

Antrobus Main Report Details

Project:	Storm Christoph Section 19 Main Report		
Area:	Antrobus		
Date:	10/08/2022	Project No.:	5150735

Document history

Revision	Purpose description	Originated	Checked	Reviewed	Authorised	Date
1.0	Draft for RMA Comment	TS	SF	EG	EG	10/08/22
2.0	Draft for Final Approval	TS	SF	EG	EG	01/09/22

Client signoff

Client	Cheshire West and Chester Council
Project	Storm Christoph Section 19 Main Report
Project No.	5150735
Client signature / date	

Antrobus Main Report Details

This Antrobus specific Main Report should be read in conjunction with the Section 19 Flood Investigation – Main Report (January 2021 Storm Christoph Flooding Event).

1. Background

Antrobus is a civil parish and rural village located between Warrington to the north and Northwich to the south. There are no main rivers in close proximity to the village centre.

Flooding, similar to that experienced during Storm Christoph, has occurred approximately every 5-10 years, including during 2012. The old village hall was built raised up so the water could flood underneath. In 2002 the village hall field flooded, following this event drains on School Lane were replaced. Road drainage improvements were undertaken in Antrobus from 2019 – 2020.

Several of the affected properties in Antrobus are within the high surface water flood risk zone (Appendix I).

Figure 1 shows existing drainage in the area and potential drainage options Antrobus Parish Council are currently considering for their address.

2. Flood Review

During Storm Christoph, surface water collected in the village hall field, then flowed through the carpark onto Knutsford Road and into the property opposite. Gardens of properties on Knutsford Road and the Old Orchard were affected, as was the village school.

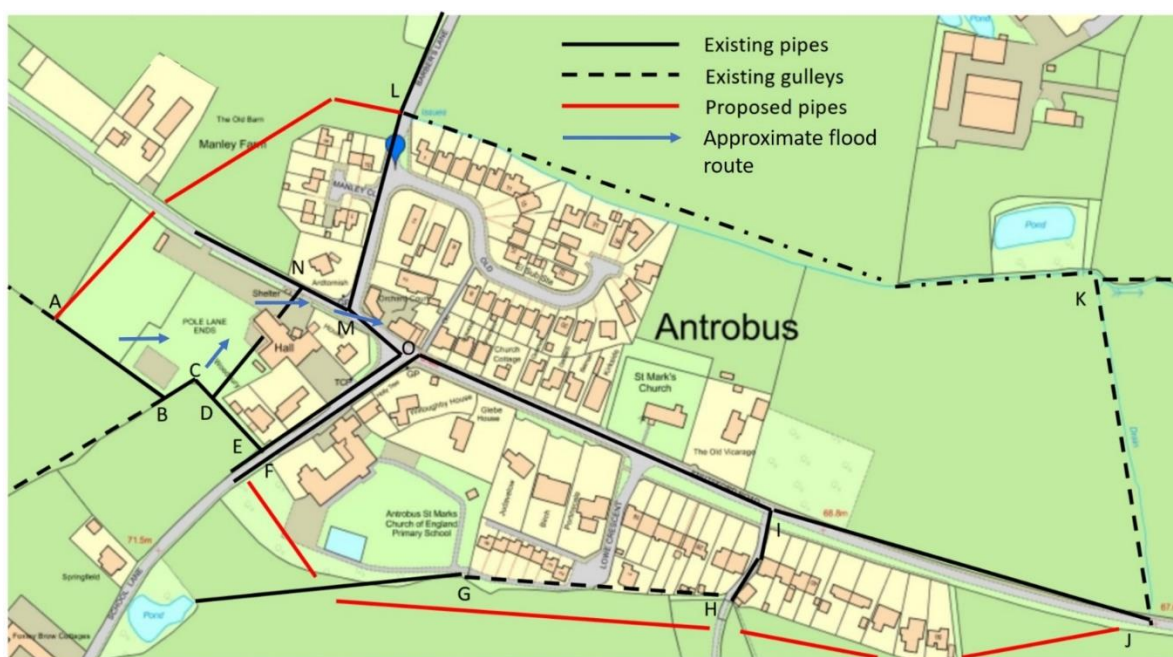


Figure 1 - Drainage Network and Flood Overview

Source: Adapted from Antrobus Parish Council and not verified by LLFA inspections

Details of the assumed drainage route are outlined below and should be read in conjunction with Figure 1. This plan reflects the flow routes of water as reported by the Parish Council by way of the letters shown on the plan

(it should be noted that the proposed pipes shown are proposed by the Parish Council and are not proposed, or recommended, by Cheshire West and Chester Council (CWaC):

- Overland flow from the surrounding fields comes from the Antrobus Arms direction (from the north-west), the west and south-west and is channelled into open field drains. These drains flow into a pipe on the Village Hall Playing Field (A and B respectively in Figure 1).
- The flow splits at D, some of which flows towards Knutsford Road at N, the remainder to School Lane at E before flowing to Knutsford Road at M via O. The water then flows north in the 125mm drain on Barbers Lane before turning east along the gully L-K which goes north-east to Arley (Figure 1).
- A second drain flows from point F to O from which it flows down Knutsford Road to point J via I. An additional drain joins at I, taking water from H, before flowing to J via K.

During the event, water escaped the ditch system and flowed overland between point C and D, flooding the village hall playing field and playground before flowing to Knutsford Road, affect flowing to the village hall and car park to Knutsford Road. (Figure 1). Residents lifted grids at the time to help to clear excess water, including the manhole of a foul water pipe (not shown) at the back of the village hall.

Photographs that illustrate the extents of the flood event in Antrobus can be seen in Figures 2 - 4.



