

**WATTON NEIGHBOURHOOD PLAN  
DRAINAGE GROUP**

**Preliminary Report to Watton Town Council on Flooding in  
Watton, Proposed Remedial Actions and Possible Sources  
of Funding**

**Presented to the Town Council  
at their meeting  
on 28 November 2017**

## The 2009 storm



Freak weather: A boot rests in the sudden hail storm that hit Watton, Norfolk, yesterday



A four-wheel-drive vehicle negotiates a road covered in hail in Watton, Norfolk

Photos and text from Daily Mail in June 2009

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Field behind Canon Close, Barn Ruche Corner June 2016

# **Preliminary Report to Watton Town Council on Flooding in Watton, Proposed Remedial Actions and Possible Sources of Funding**

## **Summary**

Watton Action Group – Drainage (WAG-D) was formed after the first meeting of the Neighbourhood Plan held on 20 July 2017. At that meeting, some residents who were concerned about the foul sewer surcharging on the Thetford Road, expressed their dissatisfaction with Anglian Water and that action was needed and so the Group came into being. Two reports from the Flood Manager at Norfolk County Council approved at meetings of the County's Environment, Development and Transport Committee have prompted this report.

There are basically two types of flooding problem confronting the people of Watton:

1. Surface water that overwhelms the natural watercourses and flows freely over the surface of the town. The Group thinks that this is due to lack of proper maintenance and inspection of natural watercourses to ensure they maintain their optimum capacity. The same applies to the surface water sewers for the town which also contribute to surface water flooding.
2. Surcharging of the foul water sewers due to the amount of surface water that has been allowed by Anglian Water to discharge into them. The Group think that this is due to the foul water sewers being undersized and have anecdotal evidence to support this.

Using anecdotal evidence from residents, our own observations and facts from reports, the Group have compiled an evidence base about the causes of the flooding and have some preliminary remedial measures to propose.

This preliminary report forms the basis of a scheme from the community in Watton to mitigate the effects of flooding in the town as described in one of the reports from the Flood Manager. To access any of the Government funding available to communities, the Town Council will need to find a willing Risk Management Authority to make the bid.

## **Recommendations**

The Group recommend the Town Council to:

1. Endorse the report
2. Ask Mr Graham Brown, Flood Manager at Norfolk County Council when and where the proposed guidance mentioned at paragraph 1.1 of his 27 January report will be published so that the Town Council can be aware of what else needs to be done. (This guidance includes public information and a timetable detailing how and when flood mitigation schemes would be developed for those communities in Norfolk at greatest risk)

3. Send copies of this report (including the appendices) to Mr Graham Brown, to Mr Alex Chrusciak, Director of Planning at Breckland Council and Mr Jonathan Glerum Flood Risk Manager at Anglian Water as relevant officers in the three Risk Management Authorities for Watton.
4. Request that the three of them meet with the Drainage Group to consider cost effective remedial measures and funding for these.
5. Send copies of this report (including the appendices) to Mr George Freeman MP

Part A of the report will present the Drainage Group's preliminary findings as to the suspected causes of the flooding and possible remedial measures to address these. It will also describe the further research the Group plan to carry out. Part B will describe the role of Norfolk County Council as the Lead Authority for Flood Risk.

## **PART A**

### **1 Background**

- 1.1 They say that a picture is worth a thousand words which is why the report contains so many photos of the 23 June 2016 storm and some of the one in June 2009. Both these events caused substantial flooding from surface water over much of Watton as well as sewerage spilling out from foul sewers on the Thetford Road and elsewhere.

The areas flooded in 2016 include:

Brandon Road, Langmere Road  
 Cannon Close, Priory Road, Vicarage Walk, Glebe Road  
 Jubilee Road  
 Norwich Road  
 Saham Road, Meadow Court, Goffe Close  
 Thetford Road  
 Watton Green

- 1.2 Bob Dore is a retired, very experienced drainage engineer and he has written a report based on the anecdotal evidence from residents of Watton who have experienced flooding in their homes and who wrote to the Town Council about this.

