RECOMMENDATIONS ON THE ESTABLISHMENT OF CREMATORIA

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INTRODUCTION

The Federation of Burial and Cremation Authorities is approached frequently by persons, companies and local authorities requesting information that will assist them in the task of establishing a crematorium. Many problems have to be addressed and carefully considered when conducting a feasibility study or preparing a scheme for submission to the Planning Authority.

The information summarised in the following pages provides advice on the whole field of policy, siting, planning and operating a crematorium. Further information concerning these and all technical subjects may be obtained by members on application to the Federation's Executive Officer. Adequate advice on problems of a local nature can only be given after consultation has taken place between representatives of the prospective cremation authority and the Federation's Technical Officers.

PLANNING

It is assumed that before any organisation proceeds with the formulation of plans and the submission of a planning application, the local authority and local residents would have been consulted first to help establish the business case for a new facility.

The length and duration of journey and the availability of service times at existing neighbouring crematoria can influence the strength of local support. In addition, the application of higher non-resident cremation fees at neighbouring crematoria can have an adverse effect on the local community and may support the need for a new local facility.

Broadly speaking, crematoria undertaking 1000 or more cremations per annum are most likely to be viable, although there are a number of crematoria, mainly serving rural or island communities, undertaking fewer than this.

It will be necessary to make an assessment of how many cremations may be expected if a crematorium is to be established, based upon local population size and growth projections from the Office for National Statistics. Plans should take account of the proximity and capacity of neighbouring crematoria and where relevant the future capacity of local cemeteries. It would be helpful, therefore, if information is obtained to establish the number of deaths in the area during the preceding five years which resulted in cremation being undertaken at existing crematoria, including any trends in terms of growth or decline in numbers.

FINANCE

Single Authority. Local authorities with populations of approximately 120,000 or more would be in a position to provide and manage a crematorium with a reasonable expectation of operating on a sound financial basis after the initial years of capital repayment and associated loan charges.

Combined Authorities. In a situation where the population is below 120,000, capital funding can be provided and running costs shared by several local authorities forming a joint management committee under the provisions of the appropriate Local Government Acts. Private companies may also decide to invest in these circumstances.

Joint Crematorium Board. Individual local authorities are empowered to appoint joint crematorium boards under the Public Health Act 1936 to provide and maintain one or more crematoria for the areas of the respective authorities. The constituent authorities each have representation on the Board, which is deemed a corporate body in its own right, having perpetual succession, a common seal and the power to hold land for the purposes of its constitution.

Joint Crematorium Committee. Authorities can combine under the Local Government Acts 1972 and 2000 to form a joint crematorium committee. Financial responsibility and member representation needs to be agreed in advance. The Joint Committee will ultimately be deemed to be the Cremation Authority under the appropriate Cremation Acts.

Private Company. A private company and/or consortium of companies may provide the necessary capital to enable the establishment and/or the management of a crematorium.

Joint Venture. A local authority may wish to consider a joint venture with a private company to establish and operate a crematorium.

APPOINTMENT OF ARCHITECT

The appointed architect should preferably have previous experience in the design and development of crematoria, and should be in consultation with an expert in crematoria management and operation from the outset. It is also advisable that the officer responsible for the eventual management of the crematorium should be involved as early as possible in the planning and development of the facility.

SITING OF CREMATORIA

The process of site selection should be aimed at achieving quietness and seclusion. A woodland or parkland setting, or an area of undulating ground with good natural features and mature trees, would enable the establishment of a good natural setting with a minimum of horticultural treatment. A visual impact assessment will help to identify any attractive views beyond the boundaries of the site that could be usefully preserved as part of the overall landscape design.

A proposed crematorium will require approval under the Town and Country Planning Act 1990 and current Building Regulations. Therefore the co-operation and sympathetic support of the local Planning Officer in the selection and layout of the site and buildings is highly desirable. Pre-application discussions with local authorities are highly recommended and are encouraged by Government.

