



# A GUIDE TO ORGANISING SAFE FIREWORK DISPLAYS



Please give this information to people who will be attending your firework display.  
To be useful, it should be issued before the event!

## STOP!!!

Before you leave....

**IS YOUR HOME SAFE?** Here are some home safety **Do's** and **Don'ts**

**Do:** lock all your doors and windows when you go out. Pay particular attention to the back of your premises - a popular entry point for burglars.

**Do:** keep your shed and/or garage locked. If your garage has a communicating door with the interior of the house, make sure it is securely locked.

**Do:** close the curtains and leave a light on in a room (not the hall) when you are out for the evening

**Do:** light up any dark areas around your home

**Don't:** leave door keys in hiding places such as under a door mat or in a flower pot. Thieves know all the hiding places.

**Don't:** leave a window open a few inches for the cat to get in or out. Burglars find this very useful too.

**Don't:** leave ladders around. If you must leave them outside make sure they are padlocked to something secure.

## INTRODUCTION

This guide is for organisers of firework displays to help make them safe.

It covers most types of displays, including those where the fireworks are to be set off by the organisers. These events are often put on by organisations like school parent/ teacher associations and sports clubs, and by public houses for their customers.

The guide also covers the larger displays organised by voluntary organisations like the Round Table where professional display operators are used.

If you are having a firework party for family, friends and neighbours, generally you should only need to follow the instructions supplied with the fireworks. However, you may find the safety advice in this guide useful.

Please bear in mind that this is only a guide, and not a definitive document. The leaflets/booklets/video mentioned in the **RECOMMENDED VIEWING and READING** Section provide additional information and advice.

### GENERALLY

Under the Health and Safety At Work etc. Act 1974, those putting on an event are responsible for both the organisation and consequences of the event.

To comply with the law you must manage risks in order to protect the public and your members and/or employees.

Following the steps outlined in this document will enable you to comply, and at the same time, enjoy a safe event.

## PLANNING THE DISPLAY

### ORGANISATION

- C Start organising the display as early as possible.
- C Form a Committee (no matter how informal) with responsibility for the operation of the display, with one person in overall charge.
- C One person should be solely responsible for safety matters. They should not be engaged in any other duties or activities which would prevent them carrying out this responsibility.
- C All people with a specific responsibility before and during the display should be named and all hazards identified; precautions specified and everyone appropriately trained.
- C Everyone assisting during the course of the display should be properly instructed in their responsibilities and what action to take in the event of an emergency.
- C It is suggested that this is set down in writing.

## WHO TO CONTACT

It is advisable to contact the following people well before the display. Where necessary keep in touch with them as your plans proceed:

### POLICE

Contact the Police Station local to the site. Tell them of the location of the display and its layout, including entrances and exits. They can advise you and may be able to assist with crowd control; public order; emergency access; and local traffic management and parking.

### FIRE BRIGADE

Contact the Fire Station local to the site at least 28 days before the event. They will be able to give advise on how the emergency services will be called; marshalling of spectators and traffic in emergency conditions; arrangements of spectators enclosures; local access for emergency vehicles; nearby buildings and features which could be affected by a fire and provision of on-site fire-fighting arrangements.

### FIRST AID

Contact St John Ambulance, British Red Cross or other voluntary First Aid society to arrange attendance at larger displays at an early stage in your planning.

### LOCAL AUTHORITY

At an early stage of your planning contact the Council Departments listed on Page 16 for advice:

- C About your arrangements for storing fireworks before the display and the possible need for registration

- c About your duties under health and safety legislation
- c If food is going to be sold at the display
- c On the possible need for a public entertainment licence, ie, where the display accompanies a music concert; but not normally where music is played at a display

## **INSURANCE**

**Public Liability Insurance** -You should be aware that the organisers could be held legally liable for the costs or damages for any injuries, etc, which may occur during the event.

It is possible to insure this risk via a public liability insurance policy and it is recommended that this insurance be arranged with a minimum limit of indemnity of '2 million, although in many instances a greater level of cover may be needed.

Remember, without cover, the claim would be made against all the organisers and their private finances.

Council schools, youth clubs and other Council establishments proposing to hold a display should contact the Council's Insurance Section to ensure that they are adequately insured. PTA's and other voluntary groups will require their own separate insurance cover.