### **2 Bob Dore's Report:**

#### **ANGLIAN WATER.**

- 2.1 Throughout the investigation so far, the reports coming back indicate that part of our sewer system, both for foul and for surface water, is seriously undersized. This is not the opinion of members of the public who just see a

cast iron manhole cover being lifted by storm water but from the comments made to them by quite senior engineers employed by Anglian Water who in their role and position within Anglian Water have remarked that the sewers are undersized and do not have the capacity to take these storm conditions.

2.2 The reason that they cannot carry out this important replacement of the sewers within their control is the lack of funding clearly referred to in the letter from the Chairman received on 15 November 2017 (see Appendix D).

2.3 Anglian Water visited the following areas affected by flooding and the residents concerned have written to the Town Council and reported what the Anglian Water engineers said about the need to increase the size of the sewers:

1. Meadow Grove and Goffe Close flooding.
2. Thetford Road flooding
3. High Street.
4. Harvey Street Area
5. Norwich Road

These sewers handle the effluent and surface water within much of the town and therefore influence potential flooding to many other areas within the town.

2.4 There is already a strong case to insist on a full investigation and report by Anglian Water on the true condition and actual capacity of the Town's sewers and their true capacity against the actual capability required to accommodate not only the current conditions but those being imposed on us by Central Government Planning.

2.5 In their letter received on the 15th November they inform us that they are presently doing a study of the problems of flooding within Watton and are initiating hydraulic modelling together with Norfolk CC. So they are obviously aware of the problem and doing something about it. We obviously don't know if the areas of flooding in our report are included in this study or if they are just considering those areas marked on Breckland DC Strategic Flood Risk Assessment map (see Appendix C) which is only part of the problem. The attached version of the map has been annotated by the Group to show where flooding has occurred.

2.6 The fact that Anglian Water has permitted surface water drains from various sites within Watton and the surrounding villages without what seems to be any understanding of the problems they will be causing during various storm conditions later on must be considered. They don't seem to have taken into account these conditions and the history showing the potential of serious flooding against what has happened over a number of years in the past. The fact that the advice given by the old Building Control Officers to "Build em High" confirms that this problem has existed for a considerable amount of time. Thankfully the builder who built my bungalow obviously paid heed to this advice as did the builders of many of the older houses along Thetford

Road and elsewhere around the town. What guidelines the developers quietly consider today when confused with the pressures of Health & Safety and adequate space for invalid chair entry, etc.etc,etc. I don't know.

### **SPECIFIC FLOODING.**

2.7 If you examine the evidence sent in by residents to the Town Council and given to the Group, there is a strong indication that the flooding that occurred on the 23rd June 2016 and in June seven years previously, has occurred at various times before then and in some areas since then. The problem of flooding within the town is therefore not a new one but one that has been going on for a considerable amount of time and had maintenance and appropriate steps been taken to maintain the sewers properly we would not be having this discussion now.

2.8 The following is my initial reaction to the evidence submitted by the Town Council and seeing the extent of the flooding that occurred on the 23rd June 2016. The following are subject to the fuller investigations we are currently carrying out. My initial reactions are therefore as follows:

#### **A. PRIORY ROAD ESTATE.**

I've called it Priory Road Estate for the want of their true name. It is the estate fed by Monkams Drive off Thetford Road. The information we have indicates that flooding occurred on the following areas:

Priory Road  
Canon Close  
Vicarage Walk  
Glebe Road

2.9 Without seeing the drainage layout of this estate I can only pass comment on what these photographs and individual reports infer and indicate. I therefore cannot examine how the problem of surface water was dealt with originally because I do not have drawings of the area. The cause might be undersized surface water sewers, sewers that are partially blocked or the lack of proper SUDS built into the design. What we can safely say is, whatever the reason, it allowed surface water to freely cascade over the surface affecting not only dwellings on these areas but along the southern end of Thetford Road also.



Priory Road



Vicarage Walk IP25 6PH



Canon Close IP25 6RF

2.10 The facts presented to us indicate that whatever method of treatment was used originally it is obviously not working now. Had it been working it is obvious the flooding that occurred on the east side of Thetford Road which flowed across the road onto the Hopkins Homes site opposite would never have happened.

**B. THETFORD ROAD AREA.**

2.11 We have two problems of flooding here which affects the following points along Thetford Road. The first one has already been discussed above and the other of sewerage discharging onto the west side of the road and onto properties there. The areas are:

- Thetford Road east and west side.
- Thetford Road west side.
- Thetford Road Barn Ruche

**a. Thetford Road East and West Side.**

This has been dealt with above under section A. Priory Road Estate as to what we believe is the root cause of the flooding.