Government policy, set out in the National Planning Policy Framework (NPPF) advocates sustainable development by the use of previously developed land, bringing it back into beneficial use. However, previously developed land can often prove unsuitable, due to land contamination which is unacceptable for the interment of ashes, or due to the presence of residential property within 200 yards. There is a growing recognition that new crematoria will be built in a countryside location close to the urban fringe.

Ideal sites are rarely to be located in urban areas and it is emphasised that suitability of setting is of greater importance than its location in close proximity to population centres. Often, this will involve the consideration of sites within the Green Belt, which is the subject of restrictive planning controls. Government guidance contained in the National Planning Policy Framework (NPPF) confirms a general presumption against inappropriate development within the Green Belt "except in very special circumstances".

All proposals in the Green Belt should provide evidence of a comprehensive site search along with demonstration of local need at the planning application stage to support special circumstances.

Community support from funeral directors, amenity societies and the general public will help demonstrate the local need. The bulk and height of buildings within the Green Belt is also a sensitive issue that may require a sympathetic and considered approach to their design.

A careful survey of any proposed site will help identify the presence of any underground services/utilities and other constraints on development such as ground contamination or mine shafts. It is also important to ensure that the presence of protected species or trees covered by tree preservation orders is identified so that provision can be made to avoid their disturbance. The aim should be to enhance wildlife habitats, wherever possible, as a part of any new development.

The site should be reasonably accessible by public transport and should have adequate water, electricity and drainage services. A mains gas supply would be an advantage as the supply, storage and cost of liquid petroleum gas (LPG) may be more expensive.

Where local circumstances indicate that the most convenient site for a crematorium would be within or attached to an existing cemetery, the adequate planting of trees and shrubs is recommended to screen the crematorium building from the roads, car park and the Gardens of Remembrance. Experience has shown that some crematoria have been sited very satisfactorily in conjunction with cemeteries, and the resultant saving of land, capital and reduced administrative costs can be of great benefit.

A minimum of two hectares (approximately five acres) per estimated 1,000 cremations per annum is recommended to provide sufficient space for the crematorium, gardens of remembrance, traffic circulation, parking, and a modest amount of space around the building The long term needs of the area should be carefully assessed at the initial design stage and sufficient land acquired initially to allow for future expansion to accommodate any increased demand for service provision.

Section 5 of the Cremation Act 1902 states that: "No crematorium shall be constructed nearer to any dwelling house than two hundred yards, except with the consent, in writing, of the owner, lessee, and occupier of such house, nor within fifty yards of any public highway, nor in the consecrated part of the burial ground of any burial authority".

In the case of crematoria established in Greater London subject to London County Council (General Powers) Act 1935 Section 64, and 1971 Section 7, the 200 yards limit from any dwelling house is reduced to 100 yards.

One of the most intrusive elements of any new crematorium is the chimney stack, which must be designed to comply with the requirements of the Secretary of State's Process Guidance Note 5/2(12) Statutory Guidance for Crematoria issued in support of the Environmental Protection Act 1990.

THE FEDERATION OF BURIAL AND CREMATION AUTHORITIES

All new crematoria (not existing processes on 1 October 2006) are required to fit abatement plant to remove mercury and dioxins, and the stack height is calculated at a suitable height for the release of abated gases (normally shorter than the optimum height for unabated gases) which require sufficient dispersion and dilution in the atmosphere to ensure that they ground at harmless concentrations.

The methodology for calculating the stack height is contained in HMIP Technical Guidance Note (Dispersion) D1 for Part B Processes "Guidelines on Discharge Stack Heights for Polluting Emissions".

Prospective cremator manufacturers will normally be able to carry out these calculations on behalf of the client, taking into account building size and shape, location, topography, meteorological data and background pollution levels. Generally, for new crematoria with abatement plant, it is unlikely that the calculated stack height would need to be more than 2 metres higher than the building height.