**Contractors Insurance** - Where organisers are using specialist fire display contractors, they should check that the contractor has their own public liability insurance and that the contractor complies with any policy terms and conditions.

**Insurance Claims** - In the event of any injury or damage to property, ensure that full details of the incident are written down, and that the matter is reported to your insurers without delay. Never admit liability as it may invalidate your cover.

## **NEIGHBOURS**

Contact neighbouring landowners/users so they can keep animals indoors where necessary, and, in the interests of good public relations, inform any nearby hospitals, homes for the elderly, etc.

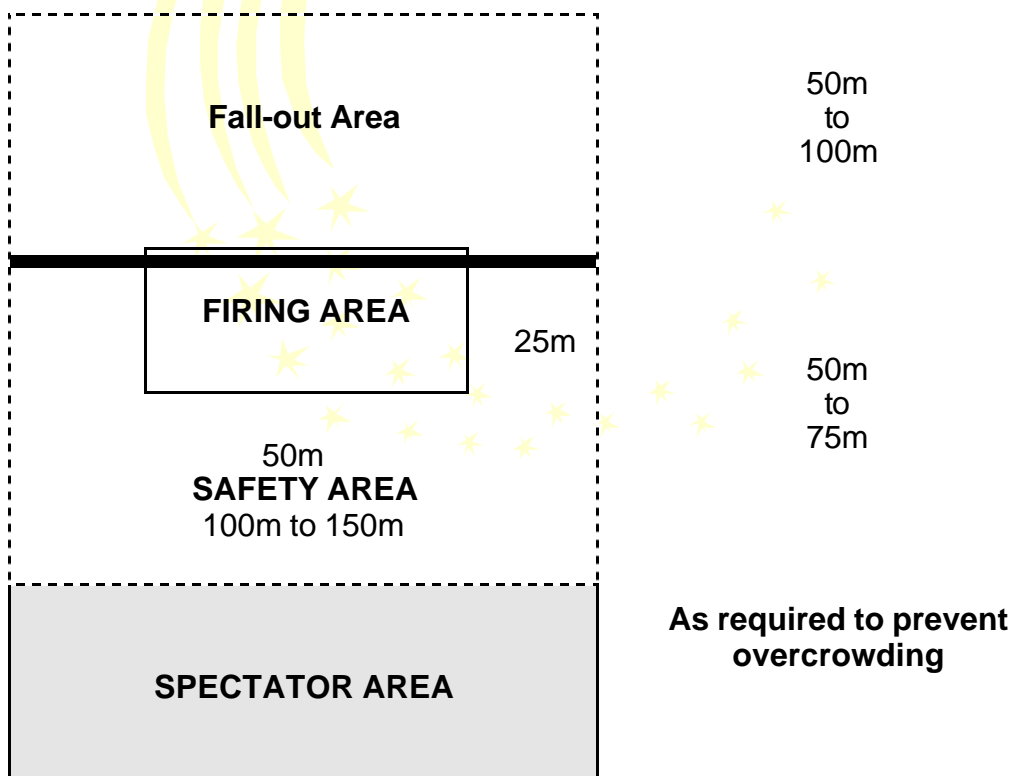
## **AERODROMES**

If the display is near an aerodrome/flight path, or you are unsure whether it is, you should contact the Airspace Utilisation Section, Hillingdon House, Uxbridge, Middlesex UB10 0RZ, telephone: 01895-276108. They will advise you whether restrictions may be required on the height of any aerial fireworks, lasers, searchlights, etc, that may form part of your display.

## SITE LAYOUT

- c Set out the site as indicated on the DISPLAY SITE DIAGRAM
- c The site should be as large as possible for public safety, bearing in mind the types of fireworks to be used (which will affect the size of the safety and fall-out areas) and the expected number of spectators
- c The lesser dimensions for the safety, firing and fall-out areas are the minimum required for smaller displays using Category 1, 2 and 3 fireworks, whereas the larger dimensions are applicable to larger displays where the use of Category 4 fireworks will require deeper safety and fall-out areas. It should be noted that some sizes and types of fireworks may require greater distances.
- c Under the classification, Category 1 are Indoor Fireworks; Category 2\*- Garden Fireworks [eg, selection boxes on sale for 5 November]; Category 3\*- Display Fireworks [the largest on retail sale] and Category 4 - Fireworks not available to the general public and which must be set off by trained operators. It should be noted that some types of fireworks may require greater distances.

