### Foreword

This series of booklets has been produced by the Department of the Environment to increase awareness of the value of our architectural heritage and to provide information on the basic principles and methods of conservation and restoration. The titles in the series are listed on the back of each booklet.

These texts are not intended to be comprehensive technical or legal guides. The main aim is to assist architects, builders, owners and others,in understanding the guiding principles of conservation and restoration. They will facilitate the identification of the most common problems encountered in heritage buildings,and indicate the best solutions. It should be appreciated that specialised aspects of conservation and restoration will require professional expertise and more detailed information.

The Department acknowledges,with appreciation,the efforts of the authors of the individual booklets,the Irish Georgian Society who coordinated their production,the Conservation Advisory Panel established under the Operational Programme for Local Urban and Rural Development and all others involved.

# Summary of Conservation Principles

- · Research prior to planning work
- Minimum intervention repair rather than replace
- · Respect the setting.

## Summary of Conservation Procedur e

- · Research and analyse history of building
- Survey building and identify original material
- Plan work according to conservation principles
- Use experts where necessary
- · Record all work
- · Install maintenance procedures.

### Introduction

Stone paving is virtually indestructible, and will, if not abused, last indefinitely. Stone is an attractive material, and can give great character to an historic area, particularly when it shows the signs of age on its smooth worn surfaces. Pavements can only look their best when clean, and in the past it was the custom of the householder or shop owner to clean their own stretch of footpath. Unfortunately, this is not the case nowadays, but using stone slabs would help, as they appear to stay cleaner than concrete slabs or coloured brick.

Various regions of Ireland produce different types of stone, and the use of local stone in particular areas not only shows off the natural products of that area but also generates employment. Many areas have good local stone, such as Kilkenny and Carlow which have excellent limestones, Dublin and Wicklow have their granite, while Kerry has a beautiful pink sandstone.

### Brief Histor y

The provision of pavements in towns and cities is a service which has existed since antiquity. For example, the Romans provided stone constituted pathways in Pompeii,which were raised more than a foot above the level of the roadway.

### Stone paving

In Dublin,the Act of 1774 for paving 'the streets,quays,bridges,squares, yards,courts and alleys'was enacted because of the poor quality or total lack of pavements at that date. This led to the paving of much of Dublin city in tough and beautiful granite, some of which survives today. Few Irish towns now possess any great quantity of antique stone paving,although many granite kerb stones remain, but where it exists,it should be protected and jealously preserved.



Antique stone paving should be protected and preserved.

It has been replaced in many cases by concrete slabs, which, while cheap, do not compare with stone for beauty. Any mounting of the footpath by heavy lorries or vans will tend to crack slabs easily.

#### Setts

The setts,or square block cobbles,of the late 18th and early 19th centuries developed over several hundred years. Wooden setts were also used,particularly under archways to minimise the reverberating noise of vehicles passing through. Sett laying was a very skilled job and the layout often a work of art. In Ireland,setts were usually laid accross the traffic flow and where one street met another the junction was meticulously designed and laid out. Larger setts were used to make wheel tracks to assist the passage of vehicles.

Stone pavements and setts have disappeared from most of Ireland's towns and cities. Many have been replaced,not only by asphalt, but by coloured brick,which is visually incompatible with our traditional streetscapes,and difficult to clean. Despite many ravages to the wonderful granite pavements and stone setted streets of Dublin,the capital can claim to have led the way in conserving stone paving and,more recently, to the laying of new stone pavements in the city. Also, in the late 1980s Dublin Corporation transformed the

appearance of the Temple Bar area by restoring the existing stone setts. Elsewhere in Dublin, for example around Dublin Castle, Guinness Brewery and at Smithfield, extensive areas of street surfaced in stone setts have survived

## Common Problems and Solutions

### 1. Lifting of stone paving

The lifting and removal of old stones is a highly skilled operation. The use of powerful air compressor tools can cause great damage. For over two hundred years these pavements have been lifted from time to time to install services, then re-instated with little or no damage, until recent times. While the installation and maintenance of moder n utilities is necessary, great care is called for when when historic pavements have to be disturbed. If they have to be lifted, the greatest care should be taken not to chip corners or break lumps off the stones.

Responsibility for pavements, especially antique or costly new stone pavements, must rest with the local authority, and no other body should be permitted to open up pavements without first taking advice from the relevant local authority.

2. Replacement kerb stones and paving Many original stone kerbs survive. New stone kerbs should be varied in length so that

they measure sometimes more, sometimes less than a metre. Machine-cut kerb stones tend to be too regular, and are more pleasing to the eye when the lengthh is varied. It also helps visually, and gives a more effective finish, if all machine-cut stone is dressed.

