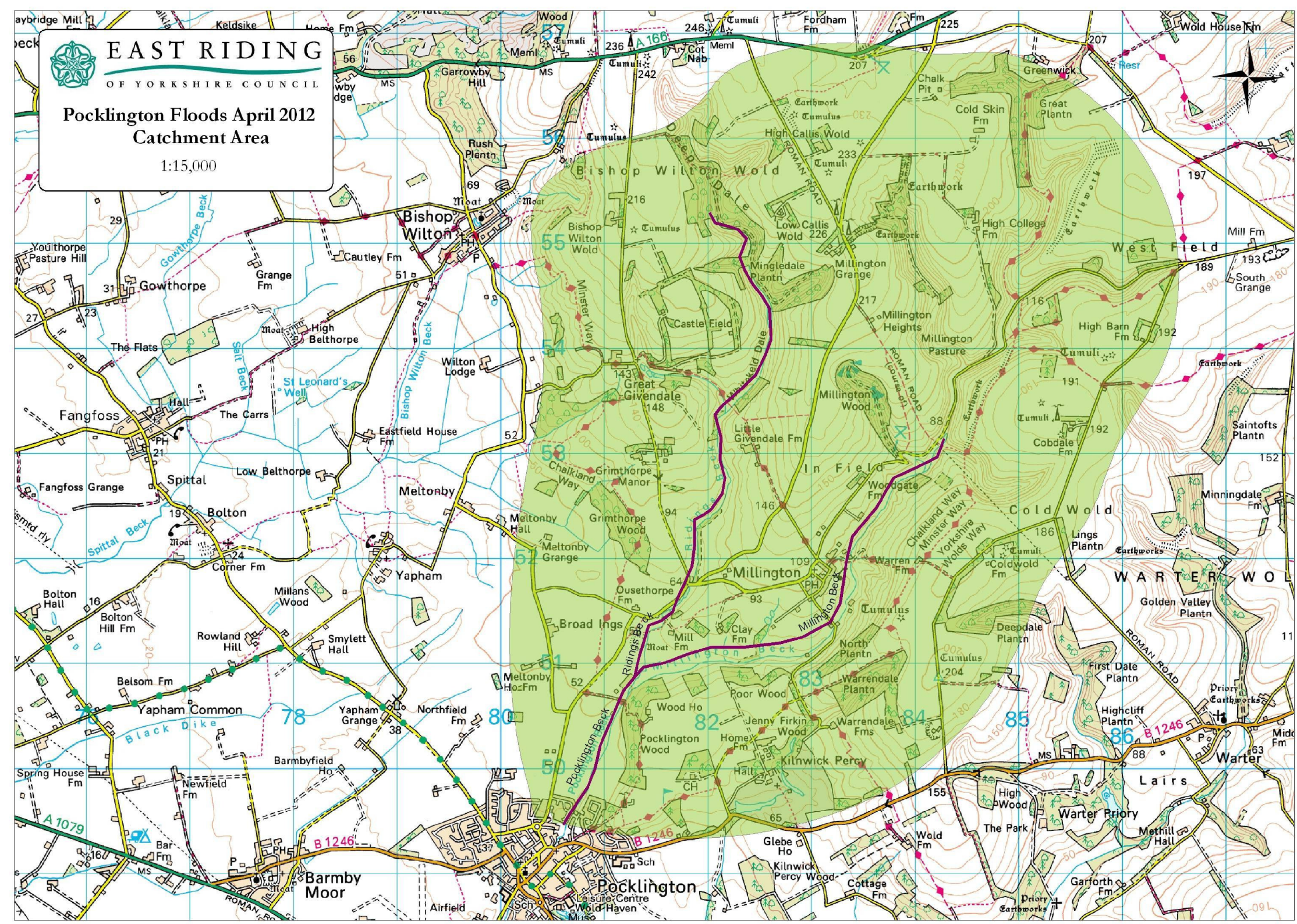


EAST RIDING

OF YORKSHIRE COUNCIL

Pocklington Floods April 2012  
Catchment Area