### DISPLAY LAYOUT DIAGRAM



Barriers -----

- c Ensure that the site is free of dry, cut grass and other easily combustible material
- c Check the site in daylight for obstructions, ie, trees, overhead power lines, adjoining buildings, entrances/exits and parked vehicles. Locate firing and fall-out areas clear of any obstructions.

## **SITE FACILITIES**

### **ACCOMMODATION**

- c Allow an area of at least 0.5 square metres per person.
- c Overcrowding should not be allowed
- c Consider providing an area and facilities for spectators with disabilities.

### **SPECTATORS' FIREWORKS**

- c Do not admit spectators to the display with their own fireworks. Publish notice of this in advance and at all entrances on the night.
- c Do not sell fireworks at the site.

### **EXITS**

- c Provide at least two spectator exits from the site; large enough, spaced well apart, clearly marked, kept free from obstructions and well lit.

### **SAFETY BARRIERS**

- c Provide sufficient physical barriers to prevent spectators entering the safety, display, fall-out and bonfire areas.

### **FIRE-FIGHTING**

- c Provide equipment for putting out small fires [eg, fire extinguishers, buckets of water/sand, fire blankets] throughout the site
- c Ensure that an adequate number of stewards know how to use this equipment. Tell them not to attempt to fight major fires.

### **FIRST AID**

- c Arrange for a voluntary first aid society to provide a suitably equipped and well lit First

Aid Post, staffed by qualified first-aiders, at larger displays.

- C At smaller displays where voluntary first aid societies are not able to be in attendance, ensure that a qualified first aider is present. This person should be readily identifiable. A well lit facility suitable for first aid treatment should be made available, provided with a plentiful supply of water for the treatment of burns; eyewash and eye baths and a selection of sterile dressings.

You should be aware that any burn deeper than the surface of the skin or larger than 25mm in diameter must be referred to a doctor or hospital.

- C Clearly signpost the First Aid Post and provide clear and easy access for spectators and an ambulance at all times. Where an ambulance is required provide a parking area adjacent to the First Aid Post and maintain a clear exit from the site.
- C Ensure that all persons assisting at the display are aware of the location of the First Aid Post, or where appropriate the identity of the first aider.
- C Locate the nearest telephone box or provide access to a telephone.

## **EMERGENCY ACCESS**

- C Keep the agreed emergency service routes clear of obstruction and readily accessible at all times.

## **PUBLIC ADDRESS**

- C Provide a small public address system or portable loudhailer so that announcements and instructions can be heard by all spectators.

## **REFRESHMENTS**

- C Refreshment facilities should be located away from the spectator area and pedestrian and vehicle access/egress points.
- C Locate any bar selling alcohol well away from the display site and do not allow drink to be taken from the bar. Do not allow spectators to bring alcohol into the display site. No one involved in the running of the display should be under the influence of intoxicating substances

***Fireworks and alcohol do not mix***

## **LITTER**

- C Provide suitable litter bins throughout the spectator area.

## **CAR PARKING**

- C Site any car parking well away from the display and fall-out areas and upwind of them. Clearly signpost the parking area. Separate vehicle and pedestrian entrances. Do not allow car parking anywhere else.

## **CROWD SAFETY**

- C Provide an adequate number of stewards who are responsible solely for crowd safety. There should be no fewer than two stewards for up to 500 people plus one for each additional 250 people expected to attend.
- C Make the stewards easily identifiable, ie, wearing fluorescent jackets and provided with torches. Have additional torches available for other staff and a supply of spare batteries.
- C Instruct stewards to be on constant watch for emergencies. Make sure they know what actions to take, paying particular attention to controlling entry to the spectator areas, avoiding overcrowding and keeping spectators out of safety, firing and drop-out areas.
- C Make every effort to start the display on time as crowd control becomes difficult the longer people are kept waiting. If a delay is unavoidable, tell the spectators at an early stage, and keep them updated.

## **EMERGENCY PLANNING**

When planning the event, consider what could go wrong on the day and draw up a plan to deal with each emergency or contingency, to include *What action will be taken?* and *Who will take that action?*

The following paragraphs highlight some of the problems that may arise and actions that could be taken. The list is not exhaustive, but should help you plan ahead for emergencies.