Kerbs for curves, which do not exceed 12 metre radius, should themselves be curved to suit the particular situation.



Kerb stones of different lengths are pleasing to the eye.



New stone paving being laid to a curve.

#### 3. Use of too thin slabs

Avoid using any thin veneers or cladding, particularly in vertical positions which can be liable to cracking or being lifted, or vandalised. It is vitally important that horizontal stone slabs be properly bedded.



Thin stone veneer is prone to damage and cracking.

### 4. Inappropriate pointing of paving slabs

All stone paving should be flush pointed to a sufficient depth to ensure permanence.

## 5. Maintenance of pavement lights and cellar openings

Pavement lights which are usually glazed castiron grids,need regular maintenance. Missing glasses should be replaced. The edges of cellar openings should be protected and repaired when necessary. The paving

stones adjacent to cellar openings of pubs are liable to be smashed by heavy lorries or by loaded beer barrels hitting the pavement when deliveries are made.

#### 6. Service access covers

In former times, coalhole covers were quite varied in design and individual in character, and the craft of the iron founder complemented that of the stone cutter, creating interest and adding to the general quality of the streetscape. Now, various types of standard concrete or steel covers, often large in size, are installed in old footpaths. Careful consideration should be given to the design, positioning etc. of covers where replacement or new installations are necessary.

#### 7. Construction work

There is a great need for all construction companies, their employees, machine operators and drivers of skip-lorries to take great care of old stone pavements. Careless deliveries of crates of concrete blocks, steel or skips can chip or even smash stone kerbs and pavement slabs.

During construction work,hoarding usually completely cuts off the pavement,and often the old stones will be simply dumped or discarded. The protection of pavements and street furniture should be taken into consideration when planning permission is granted.

#### Street furniture

All street furniture, in the form of old castiron pillar boxes, railings, lamps, or coalhole covers should be carefully conserved. Each local authority should aim at having an inventory of all street furniture, particularly in historic locations

### Street lighting

Public lighting appeared in Ireland in the late 17th century. In 1825 gas lamps started to take over from oil and this form of lighting was still in use up to the 1950s, although electric street lights had been in use since the start of the century.



Any surviving light standards should be carefully conserved. Many are beautiful in design and complement historic streetscapes. Some retain the functional elements needed at the time, for example the small crossbar high on the upright which supported the serviceman's ladder.

### Street signs

Antique street signs, whether freestanding or fixed to walls, should be maintained as part of our heritage.



Original street signs are part of our heritage.



Old signs and lettering are worth keeping.

#### Coalhole covers

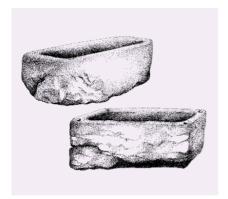
Surviving coalhole covers show the variety and charm of design which characterised these small elements of street furniture. Coal was delivered through them to the household. In many cases the stone slabs into which coalhole covers were inserted remain, and should br preserved as far as possible.



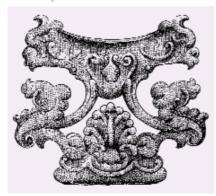
Surviving pillarbox.

### Other antique elements

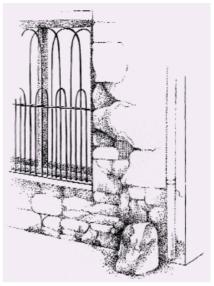
Historic pillarboxes and wall post boxes, bollards,boot scrapers,seating,horsetroughs and street signs should all be identified, inventoried and carefully preser ved.



Hourse troughs



Boot scraper



18th century 'protector'stone at entrance to narrow lane

### Historic streetscape

As well as its buildings, the line and sweep of an historic streetscape should be preserved where possible. Together with traditional street paving and furniture, historic planting of trees and shrubs may be integral to the form and character of the streetscape. A fountain or a statue may be the focal point in the street and should be preserved as such.

Great care and planning should be part of any proposed change, however beneficial in other ways,in the historic areas of our towns and cities

### Dos and Don'ts

- Do conserve all old and antique paving
  - source local materials for paving
  - reinstate traditional paving and setts where possible
  - protect antique and new stone paving.

Don't • use coloured brick in historic areas where its colour and texture are unacceptable

- use paving which is too thin for durability
- throw away any old and historic street furniture
- neglect the care of historic cast iron street furniture.

### Select Bibliograph y

Cruickshank.Dan and Burton.Neil. Life in the Georgian City. London, 1990.

O'Connell, Derry. The Antique Pavement. Dublin.1975.