Chapter Eight – Providing Facilities

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1. Best Practice for Developing Facilities

The GAA has a long standing policy of investment in ground development and could be regarded as the initiator in providing local playing fields and ancillary sporting facilities here in Ireland. Clubs have a fine record in this regard and their progressive outlook, volunteerism and enterprise have left the Association very well equipped. In fact in many cases especially in rural Ireland the GAA clubs, provide the only local amenity of any kind. The past three decades in particular have witnessed an impressive expansion in the acquisition of land for playing fields and also in the development of Clubhouses and Social centres. Virtually all units of the GAA now have at least two playing fields. In more recent times we have witnessed the development of floodlit facilities for both playing and training purposes as well as the development of all-weather synthetic playing areas upon which player can now play the on the whole year round in any conditions. Very few clubs now have just one playing field.

In recognition of the great work being carried out by the clubs they have and are continually receiving substantial incentives by way of financial support from Central Council, Provincial Councils and some County Committees. Over the past 50 years the GAA has invested (in current purchasing power) the equivalent of €2.6 billion in physical facilities.

Before development is carried out it is good practice to ensure that the necessary funding and finances are available. Upon this being achieved it is customary that a full assessment of playing needs is undertaken to ensure that facilities that are being provided meet the needs of the club. In this regard it is often useful to plan ahead of immediate needs and to be aware of other developments beyond the confines of the club or county facility. It is always advisable to be informed of major roads, large housing or recreational facilities nearby.

In some cases upon completion of a club facilities masterplan it may be necessary for the club executive to consult all members of the club as well as local residents in advance of proposals hitting the public forum such as newspapers, local radio, TV etc.

Before embarking on expensive masterplans, clubs should consider the possibility of getting more out of existing facilities, either their own or local authority rented / leased or hired facilities. Clubs should also consider the possibility of splitting their facilities onto different sites to be nearer their local catchments.

Notwithstanding this progress, many clubs have yet to provide their own facilities. It should be the basic aim of every club to have its own playing field and suitable supplementary facilities.

GAA Policy Objective: To support the development of new facilities and the enhancement of existing facilities to ensure that the GAA has a network of top class facilities to support the promotion and development of our national games

2. Planning your Facilities

Planning is the first step in the sports facility planning process. The planning process identifies the sporting needs of the club and the community; what opportunities currently exist in the area and what action is needed to meet the needs identified.

Planning for your facilities will involve answering three questions:

1. **Where are we now?**
   Looking at your clubs current facilities and those available in community and do they fulfill the identified needs of your members and teams and players.
2. **Where you would like to be?**
   What facilities are required to meet your community's and members' needs.
3. **How are we going to get there?**
   Look at how the proposed facilities and services are to be provided and managed in the future to ensure they fulfill the needs of the community and reach their potential.

Benefits of Planning

- Costly duplication of facilities will be avoided. Try to offer something different be unique don't copy nearby club.
- Create a sense of community ownership by involving all members in the decision making process.
- By identifying and fulfilling the needs of the community and club you will improve the overall quality of life for the community and raise spirit and morale within the club.
- Gain the ability to quantify the human and financial resources to operate the facility into the future.
- Risk and problems associated with running the facility are identified and ways of overcoming them are discussed.
- Performance indicators, ways of measuring and evaluating the overall effectiveness and financial viability of the facility are established.

Club Facilities Planning Process

Plan:	Club Mission and values GAA Policy on Physical Development Community/Membership consultation Recommendations and strategies
Needs Assessment:	Club aims and objectives Review of existing club and community sports facilities Community/Membership consultation Identify needs Development Proposal Estimate cost
Decision:	Abandon Proposal Upgrade existing facilities Develop New Facilities
Feasibility Study:	Critically assess proposal – Management & Marketing Location Services offered Financial viability (Programme cash flow)
Decision:	Go ahead with Proposal Amend Stage Development Postpone Abandon
Design:	Management Plan Design brief Design Team Appoint Consultants (Planning Permission) Design Development Club Development Committee (Oversee Project)
Construction:	Construction and Handover
Evaluation:	Post Construction analysis Project Evaluation Facility Operational

A well developed Club Plan is a useful; promotional tool for educating members, decision makers and the wider community about the proposed development. It can be used to gain support, attract funds and substantiate achievements. Its sets up policies and procedures and provides a sound reference document from which the club can build from.

General Location and Siting

- New facilities should be located adjoining or as near as possible to existing facilities.
- New facilities should be located accessible to public transport.
- Refurbishment of existing facilities should be considered before pursuing new facilities.
- New facilities likely to generate significant traffic and noise particularly in the evening, should not be located in residentially sensitive areas.
- New facilities however should be located as close as possible to the residential population they are intending to serve.
- New pitches, where changing rooms are not proposed, should be located as close as possible to existing changing rooms.
- New pitches should be located on land that is not prone to flooding and where there is at least an element of natural drainage.
- Figure 9.1.7

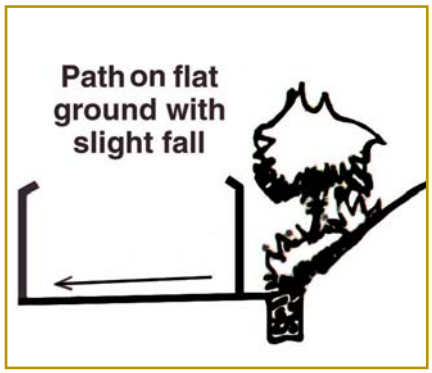


Figure 9.1.7

- New facilities generally should be provided on level ground.
- New facilities especially where floodlighting is proposed (or there is a prospect of it being proposed) should not be located in visually prominent areas.
- Facilities should generally not be located or sited where they are likely to be exposed to the natural elements.
- New club facilities can be located to complement existing non-club facilities, such as schools, colleges, etc. It is in the interest of everyone, and it is less expensive, to make the most efficient use of existing scarce land resources.

3. Landscaping New Playing Fields

GAA Policy Objective: It should be the basic aim of every club to have its own playing field

GAA pitches require an even higher standard of maintenance than pitches used for other field games because Gaelic games are played are played throughout the whole year and the extent of use is very intensive. If the grass playing surface is severely damaged by such intensive use under poor weather conditions and by subsequent lack of maintenance, it will be impossible to restore this surface without a rest period. So the aim must be to keep the pitch in good condition by suitable maintenance treatments.

Huge sums of money are involved in the purchasing and development of grounds so that it is essential that the investment be protected and used to the full by the comparatively modest expenditure needed for suitable equipment, materials and labour to keep the pitch or pitches.

When developing a new playing area clubs should think practically and not agriculturally. Landscaping a playing field is not like draining or leveling a field for agricultural nor is it like developing a golf course. Therefore its imperative that clubs enlist the help of qualified and experienced developers. The playing field is any clubs most valuable resource.

Having decided to develop a new playing pitch Clubs should consider the following:-

- Bear in mind the dimensions of the playing field and ensure the area identified is big enough to enable the club develop at least the minimum standard sized playing area as well as ensuring there's at least 5 meters run off space or safety reasons.
- Before landscaping begins, it is important to decide the direction of fall in new playing pitch, bearing in mind that at some stage there may be need for drainage and to cater for exceptional heavy rainfall.

- Have levels taken and profiles erected by competent technician, ensuring that maximum fall in any direction does not exceed 1%. This in turn will give a good indication of the quantity of soil to be moved.
- While a club may set for tender the landscaping to the desired levels, it should always be to competent operators, who have vast experience in specialist work of this nature. It is of utmost importance that the contractor, entrusted with this work has first of all, the proper machinery, including soil loosening equipment, to carry out this work properly and that he can direct you to inspect playing pitches of similar soil type which they have developed two years or more beforehand.
- The timing of this work is of utmost importance and should only be carried out when the land is dry. Ideally it's best to carry out this work in the months of August, September when the water table is at its lowest too.
- Avoid compaction through the use of very heavy machinery.
- Where there is a considerable amount of soil to be moved in the cut and fill to bring playing area to the required level, it is desirable to allow a good period of time to elapse, perhaps a winter, to allow soil to settle before final leveling and seeding. To do otherwise, the carpet finish that you had on completing the work over a short period can look quiet different the following year with undulations and unevenness on the playing surface.