**b. Thetford Road West Side.**

There has been serious flooding caused by the foul water sewer surcharging under storm or high rainfall conditions to the point that it is lifting cast iron manhole covers and flooding out onto the adjoining roads and properties. This occurs regularly and has done so during this year. What has been done and

what has happened over this period is part of another section of this report and dealt with separately below. We will add that this is a sewer that Anglian Water have said is undersized and in need of replacing.



Foul sewer surcharging on Thetford Road

c. Thetford Road Barn Ruche.

Sewerage has flooded at this section of Thetford Road and is possibly part of the same problem above. Sadly we have no written evidence of what has clearly occurred here therefore we cannot comment further until it has been properly investigated. We can only assume it is the same as Part a. Thetford Road West Side above.



Barn Ruche Corner

## C. WATTON GREEN.



### **Alan Nichols' Report:**

- 2.12 In 1973 I moved into Watton Green and erected a bungalow. I was warned by a council inspector that the area was liable to flooding so I made the DPC course high out of the ground to protect the property.
- 2.13 At this time, the Akrotiri Square and Lovell Gardens sites were being erected. The storm water for these sites ran into the ditch between the Akrotiri site and the field which has now become the Shire Horse Way site. The storm water then entered a manhole in the road in Watton Green to cross the road to another manhole on the north side of the road. Originally there was only one pipe across the road. This was updated over the years to two pipes to cross the road but there is still only one pipe leaving the manhole and two pipes into one does not work, resulting in the road flooding and water flooding into properties and ditches.
- 2.14 Since 1973 the local people have dug a channel from the road into the ditch located on the south side of the road which runs from the properties affected to Rokeles Hall but this fills up very quickly when there is a very heavy downpour.
- 2.15 **Anglian Water sewer.** Around 15-20 years ago, Anglian Water extended the sewer down to Watton Green. This was done in the road and there is a manhole which is sited outside properties 26 and 28. Watton Green has always flooded when it rains and sewerage water floods out of the manhole and into two storm water drains. I have reported this to Anglian Water several times. Their operatives always attend the site and we hear different stories every time ie the pumps have failed, the pumps tripped out, the pumps are not big enough, the pipes are not sealed now when installed. The manhole was

flooding during the first week of October this year and was reported to Anglian Water by a neighbour as I was away that week.

- 2.16 The NCC road surface drainage storm water drainage department cleaned out the two surface water drains with a lorry suction type unit and, when questioned, the driver stated that these drains are not cleaned out on a regular basis and that Norfolk and Suffolk now share one vehicle to cover both counties.
- 2.17 **New sites developed since 1973.** Akrotiri Square, Lovell Gardens, Blenheim Way, Blue Bell Close, the Signals and now, in progress, the new development at the rear of Blenheim Way site. All this without thought given to sewer sizes, storm water drainage from roadways and roofs allowing storm water to reach flood risk areas much more quickly and causing storm water to flood properties, resulting in occupants having to vacate properties. This has occurred frequently since 1973 to date.
- 2.18 When the Shire Horse Way site was proposed, the residents of Watton Green objected because of the road and property flooding. A meeting was held at the Sports Centre in Watton between Abel's developers and the residents and Abel Construction agreed to install an attenuator on the site. This seems to have worked on the site but still did not help the flooding in Watton Green.
- 2.19 The Akrotiri Square, Lovell Gardens, Blenheim Way and Blue Bell Close sites were probably erected with no attenuators and were connected to existing ditches and drainage systems which are not now capable of carrying the volume of water.
- 2.20 The Signals site did install an attenuator system. The question is will the new Abel's development behind the Blenheim Way site contain an attenuator or will the Watton Green area, which is lower than this new development and all the above-mentioned sites, still continue to flood.

I built numbers 26 and 28 and now live in 28 Watton Green.

#### D. ROUNDABOUT AT CARBROOKE RETAIL PARADE.

I have only photographs of the extent of the flooding here and no written report. My initial reaction to a possible cause of this flooding is based on how recently the roundabout was constructed and the clear evidence of SUDS incorporated in the lagoon positioned at the southeast side of the roundabout. It is possible that this is undersized and not able to cope with the amount of surface water discharged into it. I don't believe that any blockage would have changed this assumption.



