1974

(13)

Notes of a meeting held to dis...

...a user of the
...rivileges. It was
... ideal situation
...e easily achieved
...ch is responsible
...ions involved than
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...Councils.

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...ally have
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...d Teachers should
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...this problem.

...he instances this
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...to joint classes
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...ed over changing
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...d be given to the
... hall in consultation
...nt and District

...nadequate through-
...s agreed that if
... they would prefer
...ilities (eg squash

...new stock and waste
...nadequate and badly
...ed area.

...n each floor for

People in queue wanting to take part in other activities object to action in (d).

(f)
Congestion is increased by clients returning equipment and reclaiming deposits.

(g)
Receptionists suffer from draughts from main doorways.

Suggested methods of alleviating difficulties:

(a)
Free entry for spectators. There was a difference of opinion as to whether the saving in staff costs would be outweighed by the loss of income.

(b)
Any loss of income resulting from (a) might be further compensated for by making higher charges for use of facilities.

(c)
Provision of coin operated ticket machines as opposed to manual issue of tickets.

(d)
Provision of coin operated turnstile at entrance to building.

(e)
Provision of separate entrances for access to swimming pool, sports hall, etc.

(f)
Membership scheme. Opinion was again divided on this point, some believing it saved staff time and reduced administrative costs while giving a certain status to members, and others disagreeing. It was pointed out that a membership scheme brings benefits in controlling unruly behaviour and also provides a nucleus of interested people to contact when organising special events.

(g)
Detailed analysis of requirements is essential at the design stage. Further information is needed on the comparison of capital costs and running, maintenance and staff costs on different standards of provision.

(h)
A separate access is required for school parties, particularly those using outdoor pitches but changing inside the main building.

(i)
Increased flexibility of design in reception areas is necessary so that by the erection of barriers/screens they can be adapted to varying needs.

(j)
Ramped access to main entrance required for disabled persons and also for delivery of some supplies.

## 2 SWIMMING POOL, SPORTS HALL, WET AND DRY CHANGING

(a)
Unanimous opinion that changing areas are too small, and number of cubicles inadequate, particularly in female wet changing rooms where there seems to be greater objection to the communal changing area.

(b)
More circulation space required.

(c)
Considerable congestion in some centres in the evening at the time when school use ends and public use begins.

(d)
Vandalism. Shower and toilet fittings are frequently damaged or pulled away from the wall. It was appreciated that the architect is



...aining swimming pools and the filtration plant. A report on this topic has recently been produced by the Institute of Baths Management following a conference held at Brighton.

## 3 SOCIAL AREAS, BAR, RESTAURANT

(a)
It is important that District Council policy on the provision of a bar in a recreation centre should be defined at an early date.

(b)
It was generally agreed that there may be reluctance in some quarters to include this provision.

(c)
Once the building is erected converting an area into a bar can be an expensive exercise and one which often produces an unsatisfactory result. It was, therefore, suggested that if a bar is not included, efforts should be made to include in the brief an area provided with all the necessary services, etc, which initially could be used for some alternative purpose but which later could be successfully and fairly easily converted to a bar.

(d)
Breweries should be consulted to obtain the benefit of their specialist knowledge on layout and design as well as the various regulations controlling this type of provision.

(e)
It was agreed that glazing is necessary between social/viewing areas and the swimming pool and/or sports hall to prevent distraction to players and possible injury.

(f)
Clear signposting is required throughout the building. Notice boards and information areas should be carefully sited to avoid causing an obstruction to other users of the building.

(g)
It should be possible for staff from their usual working positions in reception, cafeteria, bar, changing, etc, to observe the whole of the area involved. This eases their job and is also a deterrent to vandalism and pilfering.

(h)
It was felt that a restaurant with full scale meals facilities was unnecessary and that a cafeteria to provide drinks and hot and cold snacks was the main requirement.

(i)
It was noted that in many instances the door locks to some recreation centre areas were the same as provided in other areas in the school and had had to be replaced to meet insurance requirements. This should be rectified at the briefing stage.

## 4 ADMINISTRATION AREAS

(a)
Some centres had been designed without provision for a manager's office and conversions had been necessary at a later date. It was thought this situation had arisen in the early stages of development when it was anticipated that management functions would be carried out part time by a member of the school staff. This is no longer the position and adequate space for a manager and supporting administrative staff is essential in order to cope effectively with the large amount of office work involved in managing a centre.

...school shall be considered as ...
...centre but one with special p...
...generally felt that this was a...
...which could probably be mo...
...in a Metropolitan District wh...
...for all local government func...
...in a County where responsib...
...between County and District...