### **Stopping the display early/cancelling due to adverse weather conditions**

You will have based the site layout on the prevailing wind conditions. If the wind direction is different on the day of the display, consideration may have to be given to altering the layout to ensure people's safety. If this is not possible or inadvisable as it may interfere with exits, you may have to consider the actions for high winds described in the following paragraph.

In high winds it may be necessary to modify the display [ie, eliminate aerial fireworks] or, in extreme conditions, cancel it or finish early. The firers should be involved in these decisions and if they wish to stop or cancel the display, they should not be overruled by the organisers.

### **Accident to someone from a firework**

Have a procedure to ensure that first-aiders have clear access to an injured person as soon as possible. In the event of serious injury have an ambulance called immediately by a designated organiser and suspend firing of the display.

### **Spectators in safety, firing or fall-out areas**

If spectators break through the barrier into the safety, firing or fall-out areas ensure that firing of fireworks stops as soon as practicable.

### **Bonfire out of control/fire started by firework debris/etc**

If you cannot deal with the fire using first-aid firefighting equipment, call the fire brigade without delay and suspend firing of the display until the fire is extinguished or the fire brigade advises it is under control. If fire threatens the fireworks, move them only if it is safe to do so. If spectators have to be moved away from the fire ensure that access for fire appliances is maintained at all times.

### **Disorderly behaviour by spectators**

If trouble seems to be developing consider calling the police rather than dealing with the matter yourselves.

### **Communications**

Two-way radio should be provided between the display operator/firers and other people with key responsibility for emergency action.

## **THE BONFIRE**

- C Make one person responsible for the bonfire.

### **SITING**

- C Locate the bonfire at least 15m away from other areas, buildings, roads, railways and public rights of way
- C Downwind of spectators, to prevent their view being obscured by smoke and burning ashes being blown into the firework team
- C A safe distance from flammable or otherwise dangerous materials [eg, petrol, liquified petroleum gas] and overhead power lines

### **CONSTRUCTION**

- C Use dry material with heavy bulk items forming the core of the fire, arranged so that the bonfire collapses inwards.
- C Do **not** burn dangerous rubbish like foam-filled furniture, old tyres, aerosols, bottles, tins

of paint, etc.

- C Avoid light materials such as corrugated cardboard which is liable to blow about when burning and/or burnt.
- C Tie the guy securely to the top of the bonfire.
- C Cover the bonfire to keep materials dry

## BEFORE LIGHTING

- C Check, during daylight, that construction is stable and remove any unsuitable materials that may have been added. Look for fireworks, aerosols, highly inflammable materials or containers containing such materials.
- C Check then and **immediately** before lighting that there are no children or animals inside.

## LIGHTING

- C One person should be responsible for lighting the bonfire.
- C **Never** use petrol, paraffin or other flammable liquids to start the fire.
- C Use paper and solid firelighters from two or three places to ensure an even burn.
- C The person looking after the bonfire should not wear lightweight clothing which could ignite relatively easily. They are recommended to wear a substantial outer garment of wool or other material of low flammability and stout boots or shoes. They need to know what to do in the event of a burn injury or a persons clothing catching fire. They need to have a fire blanket ready in the bonfire area.
- C It is preferable not to light the bonfire before setting off the fireworks as stray sparks may accidentally set them off

## THE FIREWORK DISPLAY

### FIREWORKS

- C Bulk purchases of fireworks for larger displays should be made from reputable manufacturers and should comply to BS 7114
- C Fireworks for smaller displays may be purchased in boxed sets from local shops which are registered for their sale by the Council.
- C Do **not** use damaged fireworks or fireworks left over from previous years.
- C Sparklers are **not** to be given to children under 5 years of age.

## STORAGE

- C Fireworks should not be stored within a domestic house, but in an outbuilding which offers security and protection from damp.
- C Store fireworks in the transportation containers in which they are supplied, and store loose fireworks in closed metal containers, ie, dustbins.

## HANDLING/SETTING UP

- C Unpack carefully in a dry place away from open fires and flammable materials.
- C Do **not** smoke when handling fireworks.
- C Study the manufacturers instructions about the fireworks before the event, preferably in daylight. This will give time to prepare any firework supports and train firers. Seek clarification from the manufacturers if the instructions are not clear.
- C Read and observe the instructions on each firework using a torch **not** a naked flame.
- C Set fireworks in accordance with the manufacturers instructions.
- C Angle them away from spectators and place stakes used to support rockets, roman candles or similar fireworks on the spectators side of the firework. This will ensure that in the event of the stake collapsing or the firework becoming detached the firework will fall away from the spectators.
- C Only set up fireworks in the firing area.