All UK crematoria must operate under the Secretary of State's Process Guidance for Crematoria 5/2(12) which gives guidance on the Best Available Techniques aimed at providing a strong framework for consistent regulation under the statutory Local Air Pollution Prevention and Control (LAPPC) regime in England and Wales, Scotland and Northern Ireland. This requires an application to the local authority regulator for a permit to operate, which is then issued under the Environmental Permitting (England and Wales) Regulations 2010 or Pollution Prevention and Control (Scotland) Regulations 2000.

It is recommended that as part of the feasibility study to provide a new facility, the appropriate Regulatory Authority is consulted when interpretation of the regulations can be discussed prior to the making of a formal permit application. This consultation is particularly important in Scotland where SEPA may vary the permit conditions recommended in the Process Guidance Note. Applications must be advertised, and will be placed upon a public register. The public and statutory consultees are given the opportunity to comment and have their views taken into account.

SITE ACCESS

Entrances and exits from crematorium grounds must be carefully considered.

Careful consideration should be given to the siting or subsequent development of crematorium facilities in close proximity to any schools, factories, trading estates, sports grounds or other facility which may be deemed incompatible within the vicinity of a crematorium. The immediate approach to a crematorium through a residential road, resulting in the constant passage of funeral processions or traffic congestion, would almost certainly attract objection on road safety grounds and may require the commissioning of a traffic impact survey, and upon completion, a Road Safety Audit.

Entrance and exit gates should be set back from the road and should incorporate a pedestrian gateway and path. Entrances that would require funeral corteges and accompanying private cars to cross the flow of traffic should not be sited on main trunk roads. However, if this is unavoidable, then there may be a need for a roundabout, or space in the central reservation of a dual carriageway, or a central turn right lane on a single carriageway, to allow the hearse and accompanying private cars to wait in a safe and dignified manner.

THE FEDERATION OF BURIAL AND CREMATION AUTHORITIES

The successful operation of a crematorium is dependent on the adequate separation of funeral corteges in both time and space, with each funeral party being provided with as much privacy as possible. The flow of traffic to and from the car park and the building should ideally be in one direction only and should be simple, dignified and uninterrupted. Where possible, entrance and exit routes should be screened and separated to avoid funeral corteges passing each other. This discipline also applies to the movement of mourners within the building. Therefore, the positioning of the entrance and exit to the chapel and waiting room, public toilets and floral tribute areas should ensure that funeral groups progress through the building in sequence.

An adequate car park is essential, and should be placed as near to the chapel as possible but having regard to the necessity to avoid disturbance by noise. The size can be estimated by equating it to approximately two thirds of the total seating capacity of the chapel. A proportion of parking spaces should be allocated close to the chapel for use by disabled people to accord with the requirements of Part M of the Building Regulations - "Access to and Use of Buildings" and the guidance contained within BS8300:2009 "Design of buildings and their approaches to meet the needs of disabled people" or the Department for Transport "Inclusive Mobility - A Guide to Best Practice on Access to Pedestrian and Transport Infrastructure".

Only the hearse and principal mourners' vehicles should be allowed beyond the parking area to the porte-cochere.

A minimum of two hectares (approximately five acres) per estimated 1,000 cremations per annum is recommended. This area includes the space needed for traffic circulation, parking, a modest amount of space around the crematorium building and the gardens of remembrance. The long term needs of the area should be carefully assessed at the outset and sufficient land acquired initially to allow for future expansion due to increased demand for service provision.

BUILDINGS

Main Entrance

Buildings should be designed to allow staff to circulate easily to any part, e.g. taking wreaths from a coffin after committal to the floral tribute viewing area, without disturbing any funeral service that may be in progress. Any part of the establishment that will be used by the public must be designed to allow access for disabled persons and ideal planning will place all floors on one level. The provision of a fire alarm and emergency lighting will be required to enable safe evacuation of the building in an emergency.