(c)
Ideally the centre provides a ...
...for physical recreation; equip...
...by centre staff so that PE sta...
...of their lesson period for cor...

(d)
At the moment schools norm...
...exclusive use of swimming po...
...during school hours in term t...
...instances this leads to under-...
...and it was felt by the manage...
...be able to programme some ...
...for use by the public. It was ...
...Education authority and Hea...
...give more careful thought to ...
...curriculum to help overcome ...

(e)
It was pointed out that in so...
...slack time will disappear whe...
...full complement of pupils.

(f)
It may be more acceptable to...
...public use of facilities during...
...eg small pool open to mothe...

(g)
Consideration should be give...
...during school hours, eg VI fo...
...interested in a particular spo...

(h)
Problems have been experien...
...facilities provided for school ...
...teachers object to changing i...
...pupils even where cubicles ar...
...Objections have also been re...
...public using changing areas a...
...the school.

(i)
Changing facilities need to be...
...more privacy for teachers wh...
...objections. Consideration sh...
...the provision of instructors' ...

(j)
Provision of equipment is a j...
...between the Education Depa...
...District Council. There is a t...
...duplication of equipment wi...
...centre each having its own. I...
...was generally undesirable an...
...finances. More thought shou...
...initial equipping of the sport...
...with the Education Departm...
...Council.

## 6 STORAGE

(a)
It was agreed that storage is ...
...out the centres. The manage...
...there are financial difficultie...
...storage to be retained and fa...
...courts) to be reduced.

(b)
Storage is required for both ...
...disposal. Dustbins are often ...
...sited; need to be in an enclo...

(c)
Storage should be provided ...

cleaning materials and electrical equipment. Space for the latter is often overlooked. Bulk storage for cleaning materials is also required.
(d)
Storage areas should be tailored to the materials/ equipment which they will house. The meeting heard of swimming pool stores which would not house chlorine bottles and sports hall storage which was marginally too small for large items of equipment eg trampolines.
(e)
Wherever possible suitable shelving and racking should be provided in storage spaces.
(f)
Storage is often not available for such things as chairs, bicycles and first aid equipment.
(g)
More thought should be given to the space needed for the storage of bulk supplies.
(h)
Dual storage is needed in activity areas to house both school and centre items.

## 7 STAFF ACCOMMODATION

(a)
Male and female changing rooms are needed near the various activity areas.
(b)
A central staff room is required and should include table, comfortable chairs, rea-making/ cooking/washing-up facilities, and space for some 'paper-work' to be carried out.
*Dennis Woodman*

# ARM NEWS EXCLUSIVE

## A summary of recommended design improvements related to Cheshire joint use centres by Joint Use Centre Managers Group—Cheshire March, 1977

### 1 INTRODUCTION

As a part of regular discussions between Managers and Assistant Managers of Joint Use Centres in Cheshire, each Centre agreed to produce a report listing those parts of the design which gave rise to operational problems. Where possible, recommendations would be made which it was hoped would be of benefit to those planning, designing, building and operating future similar projects. It should be accepted that not all Centres have the same problems, or indeed, should be designed to a standard form, or include in their design all the facilities and aspects of joint use mentioned in this summary.

### 2 RECEPTION AREAS

(i) Small 'Ticket office' windows not recommended despite the security of cash and cashier being greater. There is neither good supervision of the public reception area, nor do windows or grills of this type give a welcome to the customer.

(ii) Wide open counter top reception areas were also not recommended. This type of reception area does provide a welcome, good suveillance of the public entrance area, but the cash and cashier less secure. Business papers, counting of cash at cashier change-overs, hire and sales goods etc., are all at risk.

(iii) It is recommended that glazed reception areas be designed. DESIGN DETAILS SHOULD BE DISCUSSED WITH THE ARCHITECT, CRIME PREVENTION OFFICERS, FIRE OFFICERS AND MANAGERS and any others available with constructive thought and experience of customer flow and control through cashier reception areas both inwards and outwards.

(iv) User flow through the reception point in joint use centres falls into two broad types:

(a) Individuals or small groups. When it is intended that an admission fee is to be charged, or where customers normally pay for facilities 'at the door,' it is considered necessary to direct everyone past the cashier.

(b) Large groups of people, school classes, clubs, etc. In these cases the reception 'funnel' should be designed to allow for a by-pass of the cashier. Satisfactory arrangements for normal and emergency exit from the building must also be provided.

(v) In most centres, the reception area is the control centre for the building. On/off switches controlling lighting in main areas such as sports hall, pool, squash courts, etc, should be sited in reception. Reception should control all public access, public address and intercom systems, and cash permitting have tell-tale indicators of all other emergency exits.