## LIGHTING

- C Allow only firers into the firing area and restrict their numbers to the minimum necessary - two will normally be sufficient. If there is no radio link, appoint one person to relay messages between the firers and the person in overall charge of the display.
- C Firers should wear suitable protective clothing. This could consist of stout footwear and outer clothing of wool or other fire resistant material and a protective hat, eye and ear protection and gloves. Lightweight flammable clothing ie, 'shell suits', should be avoided.
- C Each firer should carry a torch and a whistle to attract attention in case of difficulty.
- C For lighting display fireworks a device called a portfire is usually provided by the manufacturer and it is essential this is used. Portfires should not be carried in pockets but should be kept in a closed container when not in use.
- C For lighting garden fireworks use the fuse wick supplied in boxed sets.
- C **Never** use matches.

## FAULTY FIREWORKS

- C Leave a firework which fails to go off until the end of the display or for at least 30 minutes, whichever is the longer, before placing it in a bucket of water, preferably overnight. Seek the manufacturers advice on safe disposal..
- C Do **not** attempt to relight faulty fireworks.
- C Do **not** put them on the bonfire for disposal.

## AFTER THE DISPLAY

- C Keep spectators out of the safety, firing and fall-out areas until the firers have checked and made the site safe, locating and dealing with any fireworks that have misfired.
- C **Never** put fireworks, including fully spent ones, on the bonfire or dispose of them by burying
- C Place fully spent fireworks (but **not** misfired or partly spent) in refuse receptacles
- C Soak misfired or partly spent fireworks in a container of water in an area where they cannot be tampered with and contact the manufacturer or supplier for advice on safe disposal
- C Keep spectators out of the bonfire area until the fire has been properly extinguished. Cool it down before leaving the site
- C Return to the site at first light to check that the area is clear of partly spent fireworks and other hazardous remains.

## RECOMMENDED VIEWING and READING

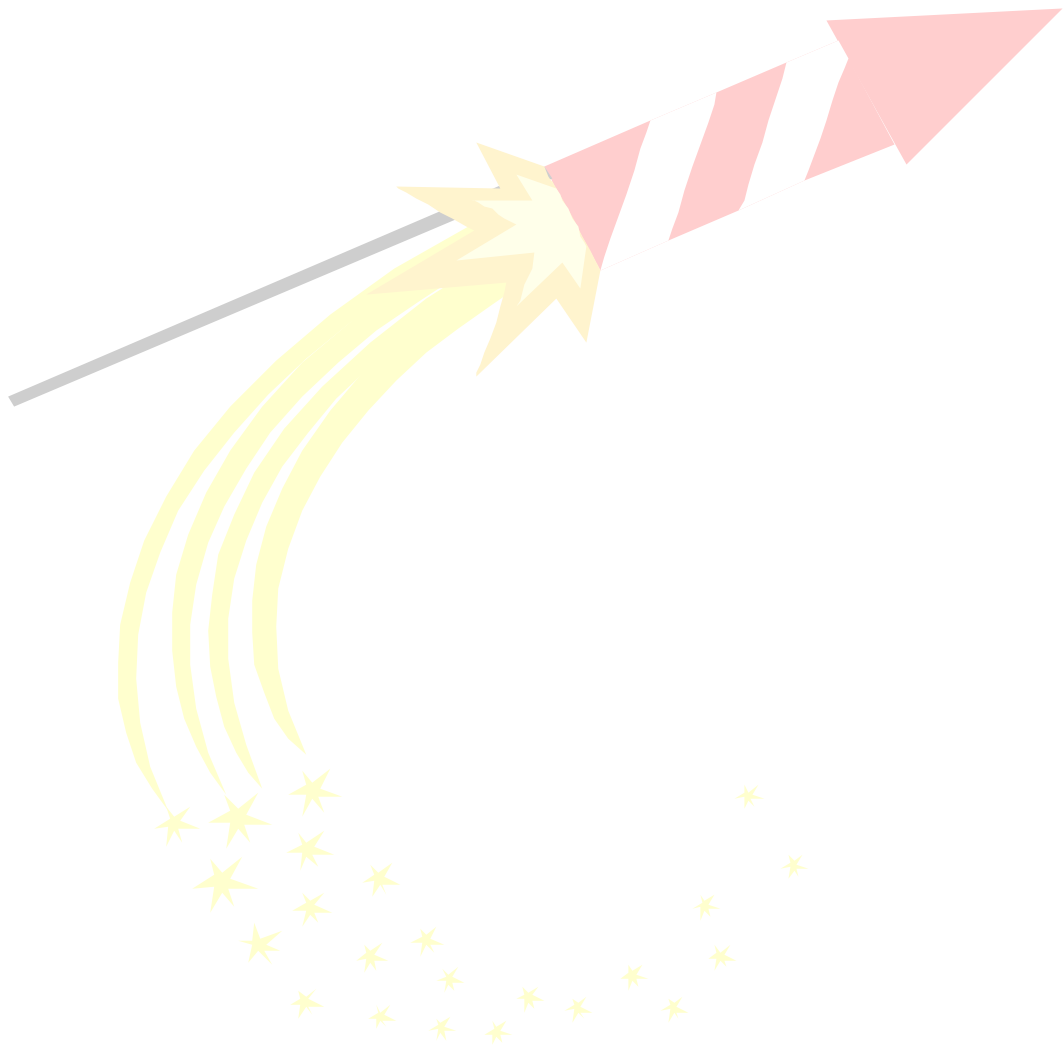
The following videos and publications provide additional information on organising and setting up a bonfire/firework display:-