#### E. BLUEBELL CLOSE.

Initial examination of the photographs submitted indicates that the foul sewer in Norwich Road surcharges whenever heavy rainfall occurs. I'm saying foul water because the photos show the effluent discoloured and brown. Apparently the sewer has been cleaned but the problem still remains indicating that the sewer is possibly undersized.

#### F. SAHAM ROAD AREA

I have called it Saham Road Area for the want of a better name. It encompasses the following where the flooding occurred and all are interlinked.

Meadow Grove  
Goffe Close  
Harvey Street

The flooding of Goffe Close and Meadow Grove are interlinked with the surface water sewer that handles Harvey Street and it seems a large part of the town including the High Street.



Meadow Grove



Meadow Grove (Saham Road) IP25 6UY

By Anglian Water's engineers' admittance, the size of the surface water sewer serving these two areas is undersized therefore causing the sewer to surcharge and discharge over these properties at the lower end of the town. The effects of the surcharging caused the flood water to discharge onto adjoining properties including the Charlotte Harvey field, through to properties on Saham Road and beyond. I believe properties on the other side of Saham Road were also affected.

The 'dyke' in the front of No.1 Meadow Grove is clearly of insufficient size to cope with the discharge described above and the passage of water that occurred through to Saham Road. It was suggested that they put a flap-valve at the discharge into the pond. This would not have helped because of the difference in water pressure being higher behind the flap-valve than from the dyke/pond. The other point is that the dyke/pond is full of water which obviously must restrict the amount of surface water that can safely be discharged into it.

G LANGMERE ROAD & JUBILEE ROAD.

It is difficult to comment on the flooding in these two roads so I would prefer not to comment on them until we have properly investigated them.

## **CONCLUSION**

There is clear evidence building that many of our important sewers are grossly undersized. Some serious funding has to be found to replace them as they are causing much of the flooding that occurs in and around the town. The above gives a clear indication of the problems that this complete lack of investment in our infrastructure is causing us. With the clearing of ditches and water courses around the town being properly maintained and inspected we have a good chance of solving the majority of flooding that is occurring within Watton.

### **3. Surcharging of the foul sewer in Thetford Road**

- 3.1 The Group has also discovered that flooding happens quite commonly when there is only moderate rainfall. In June and July this year, following moderate rainfall, the sewer in Thetford Road surcharged and caused sewerage to spill into homes on the new Hopkins Homes development, on to the road and on to surrounding land. Bob Doré reported by mail this sewer surcharging to Anglian Water as far back as May 2016 and verbally often before that.

#### **Trevor Ancelet's Report:**

- 3.2 Having moved into our new home on the Hopkins Homes development on November 17<sup>th</sup> 2016 we have suffered with a number of drainage issues where the manhole cover adjacent to our property has overflowed.



Foul sewer on Thetford Road surcharging

- 3.3 This has forced sewerage onto the pavement and our garden and to run down into the main road. Consequently cars driving up the A1075 splashed sewerage onto any persons walking down the pavement and onto our property.





- 3.4 I was advised by the Anglian Water team who attended the first time that the cause was the local Prison where the inmates were placing jumpers and other objects down the toilets although this cannot be confirmed.

- 3.5 On the second occasion the Anglian Water team informed us the reason was the fact that three pumping stations all fed into this drain on the main road and during heavy downpours the amount of water was too great to pass down the pipes along with the sewage from the houses (110 on the estate) and the surface water from the road which all fed into the same pipework.
- 3.6 The third and last time we suffered the now familiar sewerage entering our garden, pavement and main road, the team from Anglian Water found that a drain had collapsed on the Hopkins Homes site and they had to “over pump” past the blockage whilst they dug up the collapsed drain and replaced it with a new manhole and new pipework. They (Anglian Water) have assured me this has rectified the problem and the sewerage will not “leak” onto the pavement and my property anymore. This will remain to be seen and myself and wife check the drain every time it rains hoping the sewerage does not return.