In all of the above attention to detail is of the utmost importance to ensure that the work is properly done.

4. Maintenance of Playing Surfaces

- **Lime and Fertilizers** - Important to have soil tested every 5 years for fertility. Apply lime if required. Each Spring spread Fertilizer to stimulate growth. 2 -2.5 bags per acre.

- **Regular Mowing** - Regular mowing is essential. In period of most growth April-June, playing area should be mowed twice weekly and depending on growth it should be mowed up to early winter. Do not mow to bare especially in dry periods. The required height for Hurling 1-1.25 inches and 2-3 inches for Gaelic Football.

- **Weed Control** - Ideally weed killer should be used at the end of April-early May or during dry weather periods.

- **Repair of Divots** - Divots should be repaired using a soil, sand and seed mix. Divots usually occur as a result of early season games. Avoid using a roller to repair divots. Rollers can do more harm than good as they cause compaction in the topsoil. If a roller must be used, remember to use a light one.

- **Resodding of Goal Mouth Area** - For best results - Dig or rotavate area to 5-6 inches to eliminate any soil compaction and rake in plenty of sand. Prior to laying new sods fertilize area and once sods have been laid water immediately and often thereafter. Do not use mill waste for such areas.

- **Marking of Pitches** - Slaked lime is the best option for creating lines. Clubs should avoid using chemicals like Roundup or Creosote which may result in the formation on holes which can lead to players receiving injuries.

- **Aeration/Scarification**- If there's a need to carry out this it should be done in the autumn.

- **Sanding Pitches** - Provided there is no drainage problems in the sub surface layers a good playing surface can be achieved through the regular application of suitable sand as it is free draining. The best sand to use is graded 0.15- 0.5mm. Sand spreading can take place between May and September and it's recommended that approximately 100 tons be used for a full size playing area.

Remember to spread evenly

No spreading should take place in wet weather or when field is damp.

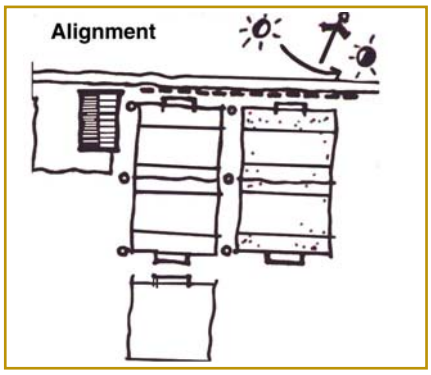
Use a tractor and lime spreader

Only a well drained Field with sand top layer can withstand frequent winter play without waterlogging. This can be achieved by emplacing a layer of suitable sand to a minimum thickness of 75mm/3inches. 5mm of sand can be spread once in each month from May to September to avoid smothering the grass. A sand top layer can be built up over 3 years.

Note: Ensure the top soil on which sand is being spread is free draining and free from waterlogging.

For more information clubs are advised to contact Mr. John Ryan Cathaoirleach of Munster Workgroup researching and developing guidelines for the landscaping and maintenance of GAA playing fields.

5. Alignment of Pitches



- Pitches should NOT be aligned in an east-westerly direction. They should preferably be aligned in a north-south direction.
- Pitches may be aligned to take account of existing prevailing surrounding topography. Pitches can also be aligned to take account of topography that would make providing spectator terracing easier.
- Pitches should be aligned to take account of prevailing strong winds.

- Pitches can be aligned to enable a greater number of pitches being provided on site or to enable improved spectator viewing.
- Pitches should be located in suitable circumstances so that they are capable of being realigned to rest worn pitch areas, goalmouths, sidelines etc.
- Clubs should consider the possibility of providing juvenile or training cross pitches across main pitches where these main pitches have sufficient carrying capacity.

6. Field of Play Dimensions

Rules of Specification

The Field of Play shall be rectangular, and its dimensions shall be as follows:

- Length – 130m minimum and 145m maximum
- Width – 80m minimum and 90m maximum
  (Croke Park - 144.5 m x 88m)

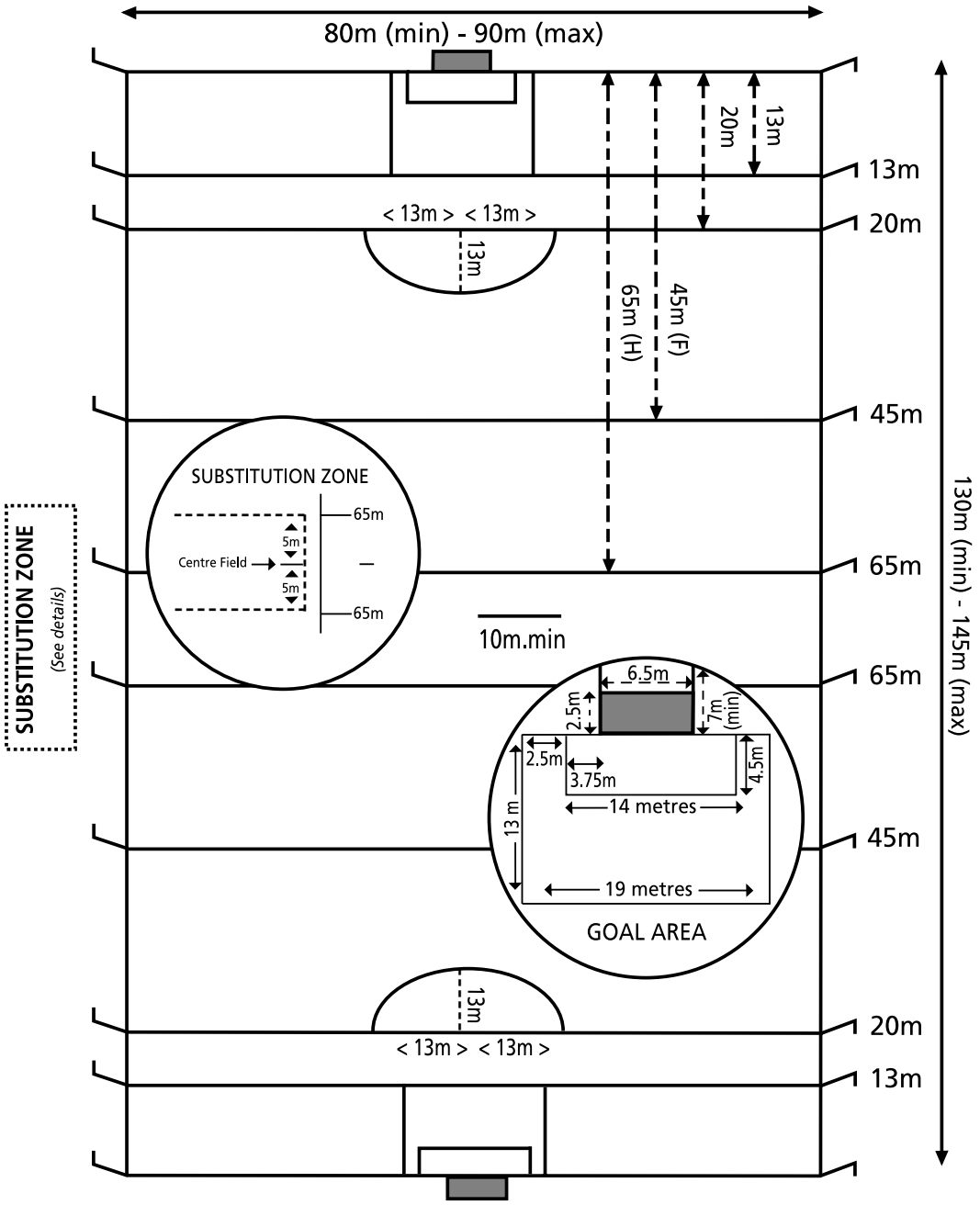
Dimensions may be reduced by local bye-laws for Under-15 or younger grades.