In the uncertain climate of this country a porte-cochere is very desirable, enabling the coffin to be removed from the hearse and mourners to pass from the vehicles under cover. The length should be at least 8 metres to enable the end of the hearse and one car to be under cover. Care should be taken that ample width (not less than 4.5 metres) is provided to allow doors on both sides of cars to be opened fully. The minimum height should be at least 3.3 metres to allow room for taller vehicles e.g. the occasional horse drawn carriage.

Entrance Hall or Vestibule. A spacious entrance hall between the porte-cochere and the chapel is an asset in many ways, allowing mourners to congregate under cover and in full view of the main drive, conserving the heat in the chapel by providing a buffer from the colder outside atmosphere, and reducing the risk of noise intrusion from outside.

Waiting Room. This should be large enough to provide seating for approximately ten per cent of the total seating capacity of the chapel and should have windows or glass doors which allow the arrival of the cortege to be seen by those waiting. It is desirable that mourners do not enter the entrance hall to access the waiting room or toilets, to avoid disturbing a preceding service already in progress, therefore entry to the waiting room should be from outside, possibly from under the portecochere.

Toilet Facilities. Toilets, which must include facilities for disabled persons in accordance with current building regulations, should be easily accessible before the service, and immediately after the service at the point where mourners disperse after the ceremony. Importantly, toilets that are adjacent to the chapel entrance should be accessible without the need to enter the Entrance Hall which may disturb a preceding or following ceremony, and care must be taken to avoid plumbing noises being audible in the chapel. Separate male and female toilets are normally desirable; however unisex toilets and disabled facilities have become more acceptable, and may be appropriate at smaller crematoria.

Vestry. It is desirable for the officiant to meet the cortege at the door of the chapel; therefore the vestry should be located in the front of the building adjacent to the entrance hall. Windows should be sited to allow the officiant to see the cortege arriving, and access to toilet facilities should be provided.

Chapel. Chapels should take into account Christian, non-Christian and secular usage and must not be consecrated for the exclusive use of any particular denomination. A system of easily changed religious symbols should be installed, and where a cross is hung on a wall, it should be capable of being easily concealed or removed.

It is estimated that no more than thirty mourners will attend in 50% of cremation services, and only on exceptional occasions does the number exceed eighty. It seems, therefore, that seating accommodation should be provided for some 80-100 people. A chapel of this size will accommodate the majority of services without destroying that intimate atmosphere so desirable with a smaller congregation. Where cremation numbers are likely to exceed 2,000 per annum then the ideal is to provide two chapels, one being for the more intimate service (approximately 20 seats) and the other large enough for at least 80-100 people.

Care should be taken to respect community needs such as, for example, the provision of additional standing room where there is a local tradition for large funerals, as for example, in some areas of London.

The architect would incorporate seating to harmonise with the building. Fixed pews with incorporated kneelers have been widely used, but require particular attention to the comfort of people using them. Upholstered chairs offer greater flexibility in terms of layout, particularly if relatives require a more informal arrangement.

If chairs are used they should have book scoops attached, and be clipped together with links to minimise movement and noise during the service and thus preserving alignment. Whatever system of seating is adopted, provision should be made to accommodate wheelchairs within the main seating area to avoid their undue prominence and prevent obstruction of the aisles.

THE FEDERATION OF BURIAL AND CREMATION AUTHORITIES

It should be remembered that the building will have to serve the Authority for many years and therefore all furnishing and fittings should be of the finest quality.

A minister's desk or lectern should be available, and equipped with a lectern light, a microphone connected to the public address and loop system, and controls to operate or signal the closure of catafalque curtains at the committal.

As a general observation on chapel interior design and furnishing it is strongly recommended that eccentric or purely secular features should be avoided. Experience has shown that mourners derive much comfort from a traditionally spiritual atmosphere engendered by the visual arrangements in the chapel. The décor should be simple, using natural materials and muted colours.

Entrance doors through which the bearers pass with the coffin should be at least 1.8 metres wide, with a minimum height of 2.5 metres.