ã **Celebrate Bonfire Night in Safety**ã is a short VHS video film produced jointly by the DTI and a firework manufacturer.

ã **Safer Displays - A guide to Firework Safety**ã, ã **Selling Fireworks - Some things you should know**ã and ã **Firework Displays - A Guide for Organisers**ã are leaflets produced by the DTI.

***Giving your own Firework Display*** and ***Working together on Firework Displays*** are booklets published by the Health and Safety Executive.

Copies of the video and leaflets and advice on the health and safety booklets may be available from the Council Departments listed on Page 16.




## THE FIREWORKS CODE

- C **KEEP FIREWORKS IN A CLOSED BOX -**  
Take them out one at a time and put the top back at once!  
When the box is open, keep it well away from fire and cigarettes
  - C **FOLLOW THE INSTRUCTIONS ON EACH FIREWORK CAREFULLY -**  
Read them by torchlight **NEVER** a **NAKED FLAME!**
  - C **LIGHT TIP OF FIREWORK FUSE AT ARM'S LENGTH -**  
Preferably with a safety firework lighter or fuse wick
  - C **STAND WELL BACK**
  - C **NEVER RETURN TO A FIREWORK ONCE LIT -**  
It may go off in your face!
  - C **NEVER THROW FIREWORKS!**
  - C **NEVER PUT FIREWORKS IN YOUR POCKET!**
  - C **KEEP PETS INDOORS!**
  - C **NEVER FOOL WITH FIREWORKS**
- A BONFIRE CHECKLIST:**
- C **DON'T PUT BONFIRES NEAR BUILDINGS**
  - C **DON'T BUILD DENS INSIDE A BONFIRE**
  - C **DON'T USE PETROL TO LIGHT A BONFIRE**
  - C **DON'T PUT AEROSOLS OR BOTTLES ON BONFIRES**
  - C **DON'T THROW FIREWORKS ONTO A BONFIRE**
- C **REMEMBER - IF YOUR CLOTHING CATCHES FIRE:**

**STOP - don't run, DROP to the floor/ground  
ROLL OVER to put the flames out**

## CONTACT TELEPHONE NUMBERS



Suffolk Constabulary Martlesham Heath Ipswich Area Sudbury Area	01473 613500 01284 774100
Suffolk County Council Fire Service Headquarters Colchester Road Ipswich IP4 4SS	01473 588888
St John Ambulance Ipswich Western Area	01473 253352 01284 700430
Red Cross Hadleigh Ipswich Sudbury	01473 827414 01473 219260 01787 882013
Babergh District Council Environmental Health	01473 825764
Trading Standards Suffolk County Council Consumer Advice	01473 584358
Highways Department Suffolk County Council	01473 58300