(vi) Double doors with self-closing mechanisms should be provided to prevent heat loss during use.

(vii) The reception area must provide a pleasant welcome to the customer. Plants, displays, notice boards, if well-arranged present an efficient and pleasant atmosphere.

### 3 ADMINISTRATION AREAS

(i) Administration accommodation is generally inadequate, and not really planned for efficient operational use. It is recommended that the eventual staffing be considered at the design stage, and the architect informed of the expected numbers of staff and separate units of accommodation needed. It is strongly recommended that where possible, consideration be given to future development, and spare office capacity should be built in at the design stage.

(ii) Offices should be kept in close proximity, and be sited where noise from users will not be a nuisance.

(iii) If possible, a control office for the duty manager should be included, which would give a view over the main playing and social areas. It is accepted that this recommendation is not always compatible with 3 (ii).

### 4 SPORTS HALL

(i) Internal surfaces should be flush from roof to floor with no ledges or sloping surfaces. Lightweight panneling even on highest areas should not be used unless protected against impact damage. It is especially important that end-stop netting be used for both ends of cricket nets.

(ii) All exposed girder work should be covered to prevent the lodging of balls, etc., as well as to prevent dust settling.

(iii) Any form of heating which creates a forced draught should be avoided.

(iv) FIRE ESCAPE DOORS SHOULD PRESENT A FLUSH SURFACE TO THE PLAYING AREA. 'Panic bolts' should be obvious and accessible, but not project into the playing area. The advice of the Fire Officer must be sought, and clearance given for the type of 'panic bolt' to be used.

(v) All permanently mounted equipment, such as basketball backboards, cricket nets, etc., which can be swung away when not in use, should be motorised. The cost of installing power winches must be offset against the cost of wasted man hours over the expected life of the equipment, and of the building.

(vi) All doorways to the Sports Hall should open outwards from the hall. Although this is against normal practice for any 'room' there is a risk of injury to players if a door is unexpectedly opened inwards onto a playing area. Whilst there is a similar risk to people in corridors, etc., outside sports hall, it is possible to erect a full-height door stop in a corridor, whereas this is not acceptable inside a sports hall.

(vii) All doors must have a minimum clearance height of nine feet to allow for example a "Goliath" trampoline to be wheeled through in the normal folded position. Access corridors should permit manoeuvering of long equipment, e.g. ladies Olympic gymnastic beams of 18' length.

(viii) Cricket nets should have an adequate full run-up for the bowler. This would mean that the netting should run the length of the standard 110' × 80' hall. There is the added bonus of the normal two cricket nets taking up two and not three badminton courts, thus allowing an extra badminton court to be used during peak use. This applies to the standard six badminton court layout for the 110' × 80' hall.

(ix) Sports hall walls should not be painted in pale colours especially white or cream shades. It is recommended that the 'background' colour is a green or blue British Standard Colour Code.

(x) Lighting should be non-glare; strip lighting should be across the main line of play, and be three-phase supply to eliminate stroboscopic effect.

### 5 SWIMMING POOL

(i) Although Mercury or sodium vapour lights provide excellent lighting, there is a need for secondary lighting, as well as tertiary (or emergency) lighting for evacuation of the pool in the event of mains power failure. It has been found in practice that should there be a momentary power interruption, for example during a thurderstorm, there is a period of about 20 minutes during which vapour lights are out while going through a cycle of cooling down, re-ignition and back to full brilliance. During this period, secondary lighting must be provided, because emergency or battery operated lighting will not be in operation, because there is no prolonged power failure.

(ii) Extra attention should be given to accoustics in these always difficult areas. Joint use pools are designed primarily as teaching pools, and most pools are inefficient in their primary purpose due to poor accoustics.

(iii) Pool sides should have a 'fall' to waste drainage. A minimum of one in 12 is recommended for pool sides, with a minimum of one in 24 for all dressing areas. All drains should be of a large bore to accept occasional large volumes of water.

(iv) All showers and pre-cleanse showers and footbaths should have stop taps and mixer controls fitted in non-public areas, or be of the lock-shield type. A normal on/off tap should be fitted to public showers but not to pre-cleanse showers.

(v) Pre-cleanse showers should provide lukewarm water, preferable at pool temperature, with no public control. Footwells should occupy the full width of access corridors to pool; that is, without a lip or ledge along the sides, and too large to stride or jump over.

(vi) All tiles on pool sides, access corridors and dressing areas should be of the 'non-slip' type.