- For Under-10's we recommends 110m x 80m.
- Under-12's 120m x 80m.
- Under-14's Full Size.

NB: There should be at least 5 metres between the endlines/sidelines and the wall/fence/seating etc.

(i) At distances of 13m, 20m, 45m (Football) and 65m (Hurling) from each endline, lines shall be marked across the field parallel to the endline. The intersections of these lines and of the endlines with the sidelines shall be marked by flags.

The midline of the field shall be marked parallel to the endlines, and shall have a minimum length of 10m. Boundary lines are part of the field of play. (see diagram on next page)



Two rectangles of the following dimensions shall be formed in front of each scoring space.

(a) One rectangle, 14m by 4.5m, shall be formed by two lines 4.5m long and at right angles to the endline being marked 3.75m from the inside of each goalpost, and the ends of these lines being formed.

(b) A second rectangle, 19m x 13m, shall be formed by two lines 13m long at right angles to the endline being marked 6.25m from the inside of each goalpost, and the ends of these lines being joined.

(c) The endline, including the goal-line, is part of each rectangle, the other three lines enclose the area of that rectangle.

A semi-circular arc of 13m radius, centred on the mid-point of the 20m line, shall be marked outside of each 20m line.

Substitution Zone

An area of the sideline, extending 5m on either side of the centre line, shall be marked as the Substitution Zone, and all the players coming off/ going on to the field of play in acts of substitution/ temporary replacement shall go through this point, when given permission by the referee.

Exception

An injured player may leave the field at the nearest point to him.

Flags

All flags used on boundary lines shall have smooth round tops.

7. Goalposts & Goalpost Safety

GAA Policy Objective: To prevent avoidable injuries from unsafe GAA Goalposts by encouraging clubs to use specialist designed and manufactured goal frames and follow the guidelines and specifications set out by the State Claims Agency in their report on Goalpost Safety in Schools

All too often goalposts are a facility ignored or forgotten about. Lack of proper maintenance and inspection procedures have resulted in a large proportion of unsafe goalposts across playing fields of all codes. Considering the number of unfortunate accidents that have occurred associated with goalposts in recent years it's now time GAA clubs took the initiative and ensure all goalposts are erected properly, inspected and maintained on a continual basis. The issue of goalpost safety is of great concern to the GAA. Goals are not always used for there intended purpose that's why teams/clubs using communal open park land should be especially vigilant and see to it that the goal frames are inspected prior to every game. Clubs should also ensure that they are properly designed, manufactured and installed. Home made goalposts are not recommended. Instead clubs should purchase goalposts from specialist suppliers or manufacturers where possible.

Portable underage goals should be manufactured from light steel such as aluminum with plastic tubes used to give height to the posts. At all times these goalposts should be properly anchored and stored in a place where they'll not suffer damage. Indoor goals are for an indoor environment and thus are not suitable for use outdoors.

For more information on Goalpost safety check out The State Claims Agency Report on Goalpost Safety in Schools www.stateclaims.ie

Specification for GAA Goal frames - fixed and permanent

GAA Goalpost Specification:	
Goalposts elements	4 x Uprights 2 x Crossbars 4 x Ground Sockets 4 x Netposts
Upright	Bottom section 89 mm diameter galvanised steel tube, 5m over ground, 3.25 mm wall thickness. Inserted at least 1200 m deep in ground sockets.
Crossbar	89 mm diameter galvanised steel tube, 3.25 mm wall thickness.
Upright	Top section 76 mm Aluminium tube, 3 mm wall thickness, 5m above steel section and inserted a minimum of 1000 mm into the steel section
Netposts	Uprights 50 mm diameter galvanised steel tube, 3 mm wall thickness, sockets 400 mm deep. See detail in figure 3.
Net tie hook	To comply with EN748.
Edges	All exposed edges to have a minimum radius of 3mm.
Metal Treatment	All metal sections including ground sockets to be galvanised and all welded parts to be galvanised after fabrication and to be painted.
Distance between uprights	6.4m
Height of underside of crossbar over playing surface	2.44m
Overall height of upright over playing surface	10m
T-Collar 1	The composite T-collar for fixing of crossbar to uprights is made of 2 sliding fit circular sections welded together. Details of composite collar and assembly of uprights to crossbar is shown in figure 2.
Ground sockets	Ground sockets for uprights to be embedded in concrete to a minimum depth of 1200mm. See details in figure 1. All sockets to be 25mm under playing surface and have a lockable cap with artificial grass bonded to it.

Warning label:

A permanent warning label shall be fixed to the goal with the following wording:
This goal is designed for the playing of football and no other purpose.
Check that all fastenings/securings are fully tightened before using and check periodically thereafter.
Do not climb on the net or goal framework.

Marking:

Goals shall be marked with the following information:

a) The name or trademark of the manufacturer, retailer or importer and the year of manufacturing of the frame.

b) A warning giving details of use that the goal is designed for and the type of net in accordance with the warning label above.