1:15,000





### Figure 3 - Watercourses



**EAST RIDING**  
OF YORKSHIRE COUNCIL

Pocklington Floods April 2012  
Watercourses  
Not to Scale

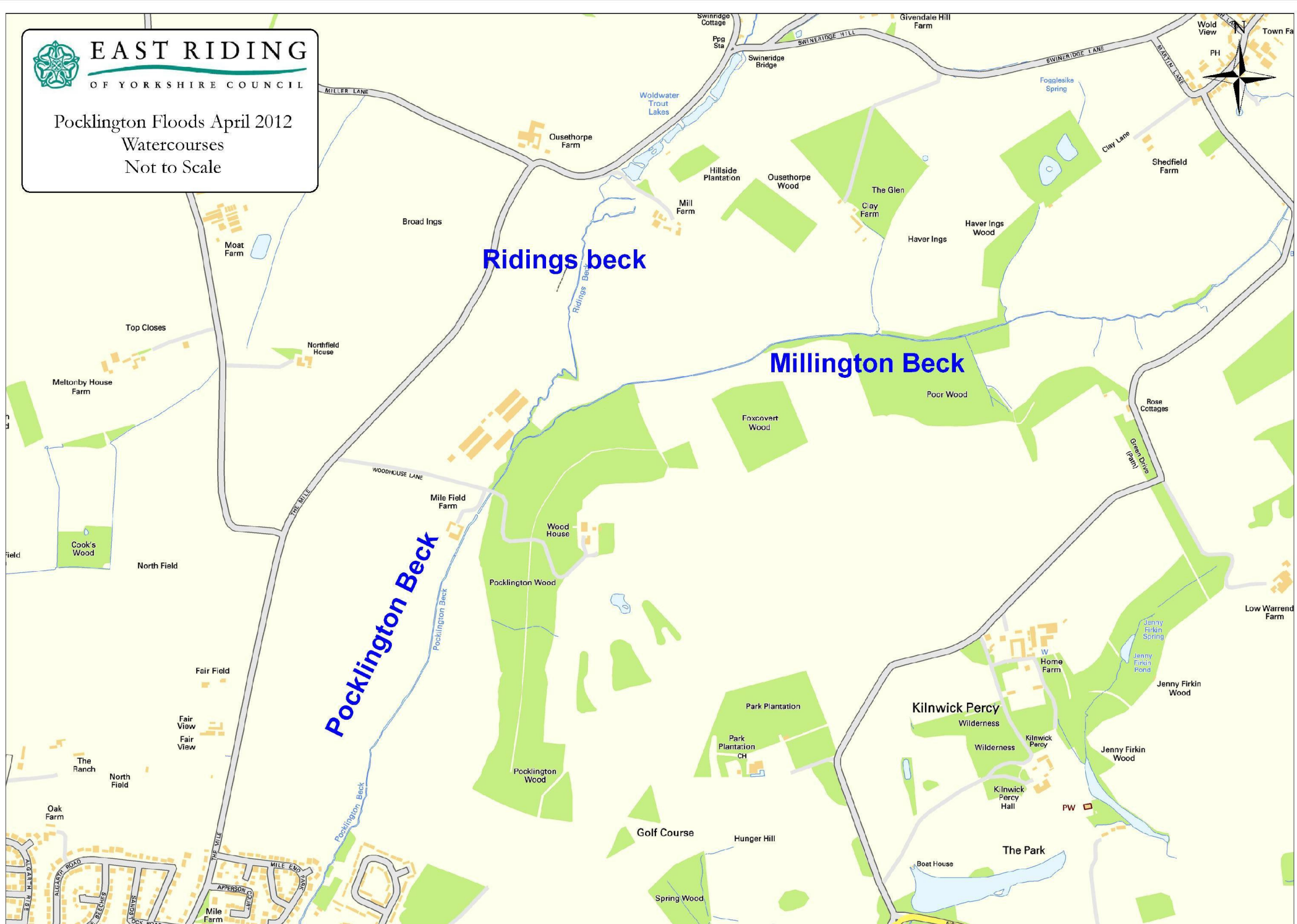
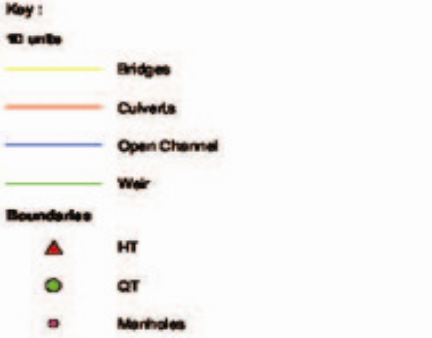
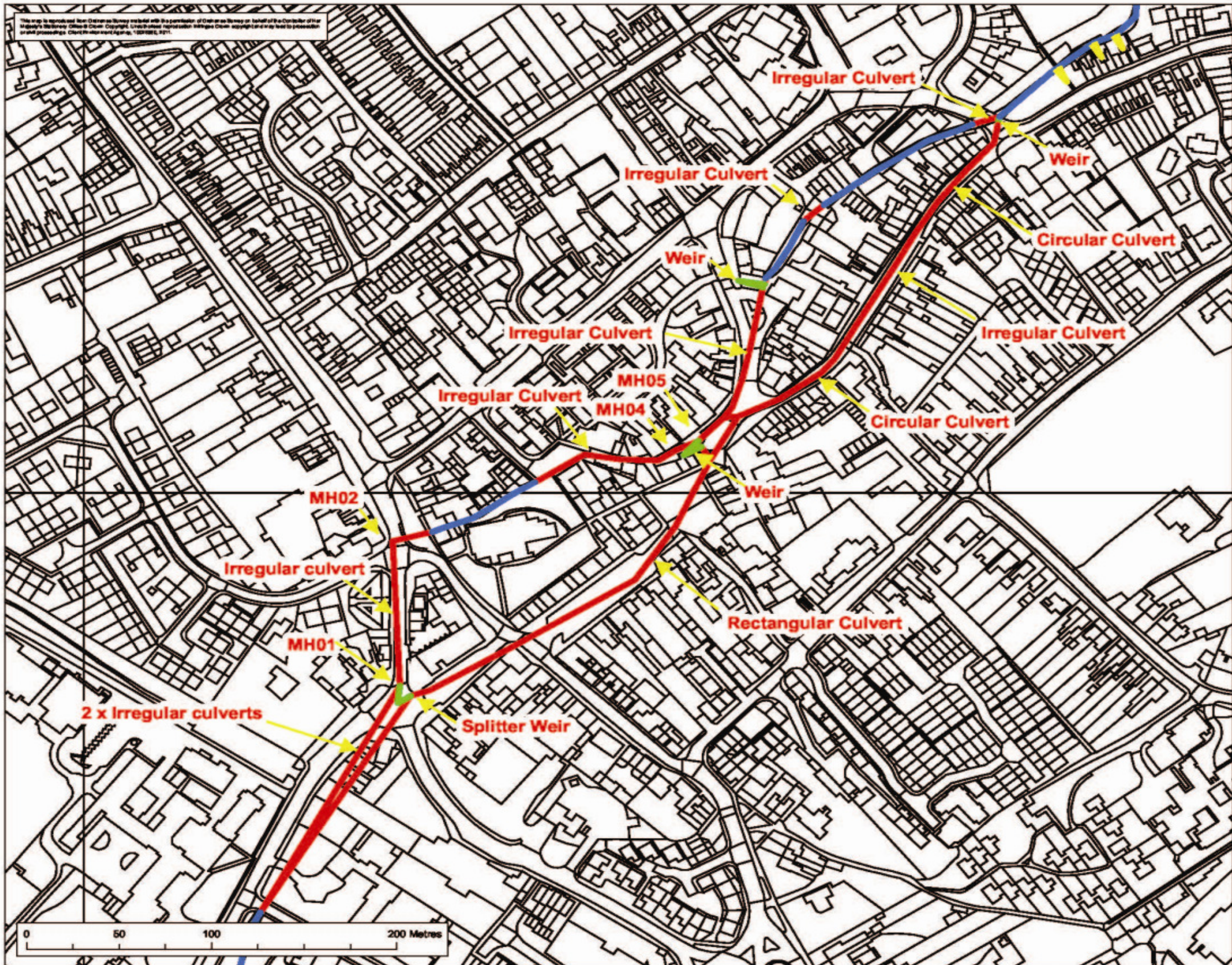


