### **APPENDIX 1**

### **GUIDANCE FOR PITCH MAINTENANCE**

### Mowing

The grass shall be maintained between a height of 30 and 45 mm using cylinder/rotary mowing equipment. The grass should never be allowed to exceed a height of 45 mm. If the grass does become too long, the height of cut should be reduced gradually over 3-4 cuts allowing some time for recovery in between. N.B. On no account, should the grass height be reduced by more than 50% on any one occasion. Overall, approximately 30 mowing operations may be required each year, depending on weather and growing conditions

Frequent mowing will encourage a thickening of the sward and is very beneficial. During the growing season pitches should be mown a minimum of once a week, with once a fortnight being sufficient at other times. Mowing is unlikely to be required over winter. If mowing is carried out at the correct frequency, clippings can be returned to the sward with no ill effect, more pertinently following fertilising. Please note: Excessive grass clippings are a significant contributing factor to thatch accumulation, if thatch is becoming increasingly prevalent, grass clipping should be collected during mowing.

#### **Fertiliser**

Allowance should be made for a sufficient number of fertiliser applications to maintain healthy growth and colour. The fertiliser regime should be based on the results of annual soil sampling to determine nutrient concentrations, but the following programme is provided as a guide.

Spring/Summer: 2 x 12:6:6 @ 350kg/ha

Autumn/Winter: 1 x 4:12:12 @ 350kg/ha

Soil testing will give a more accurate indication for P and K requirement, and will highlight any deficiencies; the appropriate fertiliser can then be sourced and applied to redress the balance. Keeping nutrients at a lower level than ideal will save on mowing, but can encourage the establishment of weed grasses that are less able to cope with the rigours of a winter sports pitch. The sward will also be more susceptible to disease.

# Rolling

Rollers should be used very sparingly on winter sports pitches, and definitely not when the surface is wet or soft. Levelling of a playing surface in the season is best achieved with a brush or chain harrow. If rolling is carried out then tining or spiking should be carried out afterwards to relieve any compaction that has been caused.

Rolling in spring can be beneficial, however in this situation the action of the roller is aimed at encouraging growth in the grass plants, not at levelling the playing surface.

### **Decompaction/Aeration**

Verti-drain (or other similar de-compaction treatment) the pitches on at least two occasions in the spring and autumn. Use 18 mm diameter solid tines working to a minimum depth of 200 mm below the surface set to provide some heave. Verti-draining must not be carried out if ground conditions are too soft or during frost.

Additional aeration treatments (e.g. slitting or spiking) during the playing season would also be highly beneficial to maintain surface drainage rates. These treatments should only be undertaken when ground conditions are suitable.

#### Weed Control

A pesticide/fungicide application may be required should disease be present within the grass sward. An approved fungicide should be used with activity against the pathogens present and be applied following the manufacturers label recommendations by suitably qualified personnel.

### Sand Dressing

Top dressing a winter sports pitch has the benefit of diluting the fines (silt & clay) that naturally accumulate at the playing surface throughout a season. Keeping a sandy layer on the surface helps surface infiltration, reduces mud formation and maintains a direct hydraulic connection between the turf surface and the piped infrastructure below. It should be considered a necessity on secondary drained pitches, where the investment made in drainage can be wasted by mud 'capping off' grooves or slits.

A typical dressing for a whole pitch would use medium fine sand (90% of particles in the range 0.125mm - 0.5mm) at a rate of 8 - 10kg/m2. During the season the same sand can be used to treat localised areas where mud is forming and will go some way towards preventing the areas spreading.

Top dressing will also help level up a surface, though it may be more beneficial to use a proprietary rootzone (sand/soil mix) for this, either a 70:30 or 60:40 mix.

#### **Over-seeding**

Worn areas of a pitch can be over-seeded at any time from March through to September, though mostly this is carried out at the end of the playing season so that the new grasses are well established by the start of the following season. Over-seed the pitches and safety margins as required at the application rate of approximately 200 kg/ha immediately after the end of season topdressing application. Use at least three cultivars of perennial ryegrass chosen form the latest Turfgrass Seed booklet with live ground cover and visual merit ratings of 6.5 or more. Make at least two passes with seeding equipment designed to place the seed approximately 5 mm below the surface. Seeding is best carried out with a disc type seeder, or other implement which buries the seed effectively as this will maximise germination. Seed left on the surface will not germinate and is wasted.

# End of Season Renovation/areas of high wear

Areas of high wear should be dressed and seeded using a divot repair mix (seed/rootzone) during the playing season as required in order to maintain good grass cover. These areas should be hand watered (if necessary) to ensure rapid grass germination and establishment.

#### **General Use of the Pitch**

After each match, divot and tread the divots back into position. This will remove any bare soil which allows weeds and weed grasses to germinate. Filling in divots with seed/soil mix will help to maintain better grass coverage

It should be noted that, even on a well-drained pitch, there may be occasions when use of the pitch during or soon after prolonged heavy downpours may result in disproportionate damage to the playing surface, which may then continue to deteriorate throughout the remaining part of the season.

In general terms, a maintenance budget of ~£5-7 k per senior pitch is normally required to maintain the facility in good condition. This figure would include the cost for annual sand topdressing.

# **MAINTENANCE PROGRAMME (PER PITCH)**

## Jan/Feb/Mar:

Mow as required

## Apr:

Mowing frequency increased as grass starts to grow. Fertiliser – 220kg 12:6:6

## May/Jun:

Over-seeding – 200kg total application
Sand dressing – 60t total application
Decompaction (verti-drain/earthquake)
Mowing once or twice weekly (max length 45mm)

## Jul:

Mowing once or twice weekly (max length 45mm)

## Aug:

Selective Herbicide (if required)
Mowing once or twice weekly (max length 45mm)
Reduce grass to playing height
Fertiliser – 200kg 12:6:6

#### Sep:

Mow at least weekly to maintain playing height Decompaction (verti-drain/earthquake)

#### Oct:

Mow as required to maintain playing height Fertiliser – 200kg 4:12:12

# Nov/Dec:

Mow as required