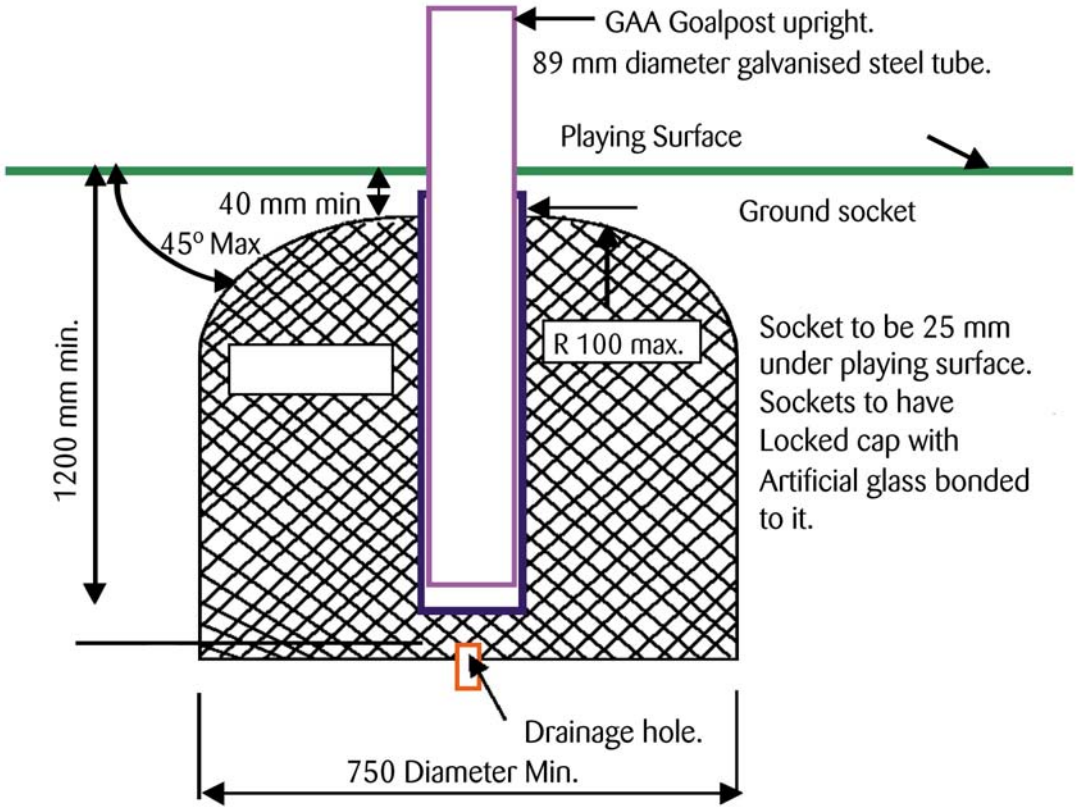
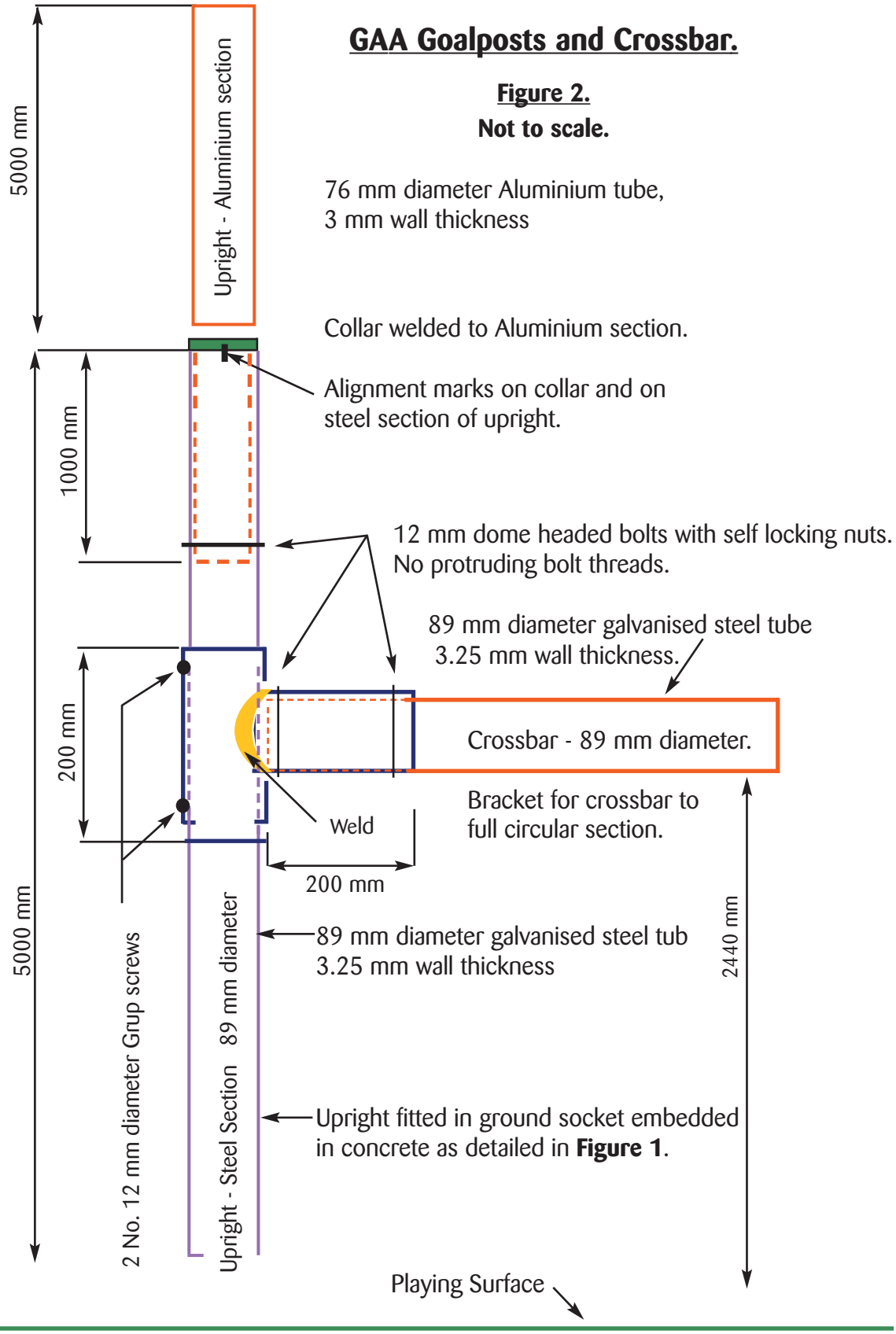


Figure 1.

Not to Scale

Foundation Details of Ground Sockets for GAA Goalposts.



Details of Uprights and Crossbar with method of fixing of Crossbar to Upright.

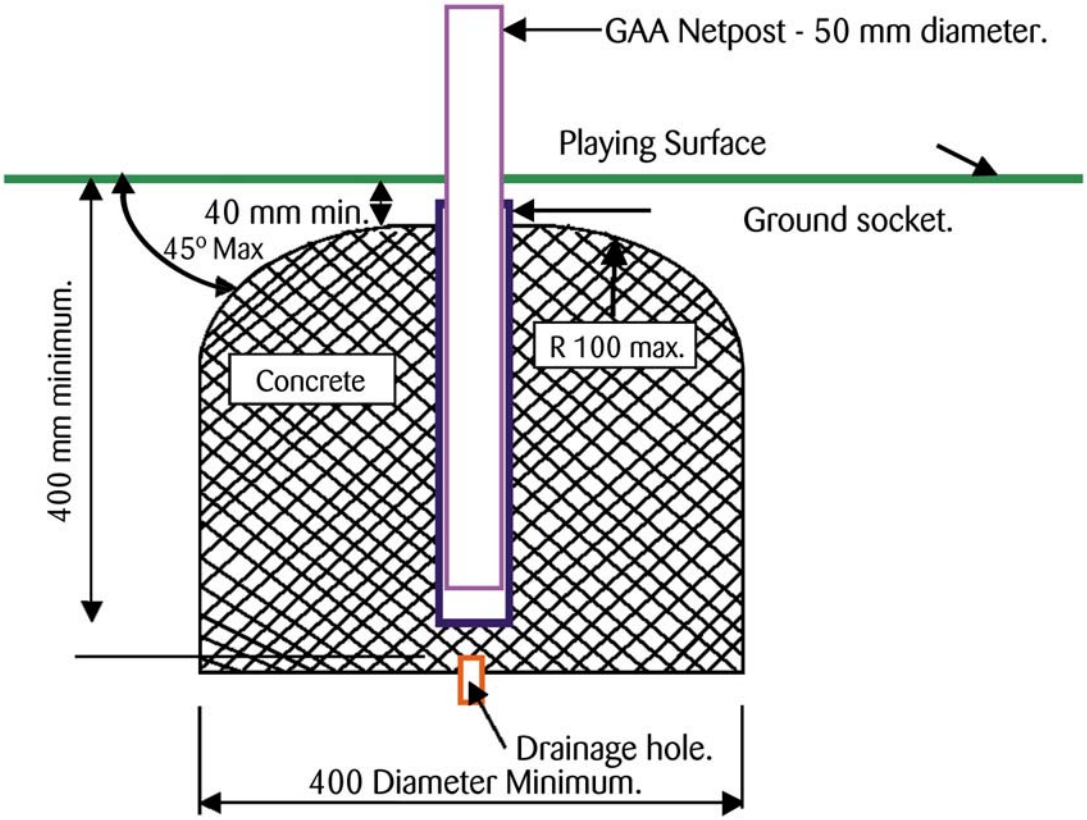


Figure 3.
Not to scale.

Foundation Details and fitting of Ground Sockets for GAA Netposts.

Rules of Specification: Official Guide

(i) The Scoring Space shall be at the centre of each endline. Each shall be formed by two goalposts, circular in cross section, which shall have a height of not less than 7m above ground level, and be 6.5m apart. The inside edge of the endline shall be at a tangent to the front edge of the base of the goalposts.

(ii) A Crossbar shall be fixed to the goalposts at a uniform height of 2.5m above the ground. The crossbar shall have a rectangular or circular cross section.
When rectangular, it shall have a depth of 140mm + 10mm and a width not less than 50mm.
When circular, it shall have a uniform diameter of 125mm + 5mm.
The Dimensions of the Scoring Space may be reduced by local bye-laws for Under-15 or younger grades.