Figure 4 - Layout of culverts





Project:  
Pocklington Data Improvement Study

Figure:  
**1D Schematisation  
(Pocklington Culvert)**

Drawn by : A. Currie Date : 26 Feb 2011  
Checked by : D. van der Leer Date : 26 Feb 2011  
Approved by : D. van der Leer Date : 26 Feb 2011

Figure No. :  
**Figure A3 (3 of 3)**

Figure Scale : 1:2,000 Plot Scale : 1:1 @ A3





Figure 5 – Street Plan

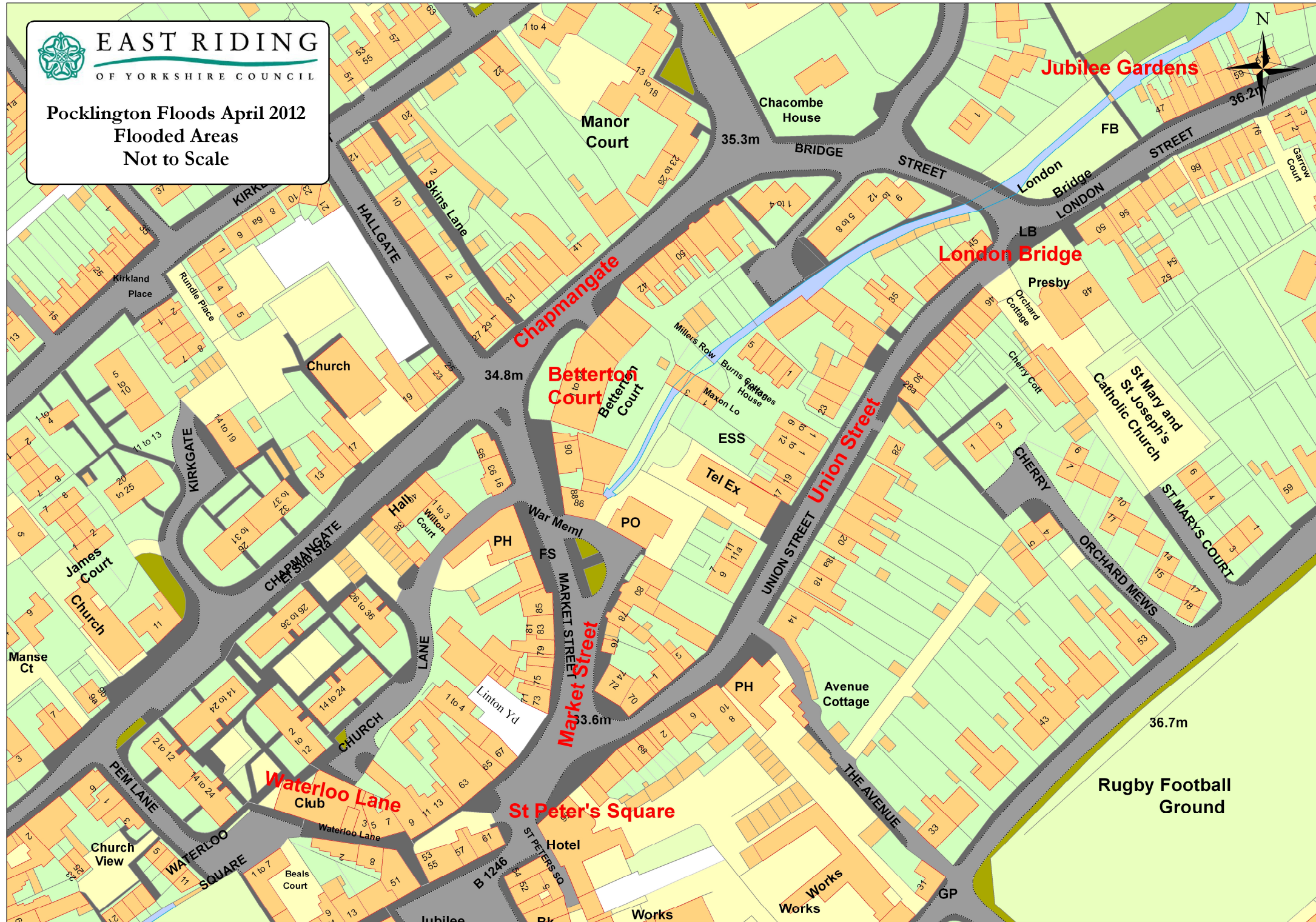


Figure 6 – April 2012 Flooded Area





EAST RIDING

OF YORKSHIRE COUNCIL

Pocklington Flood April 2012

Flooded Areas

1:2,000