Figure 2 - Knutsford Road. 19:58 20/01/2021

Source: Parish Council



Figure 3 - Village Hall. 19:58 20/01/2021

Source: Parish Council



Figure 4 - Village Hall. Afternoon 20/01/2021

Source: Parish Council

Key statistics of the Storm Christoph Flooding in Antrobus are summarised in Table 1. A detailed timeline of the flood event can be found in Appendix II.

Table 1 - Flood Impact Summary

Residential properties affected:	Commercial premises affected:	Number of properties evacuated:	Number of properties flooded:	Number of domestic properties flooded:	Number of commercial premises flooded:	Comment
2	0	0	2	2	0	As reported to CWaC prior to publishing

Table 2 provides a brief summary of the flood event, impact and response in Antrobus.

Table 2 – Antrobus Flooding

Antrobus	
Date	<ul style="list-style-type: none"> 20th January 2021
Affected Roads	<ul style="list-style-type: none"> Nook Lane, Foggs Lane, Old Lane, Knutsford Road, Hollins Lane, Pools Platt Lane, Northwich Road
Flood Alert / warning issued	<ul style="list-style-type: none"> The area is not covered by a Flood Warning or Flood Alert
Flooding Impacts and Observations	<ul style="list-style-type: none"> Property damage Additional stress and mental anguish on the community over such an event happening again
Summary of Flooding Incident Response During Event	<ul style="list-style-type: none"> Villagers lift manhole covers and blocked highway gullies in an effort to protect properties during event

The following actions were undertaken prior to completion of the interim report:

- Parish Council and LLFA flood risk officer met 25th March 2021 to discuss the flooding.
- Meeting on site with affected residents 8th July 2021 with CWaC, as Lead Local Flood Authority (LLFA), and the Parish Council.

3. RMA Response

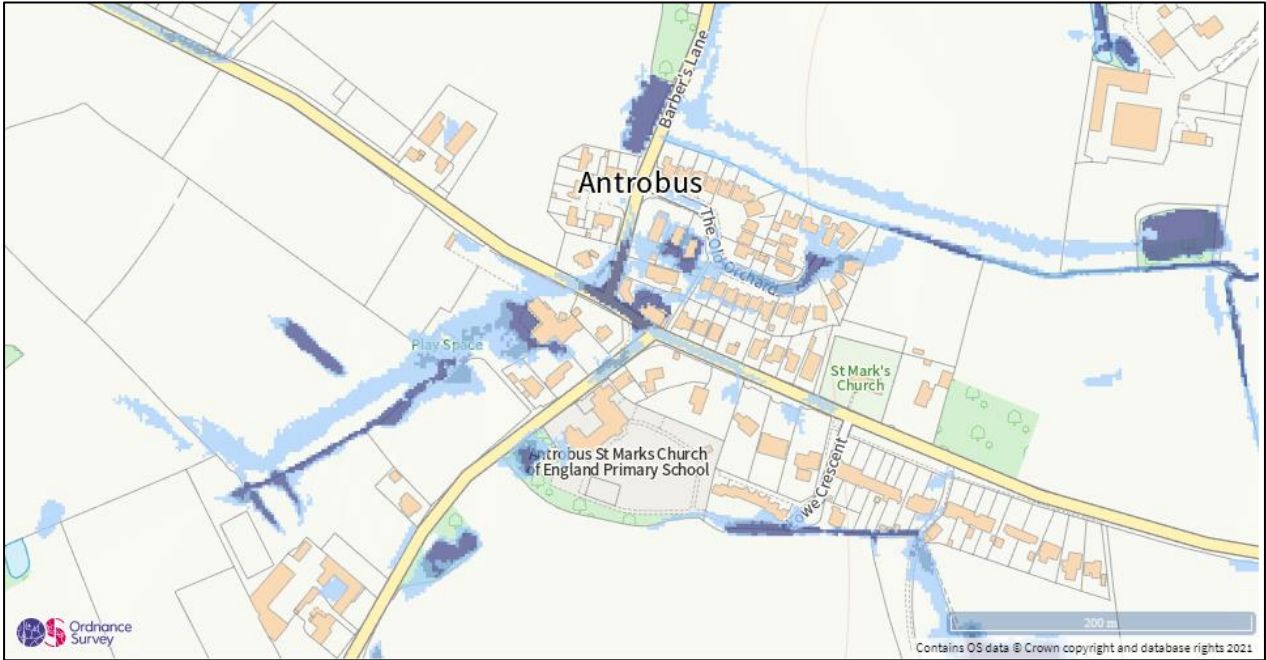
This section outlines the RMA response to the flood event and identifies area for improvement of flood risk management within the CWaC administrative boundary. Consultations have been undertaken with the participating RMAs, local residents and business owners to inform this assessment.

- CWaC, as LLFA, and the Parish Council have worked together to investigate existing drainage infrastructure and drainage routes and, to identify and consider potential drainage solutions, including a review of the potential for a flood alert system. This work is ongoing.
- CWaC is moving towards a risk-based approach to gully maintenance; increasing the frequency of cleansing to those gullies identified in areas at risk of flooding.
- As part of the development of the wider drainage improvement option the LLFA will be undertaking capacity investigations of the drainage system.
- The FloodHub has been promoted at several engagement events and during site visits with affected residents. A link is also included from the Flood pages of the CWaC website.

4. Recommended Actions

- CWaC, as LLFA, to complete the investigation into existing drainage infrastructure and potential solutions. If considered appropriate to do so, progress a proportionate Outline Business Case.

Appendix I – Map



Extent of flooding from surface water

- High
- Medium
- Low
- Very low

Source: EA

Appendix II – Timeline

Time	Antrobus
20 th Jan 14:00	The Village Hall fields began to flood from the pipe surcharging along the playing field boundary.
20 th Jan 15:00	Water flowed from the Village Hall playing fields down Knutsford Road and began to ingress into properties.