(vii) It is recommended that pools be of the 'double shallow end' type with a deep water area at the centre. There were some reservations about this recommendation.

(viii) Teaching pools should have handrails provided at just above water level, with provision for lane ropes accross and along the pool

### 6 SQUASH COURTS

(i) All squash courts should be designed without projections or fitments which interfere with the bounce of the ball. Examples quoted were:

(a) door knobs
(b) door hinges
(c) power points
(d) valuables boxes

Door furniture should be flush fitting, power points situated outside the court, or above the playing line, and valuables boxes let into the 'tell-tale' board. Heating is not required, but extractor fans are essential in most courts.

(ii) Opinions are divided on either open balconies or glazed balconies. Open balconies allow rubbish to be dropped onto players, glazed viewing requires 'local' public address for coaching and match play, and adequate air extraction.

(iii) Lighting should follow the same rules as in 4 (x).

## A Summary (continued). . .

### 7 CHANGING AREAS

(i) One centralised storage area is recommended for all activities. This would cater for male/female changing and showering as well as outdoor changing, indoor 'dry' activities and indoor 'wet' activities. Outdoor activities should have direct access to external areas to prevent mud and dirt being carried through public thoroughfares. These external doors should not be emergency exits. This layout would require six separtated areas, three male: wet, indoor and outdoor; and three female; wet, indoor and outdoor.

(ii) All six changing areas to be served by one storage area. This allows the minimum of staff to be employed in the storage area, depending on the density of use.

(iii) If a locker system is designed into the building, it is recommended, although not essential, that two locker areas are provided, one male, and one female.

(iv) All changing areas should be 'unisex' with lockable communicating doors, as well as corridor access. This allows use of extra space if a preponderance of one sex is using the centre.

(v) All changing and clothes storage areas as well as showering areas must have large bore surface drains, and a drainage fall of at least one in 24.

(vi) Non-slip tiles are recommended for all floors.

### 8 SOCIAL AREAS

(i) Great difficulties have been found with regard to delivery access for consumable goods. Cellars for alcohol, lockable spirit stores, dry stores for food and stores for non-alcoholic drinks should be as near as possible to vehicle delivery points as well as sales outlets. Where stores and social areas are not at ground floor level, an adequate passenger carrying lift must be installed.

(ii) Long pipe runs from cellar to bar must be avoided. This minimises loss when cleaning pipes, and saves time when changing over empty to full barrels.

(iii) Bar and kitchen fittings should only be ordered when the type of catering to be carried out has been firmly established. Most centres do not require the ability to cook full meals; frozen 'heat and serve' snacks are usually the type of meal served. Vending machines could be considered.

(iv) Kitchen and bar layouts are usually better designed when professional caterers are consulted. There are firms which specialise in recreation catering who will provide excellent advice for a reasonable fee.

(v) Disabled people must be allowed access to all public areas by Act of Parliament. Service lifts can be used if the cost of public lifts is prohibitive. Making access possible to 'public' social areas from a service lift might save the cost of a public lift.

### 9 'NOISE' AREAS

(i) Areas other than pool and sports hall which are likely to generate noise must have particular attention paid not only to accoustics, but also to sound proofing. Gymnasia converted to music/drama areas with dividing walls frequently transmit noise through floors, walls and suspended ceilings.

(ii) Control panels for theatre-type lighting controls should be lockable.

(iii) Special Youth Club areas normally require a separate sound reproduction system which will again necessitate adequate sound isolation from other areas in the building. If possible, any area which is likely to generate noise should be placed as far away as possible from surrounding property, especially domestic property.

### 10 CORRIDORS

(i) All corridor lighting should be controlled by key switches or from reception.

(ii) Thermostats should be set in a casing which is not open to unauthorised adjustment, or impact damage.

(iii) Extractor fan controls should be situated at a main control board, or in an adjacent private room, e.g.
  (a) kitchen for cafeteria
  (b) Basket store for swimming pool

### 11 STORAGE AREAS

(i) Recreation equipment stores must have a minimum door clearance height of nine feet to allow clear passage of for example a "Goliath" type trampoline. Doors and framework should not be allowed to reduce the effective clearance height. Store length and access must also permit storage of long items, up to 20 feet in length.

(ii) Recreation equipment stores must have a roof height of at least 12 feet to allow for example netball posts to be stored vertically. Light fittings are frequently damaged by metal posts where clear roof height is less than 12 feet.

(iii) All storage rooms, including recreation equipment stores, must have lockable doors.

(iv) Power points should be provided, particularly in recreation equipment stores. This of course does not apply to areas such as stores off swimming pools, shower areas, etc.