Separate exit doors from the chapel should be provided so as to avoid mourners arriving at the chapel meeting those leaving the previous service. All doors should be free of projections, be able to be held open, and should operate silently. Depending on the layout of the crematorium, it may be appropriate to consider acoustic insulation of the chapel to minimise disturbance from mourners assembling in or departing from other parts of the building.

Windows should be provided where possible, at a number of levels to provide natural daylight and enable mourners to view a restful and attractive external landscape or enclosed garden; the designer should avoid a totally introspective environment. However, the windows should also be positioned in such a way as to ensure the privacy of mourners during the funeral service. Tinted anti-sun glass will help to preserve privacy, and will assist in reducing glare and heat gain from south facing windows.

Music. This aspect of the crematorium facilities is of considerable importance and to overlook it in the initial planning of the building can produce bad acoustical conditions and other musical difficulties that may not easily be overcome at a later date.

With the rapid advancement of technology and the internet, there is now an extensive range of facilities that can be incorporated into a crematorium, including realistic digital organs, internet based music systems, and remotely viewed web casting, etc.

An organ is considered to be essential and an organ supplier, as well as an acoustics expert, and a music system provider, should all be consulted at the initial design stage of the chapel. The general public expect new crematoria to have the facility to play recorded music, and be able to provide a catalogue of music to select from. There are numerous companies who provide high quality bespoke systems which enable specific requests to be downloaded over the internet, and who will install all of the necessary equipment, including loop systems, speakers, microphones and web cams, etc. Additional speakers should be installed in the entrance hall, and outside under the portecochere, for those occasions when excessive numbers of people attend.

It is essential for the apparatus provided for recorded music should be of very high quality, especially designed for the chapel and expertly installed, as the quality of the musical arrangements can affect the quality and value of the funeral service and, in consequence, the reputation of the crematorium.

THE FEDERATION OF BURIAL AND CREMATION AUTHORITIES

Closed Circuit Television. The use of closed circuit television, to allow staff to monitor traffic, chapel and crematory arrangements and the security of the facility and grounds, can be of great benefit to the smooth operation of the facilities. Crematoria incorporating two chapels would find such equipment invaluable. Display screens could also be made available in the waiting room, vestry and bearers room, for example, but only displaying the view from the chapel camera.

Catafalque. There are three main types of catafalque in use at the present time:

- **a.** Lowering the coffin into the catafalque during the committal by using a hydraulic or mechanical lift. A canopy may be provided upon which the wreaths may be placed;
- **b.** Passing the coffin through the end or side wall of the chapel during the committal; and
- **c.** Where the catafalque and coffin remains stationary and curtains or screens are drawn across the recess.

A system of electrical signalling (in duplicate) should be installed to enable the Minister, person conducting the service or Chapel Attendant to signal that the apparatus is to be set in motion.

Type a. There are so many divergences of opinion over the catafalque and method of committal that it would be unwise to be dogmatic over any one method. In the early days of cremation the lowering of the catafalque was considered symbolic of the earth burial and therefore to be avoided, but it was later considered by many to be an association with tradition. Should the building be designed with a basement crematory, then this type will be essential. The lift section of a descending catafalque should not be less than 3.25 metres long by 1.20 metres wide, the top of which should be no more than 1.2 metres above the surrounding floor level.

A basement, however, cannot be recommended owing to the lack of ventilation, difficulties with access to replace equipment, costliness of any future extension and the likelihood of noise rising to the chapel.

Type b. Unless movement is to be effected by a built-in manually operated conveyor belt, it has little to recommend its adoption in a new building, and if it is to be used in an adaptation of an existing chapel, care should be taken in its design and maintenance to ensure its silence in operation, and, in the avoidance of uneven movement of the coffin.

Type c. This is perhaps the method to be recommended at the present time with the catafalque or bier, on which the coffin rests during the funeral ceremony, being placed in the centre of the chapel or offset from a central position, so that it can be seen by the congregation from all parts of the chapel. This arrangement would also enable an altar table with the cross to be placed in a central recess or small chancel which, when not desired in certain ceremonies, could be removed, screened off, leaving the appearance of the chapel symmetrical and complete. At the committal, curtains may be drawn in front of, or around the catafalque, which will remain closed for the remainder of the ceremony and until the coffin is removed, when the curtains are then re-opened ready for the next service.