Underage Guidelines

- Under-10 – Crossbar set at 1.8m approx (6ft) above ground and goalposts set at
- 3m approx (10ft) apart
- Age 10 – 13 – Crossbar set at 2.1m approx (7ft) above ground and goalposts set at

- 4.5m approx (15ft) apart.
- Under-14 and up – Full size

Goalnets

Rules of Specification: Official Guide

(iii) Goalnets shall be securely fixed to the back of the crossbar and the back of each goalpost. The roof of the net shall be supported for a horizontal distance of not less than 900mm, at crossbar height, by a metal net support fixed to the back of the goalposts. The mesh of the net shall have a diagonal length not exceeding 150mm for football and 50mm for hurling.

Backdrop to Goals

- Goalposts should NOT be located on the horizon. Where this is not possible posts should be marked to help differentiate posts from a clear or white sky
- Vegetation surrounding a pitch and behind goals especially improves visibility for participants and spectators alike. Vegetation can also reduce noise emissions from playing areas to surrounding areas.
- Avoid locating goalposts in front of club facilities.
- Ball stop nets should be located behind goalposts Such nets should not impede the view of spectators.
- Floodlighting should not be located behind goalposts.

8. Guidelines and Recommendations for Floodlighting

GAA Policy Objective: To support the provision of floodlighting at GAA grounds where this will increase opportunities and participation

Floodlighting is now an integral part of many GAA facilities, particularly all-weather playing fields and practice areas. Floodlighting and the intensification of use it can bring can, however, be intrusive in some locations. This can be an issue in both urban and rural areas.

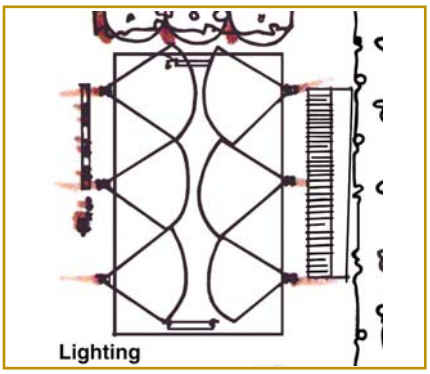
Any Club currently considering options for development, looking at their present and future training/coaching and playing requirements should explore the possibility of erecting Floodlighting.

Clubs considering the installation of Floodlighting for either training or playing purposes should remember that such schemes are not for the amateur but should be designed, installed by qualified lighting specialists.

Prior to planning, the club should ask themselves the following questions.

What will the club use the Floodlit area for?

A. Physical Training
B. Ball Work, including mini games
C. Competitive Games



- Design and layout of floodlights should be implemented by a competent lighting supplier and or an electrical and mechanical engineer.
- Clubs should ensure that playing surfaces where floodlights are to be provided will have sufficient capacity to accommodate extra practice sessions and games including the provision of ancillary facilities such as changing rooms.
- Fast action small playing objects and long viewing distances (Hurling, Rounders and Camogie) require higher lighting levels than larger playing objects and closer viewing distances (Gaelic football).
- Floodlighting columns must be located so as to minimize obstruction to on site spectator or television viewing where appropriate. Galvanized steel masts (Numbers will vary depending on height and distance from playing area) should be positioned on each side of the field and for safety reasons located a distance of at least 5m from the sideline.
- The height of floodlight columns will influence the evenness of the light falling on the pitch, how many lights are required and what lux levels (the illumination level).
- The lighting type will influence lux levels on the pitch, level of power required to run the lights and the level of maintenance required.
- Locating pitches close together creates the possibility of one column lighting pitches in multiply directions. Lighting should be provided in such a way that it is capable of being redirected where this is appropriate and should be designed to be of optimum efficiency to minimize wasted light and associated financial costs.
- The size and use of the pitch will have a direct influence on the design of floodlighting.
- The target for illumination should be 50 Lux with a uniformity of 1:3 where the lights are used for training purposes only (Uniformity level is the difference between the bright spots and those not so bright).
- If the lights are for playing purposes, the recommended minimum lighting level for Gaelic Football is 250 Lux and Hurling 500 Lux. For competitive games at County and Provincial Grounds where TV cameras will be used the lighting should be of the highest quality therefore 1000 Lux is recommended at least. In grounds such as Pairc Ui Rinn, Parnell Park and Austin Stack Park where 1000 Lux has been achieved the lights are mounted at a height of 30 meters.

- It's important at the early planning stage to contact local ESB and investigate if the local electricity supply will be capable of bearing the necessary loads. Clubs should also use this opportunity with local ESB contact to acquire information regarding wiring specifications.
- Planning permission will be required for Floodlighting. Therefore Clubs should plan well in advance. At this stage too clubs should consider the height and location of proposed structures in relation to the surrounding residential properties.

Remember:

Professional Advice should be obtained from Lighting Specialists
Experienced Contractor employed
Previous work examined
Research other installations
Consult other clubs seek their advice
Safety First
Needs Second

Note: In the event of a main power failure GAA units should make provisions to have emergency lighting systems installed to ensure spectators can leave the ground safely and floodlighting is provided in the car park areas.

9. Practice/Training Areas

Practice areas can be provided in areas where there is or may be overspill lighting. Lights may be multi directional to be shone from match areas to practice areas. This will result in economies of cabling, electricity and ducting etc. Practice areas need not be of regular shape. Practice areas, particularly where they are floodlit or likely to be extensively used in the evening or at night, should be located away from existing or proposed residential properties. Where practice areas are by necessity small, consideration should be given to using these areas in mostly or exclusively for mini games or skills training. Training areas can be screened from adjoining residential areas, by club buildings, hedge and scrub planting. Screening should be of a sensitive nature.

10. Artificial Playing Areas

GAA Policy Objective: To support the development for GAA use of floodlit all-weather "Third Generation (3G)" synthetic playing surfaces to enable units provide all year round outdoor facilities. This must be seen as a fundamental part of the infrastructural future of GAA Facilities and an integral part of games development

One of the objectives of the GAA is to provide and encourage units to install of "Third Generation (3G)" pitches. Over the last few years a number of Clubs have invested in these "3G" playing surfaces for training and playing purposes. For example Ballymun Kickhams GAA Club have installed a full-size "New Generation" playing field. Clubs

Because of their durability they can be floodlit and used all year. It should be remembered that these are **not** maintenance free.

The practical and coaching advantages of these artificial surfaces are;

- These surfaces are designed to mimic real grass as closely as possible and the behaviour of games played on natural grass.
- They enable players to wear molded football boots so grip and movement are superior to other surfaces.
- The surface is soft in texture, made from plastic and rubber. This results in it being soft to play on and contributes in players not receiving burns or injuries when they come into contact with surface.
- Where clubs have little or no land available for developing facilities "Third Generation" playing surfaces are very useful as they have the capacity of two all-weather natural grass playing field
- Higher skill levels attained – Summer surface for hurling
- Greater flexibility in programme design
- Consistency of surface – injuries Ankle/knee etc.
- More opportunity for fun
- Ideal surface for Coach Training
- Opportunities for games promotion through use of floodlights-Novelty aspect
- Surface for increased participation rates
- Better Skill development
- Competitive advantage for weaker counties in hurling etc.
- More parents hang around

When developing such a scheme clubs should consider;

- The playing area should not be located in an area where there is poor access for people with disabilities.
- Position in relation to existing Clubhouse and other accommodation.
- Ensure emergency vehicles can gain access.
- "3G" playing surfaces should not be located near deciduous trees. Such trees will shed leaves on to the pitch, creating conditions for moss or seedlings to grow.
- Perimeter fencing and line marking will need to be provided.
- The installation of artificial playing surfaces is very expensive and units should ensure they're used efficiently to minimize financial costs.

Facilities of this nature should be encourage in areas which are accessible to a large catchment population and schools, giving priority to access by walking, cycling and public transport and taking into account the number of other GAA clubs in the area which could also benefit from using the "3G" playing area.

Again clubs should ensure that they have the necessary back up facilities are available to service such a facility such as changing rooms.

11. Hurling Alley

Hurling walls and alleys are a new sight at many GAA ground throughout the country and are essential in player development.