(v) A first-aid room must be sited near to both pool and sports hall with easy access for stretchers. It should also, if possible, have separate external access for ambulance cases, with a clear approach and "no parking" space clearly marked. Dressing areas should be accessible to stretchers.

### 12 EXTERNAL

(i) Joint use recreation buildings should be physically separated from school buildings. If necessary, corridors, with lockable doorways will give security to school areas during public use hours.

(ii) Access roadways and parking facilities should be sited between school and centre buildings to avoid the cost of duplication.

(iii) Service roads should be wide enough and have 'easy' bends to permit long and high vehicles to get as near as possible to delivery points such as bar cellar, plant room and domestic store rooms.

(iv) Service roads, parking space for emergency vehicles, and staff transport must be clearly marked to prohibit general parking.

(v) Routes and entrances to centres should be well sign-posted with clear guidance to parking areas.

(vi) Pedestrian routes outside the buildings should be direct, and without the temptation to take short cuts over grass or flower beds.

(vii) All external areas should be well-illuminated at night. Lighting columns should be around the perimeter of vehicle areas, not in the centre. If it is necessary to site lamp standards etc., in a vehicle area, they must be well protected against damage from vehicles. All lighting should be set as high as possible to reduce the risk of vandalism. Time clock control is advisable.

(viii) Adequate parking facilities must be provided for the likely number of people to use the centre bearing in mind the public transport services plus type of catchment area.

### 13 STANDARDS

(i) The paying public generally expect a reasonably high standard of equipment and accommodation. When providing joint use equipment and facilities this factor should be kept in mind.

(ii) Standards of cleanliness and hygiene must be high. The maintenace of high standards should be considered at the design stage. Wall and ceiling finishes, domestic cleaning machinery, siting of power and water supplies should be provided to reduce labour costs during the operation of the building, yet provide a pleasing appearance to the user and staff.

(iii) Although natural lighting does provide a degree of inconsistency and can promote for example the growth of weed in swimming pools, a case can be made for the inclusion of natural north light through the roof especially, in recreation buildings.

(iv) Vandalism plus theft is usually a problem in public buildings. Adequate supervision, whether by closed circuit television, or security patrol is expensive. If consideration is given at the design stage to the elimination of such things as emergency exits at the ends of 'hidden' corridors, tamper-proof fittings and controls, clothes storage facilities requiring the minimum of supervision, yet not open to abuse, that the customer can relax and enjoy his recreation, and the operation of the centre will not be an expensive labour intensive task in the future.

(v) Upstairs toilets, washrooms, bars and kitchens should have sealed floors to eliminate the possibility of seepage of liquids down to the roofs of rooms below. An example quoted was the siting of a main power board at ground floor, immediately under a constantly wet floor and drains from a busy washing up sink. Sanitary fittings and plumbing should be hidden or be enclosed. All areas where the public have access to water should have surface drainage.

### 14 THE ARCHITECT'S BRIEF

(i) This should be in two main parts, with guidance on cost limitation.

(ia) Elements of use. The function of the total building should be defined as clearly as possible. Instruction should be given on the relationship of the various elements of the building to each other, and that instruction should include guidance on assembly, circulation, spectator and social areas required.

(ib) Room breakdown. Individual room requirements should be given. That is, how many rooms, their main function and subsidiary functions, approximate sizes, expected numbers of people using the room etc. Specific details are not required at the 'brief' stage unless for example the size is critical, or particularly relevant to the early design stage. Examples where such detail might be required are squash courts—size and not heated; swimming pools, size, depth and type; plant rooms where perhaps a workshop is also required and the types of chemicals to be used and stored, with probable quantities, and the type of heating fuel and air circulation/purification required.

### 15 CONCLUSIONS

(i) All observations and recommendations are made with regard to joint provision of facilities. Cost has not been specifically considered, but cost must be an ever-present limitation. In many cases, however, improvements over existing design can be made in new design at no real increase in capital cost. In fact, eventual running costs could be reduced in many instances if sufficient good information is given to the architect.

(ii) Few recommendations are made on spectator provision or multi-purpose use. Most joint use centres are of "local provision" standard. Multi-purpose use and spectator provision would be included for "regional" centres.

(iii) In joint use centres adequate accommodation should be provided, not only for staff mainly concerned with the public element, but also for teachers and instructors concerned with the educational use of the premises.

(iv) Public address equipment, telephones and intercom should be built in to the design, not added at the last minute, and public 'pay' telephones should be provided.

Further information, advice and guidance can be offered by the Joint Use Manager's Group in Cheshire, in relation to items not covered in this composite survey.

*RGR/JTH*
March, 1977