A fixed catafalque should be at least 2.6 metres long and 1 metre wide, but the height can vary considerably depending on the local method adopted by funeral directors. Where a coffin is carried in on shoulders, 1 metre to 1.2 metres is advised, but where the coffin is transported on putlogs or a trolley bier, then the height would need to be much lower. Liaison with local funeral directors would be advisable before any design is finalised.

THE FEDERATION OF BURIAL AND CREMATION AUTHORITIES

It is highly recommended that there should be no steps of any kind from the chapel entrance to the catafalque.

Committal Hall and Crematory. A committal hall is desirable in order to provide soundproofing chamber between the chapel and the various unavoidable noises of the crematory. The hall should measure at least 4 metres between the opening from the catafalque and the doors to the crematory.

When planning finishes for the crematory walls, floors and fronts of cremators, it should be remembered that occasionally committals are witnessed by some of the relatives, so finishes should be impervious and easily maintained. It is essential that initial provision should be made, at the design stage, for the chosen number of cremators with abatement equipment and with additional space allowed for a possible addition should the annual number of cremations exceed original forecasts. Adequate space should be provided in front of the cremators for raking and charging, and normally 4.5 metres is ideal. Space should also be considered for a coffin storage rack to temporarily hold coffins until a cremator becomes available, and possibly a refrigerated unit in case overnight storage becomes necessary. An effective thermostatically controlled ventilation system will be required to ensure satisfactory working conditions for operatives, particularly with the additional heat gain experienced from abatement plant.

Viewing Room. Ideally a viewing room should be provided to enable the bereaved to view the coffin being charged into the cremator. This is particularly important to Hindus and Sikhs. Access to the viewing room should be arranged so that witnesses are able to leave without disturbing a following service.

Cremators. Careful consideration should be given to the make and type of cremator to be installed and enquiries should be made from a number of other authorities regarding their experiences with the type of units that they are operating. Cremator manufacturers will be able to facilitate visits to other crematoria where their cremation equipment can be seen in use, and will be able to provide a list of reference sites where their cremators are installed. Cremators and other ancillary equipment should conform to the specifications and performance criteria included in the Secretary of State's Process Guidance Note 5/2(12) Statutory Guidance for Crematoria issued in support of the Environmental Protection Act 1990.

Combustion air fans, gas meters heating systems mercury, abatement plant and other necessary apparatus should be situated adjoining the cremators and as far from the chapel as possible to avoid noise and vibration. Due to the possibility of mains power failure or low voltage, it is advisable to consider the provision of a standby generator.

The following facilities may be considered for inclusion in the planning of a crematorium depending on the size, situation and projected numbers of cremations per annum.

ANCILLARY ACCOMMODATION

- **A.** *Bearers' Room.* May be provided for the use of the bearers whilst the service is in progress, and could be equipped with seating, refreshments, and a display screen showing the CCTV view of the chapel.
- **B**. *Chapel of Rest.* Where coffined body may repose during the interim period between death and the cremation service, as might occasionally be required. This building should be easily accessed externally by funeral directors bringing coffins to the crematorium and should be out of view of visitors and mourners arriving for funeral services.