- Ideally when building a hurling alley it should be enclosed allowing players to “double” on the ball.
- For target practice goals should be painted on the walls.
- Hurling Alleys should if at all possible be floodlit to enable players to work on their skills over the winter months.
- Be five meters in height.
- An overhanging barrier or net should be provided at the top of the wall to prevent the ball/sliotar being hit out of the area.

12. Handball Courts

Court Plans and Construction

Ventilation / Air Vents

Only one or two air vents are placed under the floor of a lot of courts. This in itself will contribute greatly to lack of air flow and hence condensation problems. I would recommend that you install nine vents under the floor at the locations identified on the drawing below. They should be approx. 9" x 6". I am assuming that all outside walls are cavity with an air break and/or insulation.

Extractor Fans for the Court

If there is no provision for changing the air on the premises this will add to the condensation problems, especially when a number of spectators are present. A Court would require Four Air Changes per Hour for proper Humidity control.

I would recommend that a 12" Extractor Fan with a 3 Speed Controller be fitted at the rear of the Court, either on the side wall or rear wall, at high level, as per drawing. This fan is to be controlled manually from an accessible position and automatically through a humidistat. The preference here would be a Hand/Auto Switch to allow manual operation at high speed when a crowd is present, and be left on automatic control at low speed through a Humidistat at all other times.

This will change the air constantly and extract the moisture away from the court.

This fan should be run manually whenever more than 10 people are present in the balcony to extract the air laden with moisture.

Extractor Fan for Dressing Facilities

Condensation can be caused by people showering etc. so I would recommend that an inline extractor fan for the dressing rooms and toilets be installed, capable of providing eight air changes per hour. This is a system where vents are placed in each cubicle or room and piped out (using flexible piping) via the inline fan. This fan should automatically operate when any dressing room light is turned on.

Painting

The Court Walls and Ceiling should be painted white with good quality Vinyl Matt (Berger, Dulux or Equivalent) immulsion paint.

The above recommendations will eliminate most of the condensation problems that exist in Irish Courts but you should also install a heating system in the Court, Balcony and the Dressing Rooms to achieve absolute atmospheric control.

Heating

If you have access to a heating circuit from the main premises, then a circuit from this unit should be used for your heating requirements. Alternatively you may have to install an oil, gas or electrical heating system. Whatever system you decide on should not have a naked flame burning in the court area. Example Oil or Gas Burner heating water for radiators or an Electrical Heating system with fans to distribute the heat.

Court Area

Two Mark Air Radiators with quiet fans giving a throw of 12 feet at each side of the court as indicated on drawing. The fans on these heaters to be controlled by a thermostat located high in the court as indicated, set at 10o Centigrade. This setting is adequate to keep the walls warm and is not too hot for players.

It is important to note that the heating system for the court area should be run automatically each day. Suggested control program 10 - 11am, and 5 - 9pm daily.

Balcony

One Mark Air Radiator Unit as above and indicated on the drawing. The fan on this heater to be controlled by a thermostat mounted at low level, set at 15o Centigrade. Alternatively wall radiators can be fitted and controlled as above or a suitable electrical fan heater. This will provide a comfortable atmosphere for spectators and for parents to attend games and juvenile training session's etc.

Dressing Rooms

Wall Radiators with thermostatic control or Electrical Fan Heaters. About 150 Degrees Centigrade is satisfactory.

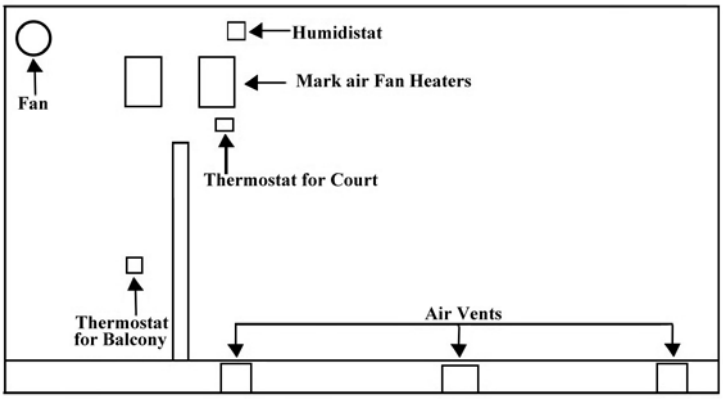
Floor

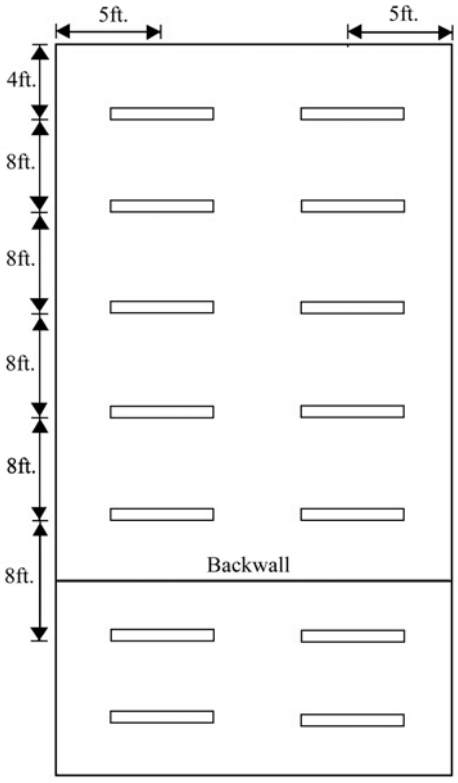
There should be a gap of at least 6mm between the Floor and the Wall all round to assist the air circulation. The Floor should be sanded and varnished with Gran Wax, which is a non slip and sport grip varnish, recommended for all sports surfaces.

In my opinion, the above will eliminate any condensation problems in your court and provide a comfortable atmosphere for players and spectators.

The effectiveness of De-Humidifiers is limited as they try to eliminate the symptoms, rather than the causes.

Elevation View of 40 x 20 Handball Court





Lighting

40 x 20 Handball Court Lighting Layout

18 off. 5ft. Twin Dustproof Florescent Fittings spaced as shown on the drawing layout.

Philips New Generation Daylight, 58 Watt tubes to be fitted on all Florescent Lights.

All lighting fittings in the Court and the row outside the back wall to be switched through a suitable contactor, by a £1 Coin Operated Meter, with a variable time setting from 10 to 30 Minutes per coin. Where 3 phase power is available, the lighting load should be spread evenly over the 3 phases.

Separate lighting should be provided for rest of the Balcony Area.

Condensation Control

In order to control any variable, it is important to understand what determines the variable.

- Atmospheric air always contains a percentage of water vapour.
- The amount of moisture present depends on the humidity and air temperature.
- When air cools, it will reach a point at which it is saturated with moisture. This is known as the Dew Point.
- If the air cools further, it cannot retain all the moisture and the surplus is expelled as droplets of condensation. This will settle on cold walls or glass.
- The actual amount of water which can be retained by air, depends almost entirely on Temperature.

The chart below shows the relative dew points at various temperatures

Temperature(˚Celcius)	0˚	5˚	10˚	15˚	20˚	25˚	30˚
Grams/Metre^3	4.98	6.86	9.51	13.04	17.69	23.76	31.64

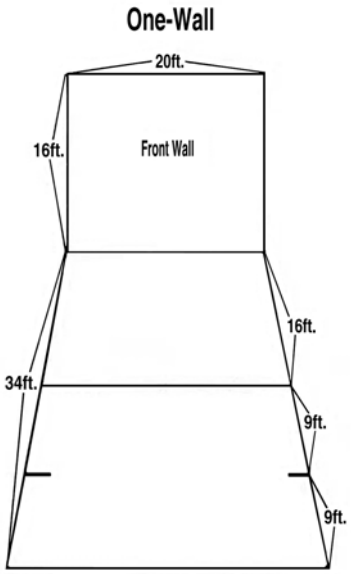
As can be seen from the above chart, the moisture carrying capacity of air is very much dependent on the air temperature. If we keep the court at 10˚C it can hold twice as much moisture as it would at 0˚C.