Anglian Water over pumping past the collapsed drain

- 3.7 From memory we have suffered this at least 5 times since last November.
- 3.8 Out of interest Anglian Water fitted a manhole cover which has a bolted down lid when they repaired the drain. I asked Anglian Water if they could replace the drain cover outside our property with the same type of cover, so we would not suffer this problem again but was told this cover was fitted in error and

had nothing to do with the fact that this cover is situated in the parking spaces of the show home!



- 3.9 Residents who have lived in the town for 20 years or more affirm that flooding and sewer surcharging have been a problem for many years.

In order to make sense of these problems it is vital to have the drainage maps for the surface drains and the foul sewers.

- 3.10 Bob Dore as Acting Chairman of the Group wrote to the Chief Executive of Anglian Water, Mr Peter Simpson, on 29 October asking that we be provided with these. His reply letter was received on 15 November (see Appendix D) and informed us that these maps can be obtained from Breckland Council and we have now asked for them.
- 3.11 He also stated that Anglian Water are working with the County Council on the problems and he has suggested that the Anglian Water Technical Team meet with the Group. This is welcome news.
- 3.12 The Group think that a related problem is that all these breaches of the sewer are dealt with individually at the time and there is no one at senior management level looking at the big picture. This is very much needed.
- 3.13 Appendix E details which authority/agency is responsible for which sort of flooding and the Sustainable Drainage System (SuDS) policy of Breckland Council.

3.14 Having regard to this guidance, the Group's preliminary remedial measures include:

- For surface water expected to drain into ordinary watercourses – clean them all out so that they run to their optimum capacity
- For surface water running into public surface water sewers – have these cleaned at least once a year in Spring before the summer storms and if possible in late Autumn after leaf fall.
- Explore whether new SuDS of an appropriate form for existing developments are possible and whether surface water draining into the foul sewer system can be intercepted and put into attenuation tanks at key flooding sites.
- For the foul sewer network, ensure that the sewers are fit for capacity and purpose.

## Part B

### 4. The Role of Norfolk County Council as Lead Authority for Flooding

- 4.1 Two reports by the Norfolk County Council Flood Manager to the County's Environment, Development and Transport Committee (EDT) are relevant to this report. The report that went to the committee on 17 June 2017- Updated Preliminary Flood Risk Assessment - now lists Watton as a settlement at risk of flooding. The town falls in Band 5 (of 6 bands) where between 100 and 250 residential properties are at risk. Watton is seen to have 247 residential properties at risk, 40 non-residential, 3 key services affecting 578 people (see Appendix F). This means that Watton can seek to obtain some government funds.
- 4.2 The other report - Report on Flood and Water Management Funding Policy Guidance - is relevant to how that might be done and its recommendations were approved at the EDT on 27 January 2017.
- 4.3 The report is a complex document and difficult to get one's mind round. Our understanding in summary is that it sets out the thinking on how the County Council will manage its statutory duty to ensure that *the county is able to cope with, and mitigate against, extreme weather conditions when the amount of funding from central government does not meet all this identified need.*
- 4.4 The County Council has set priorities of communities at risk and decided to support those most at risk whilst not putting at a disadvantage those communities both willing and able to develop their own schemes.
- 4.5 As stated in the Summary, our preliminary report forms the basis of a scheme from the community in Watton to mitigate the effects of flooding in the town.
- 4.6 There are a number of proposals in the Report and two are relevant here:

*The proposal is to clarify for communities at flood risk how the County Council will prioritise and support the development of flood mitigation schemes across the county.*

*The proposed guidance would be published alongside public information and a timetable detailing how and when flood mitigation schemes would be developed for those communities in Norfolk at greatest risk.*

That is the reason for the second recommendation to Council.

- 4.7 We understand that the Town Council would be regarded as a third party and that to access funding, the Town Council will have to seek to find a willing Risk Management Authority (RMA) partner.
- 4.8 The Group think that surface water flooding and sewer surcharging are the main challenges. So the most relevant RMAs are Norfolk County Council, Breckland Council and Anglian Water.

These are the reasons for the third and fourth recommendations to Council.

- 4.9 The Group will continue to research and analyse the data it collects with a view to establishing a sound evidence base for a community led initiative.
- 4.10 Our preliminary report has illustrated the seriousness and severity of flooding within Watton which hopefully allows it to be prioritised to a higher level when comparing it against flooding elsewhere within the county.

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