THE FEDERATION OF BURIAL AND CREMATION AUTHORITIES

- C. *Coffin Storage Facilities.* Necessary accommodation should be provided adjoining the committal hall for coffins to rest after the funeral service to await cremation.
- **D.** *Treatment Room for Cremated Remains.* Absolutely essential and should include equipment for cooling and reduction of cremated remains for final disposal. Dust extraction and arrestment facilities must be provided where cremated remains are transferred between containers or equipment. Separate and secure facilities should be provided for the storage of cremated remains awaiting disposal.
- E. *Staff Room.* Should include mess room and toilet facilities.
- F. Storage Room. Should provide adequate cupboard space for stores and equipment.
- **G.** *Office.* Where the administrative staff are housed will depend entirely on the site and whether a cemetery is incorporated. It is essential that the public should not have to walk a long distance from the entrance to the office, which should also be situated in a position so that mourners are not disturbed during services.
- H. Chapel of Remembrance. Used for the storing and display of the Books of Remembrance, in suitable cabinets. Ideally this chapel should be separate from the main building and close to the Garden of Remembrance. Visitors, who wish to view the Books of Remembrance, or quietly meditate in the chapel, should not be disturbed by mourners attending services and vice versa. The display cabinet should be designed to facilitate viewing by disabled visitors.
- I. *Floral Tributes.* Ample provision should be made for the display of floral tributes. The initial reception point for displaying them would best be sited near the exit which the mourners will use from the chapel, but care should be taken to avoid noise from this point being heard in the chapel. A covered area will provide shelter for mourners during inclement weather. Provision should also be made for the accommodation of cut flowers that will be brought by visitors to the crematorium and Chapel of Remembrance at any time.
- **J.** *Staff Housing.* Where staff housing is to be provided careful consideration should be given to siting, if this is to be within the grounds. Adjacent to the entrance gates is not necessarily the best site and it should be borne in mind that staff who work together each day do not always wish to live in close proximity to each other or directly on their job.

METHODS OF DISPOSAL

General. The increase in the number of cremations taking place annually compels Cremation Authorities to give careful consideration to the whole question of commemoration. The following summary indicates the recent practice in the disposal of cremated remains:

Strewn in Grounds	21.10%
Interred in Grounds	7.63%
Placed above ground at Crematorium	0.31%
Removed from the Crematorium	69.51%
No collectable cremated remains obtained	0.03%
Retained Pending Instructions	1.42%

100.00%

Interment. Cremated remains are often conveyed to cemeteries for interment in an existing family grave.

The desire to save land, which was a primary object of the cremation movement, has discouraged many authorities from developing new grave facilities exclusively to contain cremated remains. The interment of cremated remains in various areas of the Crematorium's Garden of Remembrance is often carried out as an alternative to surface strewing although the use of caskets in these circumstances should be precluded.

Strewing of Cremated Remains. Cremated remains may be strewn in the Garden of Remembrance either on the surface of formal or informal lawn areas, in the shrubberies or in natural woodland. Where possible, it is desirable for the location of the strewn remains to be recorded within defined periodic strewing areas, situated well beyond the site of any future building developments or extensions. Many authorities have been disappointed with the appearance of lawns following surface strewing of cremated remains. If this procedure is followed, a range of alternative sites for strewing should be provided to provide time for the turf to recover. A widespread or light covering of fine soil or compost after strewing is also advisable.

Commemoration.

Experience has shown that when cremated remains are dispersed in the grounds attached to the crematorium, many relatives require some form of memorial. A choice of at least two types should be provided, but for limited periods only. Considerable practical and legal difficulties have been encountered in respect of perpetuity arrangements that were made many years ago and which cannot now be altered. Wherever possible, provision should be made for commemorative floral tributes to be accommodated within the general vicinity of the memorials. Visitors to memorials will appreciate a dedicated car parking area, set apart from that for normal funeral traffic. Informal seating and the provision of one or more shelters should also be considered.

Recordia. Methods vary at individual crematoria. The erection of stone or bronze tablets on well designed cloisters or specially constructed walls became the accepted practice until about 1940. This commemorative facility, with minor variations, has recently been revived and is available at some crematoria.

Memorial Roses, Trees and Shrubs. Some crematoria have facilities in their gardens for the planting of memorial roses, trees and shrubs to which may be attached a suitably inscribed plaque. Additionally, many cremation authorities operate schemes that allow for the planting of bulbs (crocus, daffodil, etc.) in certain areas of the Garden of Remembrance.

Garden Seats, etc. The provision of garden seats and architectural features offer another form of commemoration in harmony with the garden.