If we heat the balcony area to 15˚C it can hold three times the moisture compared to 0˚C.

If we keep the walls warm, condensation will not deposit on them.

The effectiveness of De-Humidifiers is limited as they try to dry the air and not regulate the temperature, hence, if the temperature is 0˚C. the dry cold air will soon reach it's dew point and condensation on the walls and floor will occur.

Dimensions for a Standard One-Wall Court



1. **Wall.** The wall shall be 20 feet wide from the outside edge of one side line to the outside edge of the other side line, and 16 feet high, including any top line.
2. **Floor.** The floor shall be 20 feet wide from the outside edges of the side lines. It shall be 34 feet from the wall to the outside edge of the long line. The side lines should extend at least three feet beyond the long line. There should also be a minimum of at least six feet, but ideally 20 feet, of floor beyond each side line as well as 16 feet beyond the long line to allow for playing space.
3. **Short line.** The short line runs parallel to the wall with the back edge of the line 16 feet from the wall.
4. Service markers. There shall be service markers, lines of at least six inches in length extending inward from the side lines, parallel with the short and long lines and located midway between them. The imaginary extension of these lines across the court indicates the service line.
5. **Serving zone.** The serving zone is the floor area inside and including the short, service and side lines.
6. **Receiving zone.** The receiving zone is the floor area beyond the short line, inside and including the side and long lines.
7. **Playing zone.** The playing zone is the floor area between the front wall and the outside edges of the side and long lines.
8. **Wall edge.** The top edge of the wall, if any, is not part of the court. A ball striking the top edge is an out.

Dimensions for a 40x20 Alley

The specifications for the standard four-wall handball court

A. Dimensions.

The court is 20 feet wide, 20 feet high and 40 feet long, with the back wall a recommended minimum height of 14 feet.

B. Lines and zones.

Handball courts shall be divided and marked on the floors with 2-inch-wide lines. Recommended colours are white or red. The lines shall be marked as follows:

1. Short line.

The short line is parallel to the front and back walls. Its outside edge is 20 feet from the front wall.

2. Service line.

The service line is parallel to the short line and its outside edge is 5 feet in front of the outside of the short line.

3. Service zone.

The service zone is the area between the outer edges of the short and service lines.

4. Service boxes.

A service box is located at each end of the service zone by lines whose outside measurements are 18 inches from and parallel to each side wall.

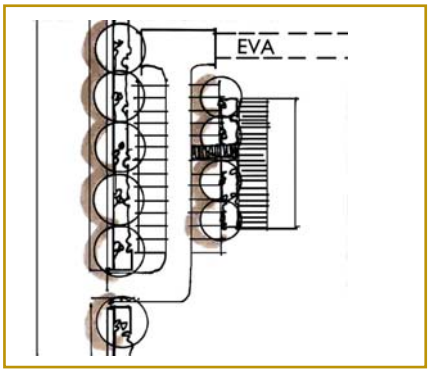
5. Receiver's restraining lines.

Five feet back of the outside edge of the short line, lines should be marked on the floor extending 6 inches from the side wall. These lines are parallel to the short line.

Full architect's plans for 40 x 20, 60 x 30 and One Wall handball courts are available from the Irish Handball Council in Croke Park. A referral service is also offered whereby interested clubs can contact other parties who have completed similar projects for further information and guidance. If you are interested in adding handball to the Gaelic games played in your club, then a programme of initial coaching sessions with free starter equipment for all age groups within your club can be easily organised. For further advice and information on all of the above, please contact the Irish Handball Council in Croke Park on + 353 1 819 2383 / 819 2385 or email info@handball.ie.

13. Parking

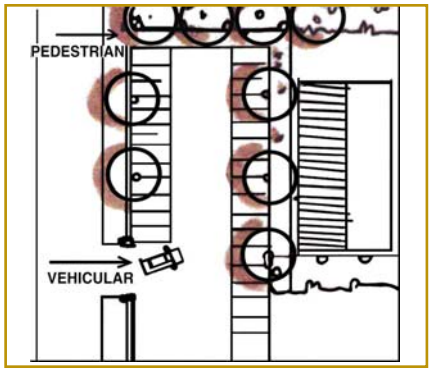
- Parking should be located as close as possible to clubrooms and changing rooms.



- Parking should minimize conflict between vehicular and pedestrian users.
- Parking when being designed should take account of servicing and emergency requirements.
- Parking should not be located where it will interrupt the free flow of traffic especially on main roads.
- Sufficient parking should be provided to discourage on street parking, especially in residential areas.
- Disabled parking should always be located most conveniently to access points into and out of buildings.
- Coach parking should also be provided.
- Coach parking should not be located where it is likely to endanger other vehicular users, pedestrians or cyclists.
- Where parking areas are sufficiently large, consideration should be given to providing a "one way" system of ingress and egress.
- Where floodlighting of car parking is considered necessary such lights should be sensitively located. Lights should not be located where they will either directly or indirectly shine onto adjacent residential properties.
- Cycle Parking in the form of cycle racks should be provided.
- Parking will generally need to be provided to local authority development plan standards.
- Developers of facilities should give consideration to landscaping substantial areas of car parking.

Access

- Only the largest facilities will generally require access off a national road.
- Local authorities will refuse planning applications for facilities where access is provided on blindspots or provide inadequate sightlines. The National Roads Authority's "Design Manual for roads and Bridges" provides the necessary guidance for providing access to facilities.
- Facilities should be properly signposted especially where they are in large urban areas.
- Access to facilities should be sufficiently wide for coaches and service vehicles. It is essential on grounds of road safety that such vehicles are able to access and egress grounds in forward gear.
- For substantial ground developments clubs should give consideration to separate entry and exit points.
- Structures should not be provided at access and egress points that will impair visibility.
- Pedestrian and vehicular access should be segregated.



- Consideration should be given to providing pedestrian only access points to grounds particularly where there is a substantial existing or proposed residential population nearby.
- Access should be provided for cyclists.
- General access should be direct and should not be circuitous either to or within the facility i.e. pedestrians should not have to walk on pitches to circulate through a facility.

- All pedestrian and cycling areas should be clearly distinguished from vehicular areas either through signage or surfacing and preferably both.
- Surfaces of pedestrian and cycling routes should be well maintained and properly lit.
- Pedestrian facilities should not be provided in locations where they cannot be properly surveillanced or where they are unlikely to be heavily used.
- Disabled access should always be provided. Ramps are preferable to steps. Lifts may also be provided.

14. Spectator Facilities

- All spectator facilities should be provided in accordance with the Department of Education's "Code of Practice for Safety at Sports Grounds". The local health and safety authority should be consulted on the provision of all spectator facilities.
- Where possible, spectator terracing should be provided consistent with the topography of the site.

- Where possible spectator terracing should be covered and provide sufficient shelter from rain and other elements as indicated above.
- Disabled spectator facilities should be provided.
- Able bodied and disabled toilets should be provided.
- Access from parking facilities to spectator's facilities should be as direct as possible.

15. Social Centres

Over the last two decades Social Centres have become synonymous with GAA Clubs and reflect the response of the Association to more complex community needs. There is a growing need to conserve and increase the voluntary commitment of people to an expanding GAA and it is evident that, if it is "to promote community spirit" as laid down in the Official Guide., the must broaden its role in the commitment of its clubs at local and parish level. Clubs were therefore encouraged to provide Social Centres to reassert a social and cultural influence through new forms and to provide a necessary community amenity.