Bronze Memorial Plates. Authorities have adopted the method of fixing bronze memorial plates to specially constructed, chamfered terra-cotta brick or stone edging to the walks in the Garden of Remembrance, or a similar edging of stone or green slate directly inscribed on the chamfer. Relatives appreciate this form of commemoration when it allows the inscription to be placed in close proximity to where the cremated remains were strewn. This method enables many thousands of memorials to be provided without detracting from the beauty of the garden.

Books of Remembrance. These are regarded as being the ideal form of commemoration because of their unlimited capacity, the simplicity of the inscription, and comparative inexpensiveness.

The Book of Remembrance provides a lasting form of memorial to those cremated. It may be in four quarterly volumes, handmade, covered in natural calf vellum and richly tooled in gold. Lettering executed by hand by modern craftsmen provides a permanent record comparable with the carrying on of the tradition of the best-illuminated manuscripts of mediaeval times. An opening is provided for each day of the year and the Book, housed in a protective case, remains open each day at the appropriate page, so that entries may be seen on each anniversary of the date of death and at other times by arrangement.

Digital Books of Remembrance are also available where visitors can select the inscription they wish to see via a touch screen display facility at the Crematorium or which may be accessed on-line via the world-wide-web.

Columbaria. This type of commemoration is probably one of the oldest recorded, however, it has not been provided for in most post-war crematoria. Niches can be leased in columbaria for a period of time and ornate and well-crafted urns can be supplied by the cremation authority to hold the cremated remains. There are 2 main types of Columbaria. The 'Open or Closed' style, the 'Open style usually located indoors and the Urn remains on view, however with the 'Closed style' a memorial plate with a suitable inscription is used to enclose the niche.

GARDEN OF REMEMBRANCE

An essential part of any scheme will be the Garden of Remembrance and landscape architects of experience should be retained to make it a place of quietness and beauty.

When the site chosen for the crematorium has an attractive, natural landscape, as recommended previously, this should be disturbed as little as possible and any necessary development should only be complementary to the existing natural features. A formal layout is not desirable, excepting as might be necessary adjacent to the buildings to harmonise with the style of architecture. Wherever possible, the grounds should be accessible by wheelchair and the layout of the grounds should incorporate a minimum number of steps.

The main purpose of the Garden must not be overlooked and most of the area should be available for the strewing or burial of cremated remains.

On a flat bare site it is important to get quick-growing trees and shrubs planted at once with a long term planting scheme for forest trees for the ultimate screening and maturing of the site. Memorial areas should be screened and separated from those parts of the grounds used by mourners attending funerals or viewing floral tributes. The main avenues of traffic should be screened as much as possible to retain areas for quiet thought and meditation.

ADAPTATION OF CEMETERY CHAPELS

It is reasonable to suppose that small urban and rural areas with populations of say 20,000 to 50,000 and isolated from other centres of population could be provided with cremation facilities by the adaptation of an existing chapel on the unconsecrated portion of a cemetery. This has been achieved satisfactorily on a number of occasions. Also, under certain conditions, chapels and other buildings surrounded by, and situated on, consecrated ground can be deconsecrated in order to make a conversion possible.

The observations made in the preceding pages under various headings would, in the main, apply to adaptation schemes, but possibly on a less ambitious scale and modifications would have to be made accordingly within existing limitations.

REQUIREMENTS BEFORE OPENING

Prior to the opening of a crematorium, the cremation authority is required to certify to the Secretary of State that the crematorium has been completed and is properly equipped for the disposal of human remains by burning (Cremation Act 1952, s.1(1), as amended by the Local Authority Planning and Land Act 1980. Furthermore, no cremations may take place unless and until the Secretary of State has been notified of the opening of the crematorium (Cremation Regulations, 1930, r.3)

The requirements for the opening of a crematorium in Scotland are contained in the Cremation Act 1952, s.1(3), as amended by the Town and Country Planning (Scotland) Act 1997 and the Cremation (Scotland) Regulations 1935, r. 3.