The objectives of the Social Centre should be in keeping with the aims of the Association to strengthen the national identity through the promotion of Gaelic games, the Irish language traditional Irish dancing, music, song and other aspects of Irish culture. Clubs should strive to ensure that their Social Centres is the focal point for the community and above all else a place where people can meet. The Centre should aim to provide a home for the club, current

players and past players, parents and their families and club supporters. It should be used to facilitate other local voluntary organizations in their activities. Goodwill and a willingness to accommodate such organizations as the Old Folks Association for example will ensure the club has a good standing in the community. It should be used as a recruitment ground for voluntary workers, including past players, to become involved in the coaching and management of teams and in administration.

Above all people must be attracted to the centre by the quality of what it provides. When clubs are thinking about developing such centers they should ask themselves how they are going to attract people through its doors and in so doing help with the running of the centre. It has been shown in recent years that there's great demand for indoor leisure facilities and in light of this GAA centres should look at ways of providing sporting opportunities for the wider community and enable people to play Basketball, Badminton, weights, aerobics, table tennis and other indoor sports.

With clubs expanding year on year they should start thinking about developing office and meeting room facilities within the centre. The club secretary as the chief administrator should have somewhere to work from and a place to keep a record of club documents and correspondence. The provision of an office would greatly improve the organizational structure of the club. Meeting rooms are also essential.

Social Centres with Bars

More and more GAA Clubs especially in urban areas have GAA centres incorporating a bar. This is a legitimate activity for the club, but it puts extra responsibility on the club to have very good controls in place. Moderate drinking by adults in a well run and well conducted bar is socially acceptable. Again the bar creates a focal point for the club and helps to retain the interest of older members of the club as well as being a catalyst to get non club people into the club.

The bar contributes in no small measure, through bar profits, to the funding of the games and the development of ground facilities in the club. More importantly, a well run bar ensures that club members who use it are subject to a reasonable measure of control in their drinking habits which might not otherwise happen.

The aim of a Social Centre should be to promote the Associations ideals in the centre and to do so in a well organized manner that will generate income in order to cover the high costs of building and maintenance. Financial constraints may lead to a concentration of effort on the business end and result in running events for their financial return without regard to the primary aim. This ought to be carefully avoided.

Running Social Centres with Bars

It must be stressed that a GAA club which operates a bar is running a business. In running a business a service must be given and this requires a very different approach from the methods used in operating the normal games activities. Not only is there a need for excellent organization, management and accounting expertise but stringent legal responsibilities also have to met. The club must therefore assume control of the bar and ensure its run properly by appointing a:

Bar Manager

The bars opening hours will determine whether or not the club will have a full or part-time manger. The bar manager will have sole responsibility for the day to day running of the Centre including purchasing of goods storage, cash lodging, salary, and HR.

Ideally the person appointed to this role should have a background in the club and have the clubs interests at heart. If the Bar Manager has a connection with the club they'll more likely be prepared to give that little bit extra to the cause. Outside hired personnel with no attachment to the club will only have a short term outlook and invariably will not have the future development of the club at heart.

The bar manager should be well respected within the club and community and ideally have a business background with experience of running a business and managing staff. The bar manager needs to be entrepreneurial in outlook, customer focused and consistently delivering quality programmes and services for the membership and community. Together with the club the bar manager should be responsible for marketing the centre and in turn using the centre as a tool to raise the profile of the club in the wider community. A well run and presented centre will reflect favourably on the club as a whole.

In some cases where only a few staff exist a management committee may be established to help with the running of the complex and to ensure club and community involvement in the management system. Members of this committee should provide administrative support to the centre manager (banking, financial reports, assistance with taking bookings, key collection secretarial and mail services). The Bar Manager should be the chairman of this dedicated subcommittee. The management Committee should have specific terms of reference and responsibility for the overall running of the centre including maintenance.

The centre should have its own separate accounts. The bar manager together with the committee in conjunction with the Club Treasurer should be responsible for the financial planning of the centre including tax issues.

The executive should clearly outline the duties and responsibilities of the bar manager and clearly define who he is responsible to and his degree of authority in managing the bar. Communication between the bar manager and the executive is vital. The executive should have a watching brief in the running affairs of the centre. The bar manager should be a member of the club executive and report to it on a regular basis. To avoid complication the Bar Manager between club meetings should report only to a select few on the executive namely the chairman and the treasurer and perhaps the club secretary.

"GAA Super Clubs" are a new phenomenon across the GAA club landscape. Such clubs incorporate multi sport facilities such as Gyms, swimming pools and tennis courts as well as a bar. In such circumstances its best practice to have a separate **Sports and Leisure Manager** to run those aspects of club activity. The Sports and Leisure Manger should be qualified in this area and to ensure the centre is managed effectively he should be a member of the centre committee yet be responsible to the Centre Bar Manager and ultimately the Club Executive.

Control

It's particularly necessary for a club with a bar to adopt the Official Club Constitution to ensure control by the club and the operation within the law. It is essential also that the Club Executive would at all times retain control over the management of the bar and not allow its authority to be usurped in this vitally important area. The club has a responsibility to see to it that the club is operating within the law. Hours of opening and closing should be strictly adhered to and the bar rules prominently displayed.

The club has particular responsibility to prevent underage drinking and in this regard either a mineral bar or dispenser system and/or a tea or coffee facility should be provided where possible. Children should not be allowed in the bar area. Entry to the bar should be restricted to members of the club Full and Social. Members may be permitted to invite a guest into the bar provided they sign the person(s) in on a club register. In addition to this the bar should not be open while games are in progress.

Use of Bar Profits

In the course of time it's likely that most clubs with well run bars will eventually pay off all borrowings. A situation could then arise when the accumulation of profits could lead to abuse of the club funds. To avoid such a contingency, a club should ensure that its funds would continue to be used to:

- Develop further the clubs range of facilities, including secondary grounds
- Develop further the clubs cultural and educational affairs
- Develop club coaching structure
- Improve club communications/IT
- Supply playing gear and equipment
- Market club

Commercial Facilities

- Clubs should give consideration to providing semi-antononous commercial facilities such as crèches or club shops.
- Both facilities should be located in prominent locations within developments.
- Clubs should consider renting out facilities that are not likely to be used at off season or off peak times.
- Fitness suites and gyms with appropriate management and insurance precautions can be used by the community at large and if necessary for a small fee without prejudicing GAA activities.
- Some club facilities, where funds permit, may be located off site i.e. the club shop.

16. Indoor Facilities

Careful consideration should generally be given to the visual impact of clubhouses on the surrounding landscape. Clubs should not, cost permitting, be afraid to make a bold architectural statement when designing and built their proposed club houses. Club buildings, should be architect designed.

- Clubhouses should be designed in keeping with local materials and vernacular styles.
- Changing rooms should be within easy reach of pitches / facilities.
- More than one pair of team changing rooms can be provided for each pitch to improve turnaround of matches depending on financial constraints.
- Referees and umpires facilities should be provided.
- Referees and umpires facilities should be segregated from team facilities.
- Women and men's team changing rooms should be segregated.

- Halls should cater for more than Association activities and should be capable of being used by the general community for a multitude of purposes as advocated in the Strategic Review Report.
- Indoor Halls should be capable of being subdivided for a multitude of simultaneous uses.
- For larger development the following facilities should be considered: meeting rooms, press and media rooms, treatment rooms, crèches, TV rooms etc.

17. Health and Safety

The Department of Education's "Code of Practice for Safety at Sports Grounds" (1996) sets out a formal code of practice for safety at sports grounds.

The Code can be summarised into several themes namely:

- Ground Management, responsibility and emergency planning
- Physical infrastructure
- Legislation
- Tests and inspections
- Stewarding

The Code of Practice in regard to ground development covers the following points:

- Spectators with disabilities
- Ingress
- Egress
- Stairways and Ramps
- Terracing and viewing slopes
- barriers, guardrails and other guarding
- Covered standing and seated accommodation
- Temporary stands and other temporary structures
- Fire safety
- Communications
- Electrical installation, auxiliary power and emergency lighting.
- Pitch perimeter fence / wall
- Assessment of safe holding capacity
- Medical facilities, first-aid and ambulances
- Sanitary accommodation