QUALITY PROGRAMME

FIH

ENGINEERED FOR HOCKEY

COMPETITION FIELDS

SPECIFICATION, LAYOUT QUALITY REQUIREMENTS

Applicable to all qualification tournaments that lead directly to FIH World Cups and Olympic Games (including Continental Championships and Continental Multi-Sport Games)

VER. 01

AUGUST 2021

1 Introduction

The FIH World Cups and the Olympic Games are the most prestigious global hockey tournaments, and every national team aspires to compete in them. Various qualification routes are available depending on the tournament.; these include hockey's five Continental Championships, Continental Multi-Sport Games and FIH Olympic and World Cup qualification tournaments.

To ensure that the teams playing in these tournaments are able to compete to their full potential, the FIH has established minimum quality criteria for the fields on which qualification matches will take place. These are based on the FIH's *Hockey Turf and Field Standards*.

2 Scope

This document describes the minimum requirements for field being used to host qualification tournaments for the FIH World Cups and the Olympic Games hockey tournament. This includes the following events:

a. FIH Qualification events
b. Continental Championships (Division 1 only)
c. Continental multi-sports Games (e.g. Africa Games, Asian Games, Pan American Games)
d. Continental Federation qualification events for FIH World Cup and Olympic Games

The specified criteria is split into two categories:

Recommended criteria is based on good practice and helps ensure a satisfactory experience for athletes, officials and spectators. This criteria should be satisfied wherever possible and the FIH and Continental Hockey Federations have the right to make it mandatory for specific events if they wish.

Minimum criteria is established to ensure satisfactory and safe playing conditions. Compliance with these requirements is a condition of hosting a qualification event.

3 Dry Turf

The FIH is working with the synthetic turf industry to develop surfaces that perform as elite players desire without the use of water (Dry Turfs). As part of this development the FIH has commissioned research that will allow us to update our *Hockey Turf and Field Standards* to remove the requirement for Global category hockey turfs to be watered prior to play.

The updated version of our *Hockey Turf and Field Standards* will specify the sports performance and player welfare properties required from Global category hockey turfs. How a hockey turf satisfy these requirements will be for its manufacturer to determine.

As it becomes possible to build fields for top-level play without water, the FIH believe hockey will embrace this advancement with enthusiasm, but there will be a period where international matches and tournaments will still be played on existing water-based hockey turfs as well as the new Dry Turfs. Ideally, when major tournaments such as the FIH World Cups and Olympic Games are to be hosted on Dry Turf fields, the qualification events for the tournaments will also be played on Dry Turf surfaces, but this is not yet mandatory.

4 Reference documents

Reference is made to the following documents, all of which can be downloaded from Facilities Guidance Resources | FIH.

- Hockey Turf and Field Standards – Part 1 FIH Approved Hockey Turfs
- Hockey Turf and Field Standards – Part 2 – 11 a-side hockey fields
- Hockey Turf and Field Standards – Part 4 – Temporary Overlay Pitches (TOPS)
- Facilities Guidance – Sports Lighting for Televised Outdoor Hockey
- Facilities Guidance – Sports Lighting for Non-Televised Outdoor Hockey
- Facilities Guidance – Hockey Field Irrigation
- Facilities Guidance – Scoreboards for international tournaments
- FIH Approved Field Equipment – Hockey Goals
- FIH Approved Field Equipment – Team Shelters
- FIH Approved Field Equipment – Technical Officials Booths

If further information or guidance is required, this can be obtained from facilities@fih.ch.

5 FIH field certification

FIH Field Certification is the internationally recognised way of demonstrating a field's suitability for competitive play and its compliance with FIH competition regulations and quality standards.

Restricting FIH World Cup or Olympic Games qualification tournaments to fields holding FIH Certification provides certainty of performance to players, match officials and competition administrators. It also helps minimises potential liabilities in the event of player injury compensation claims.

If a field that is not certified is being considered as a tournament venue, it should be tested at the earliest convenience to demonstrate compliance with this specification. The FIH has a number of accredited test institutes, and these have accredited engineers located around the world. Details may be found at Contact a FIH Accredited Test Institute | FIH .

Undertaking a field test incurs costs. These can often be reduced if they are linked to other tests in the same region. FIH accredited test institutes also undertake tests for other international sports governing bodies; by giving adequate notice the test institutes can often combine the testing of hockey fields with the testing of other sports facilities. This allows costs to be shared between projects.

6 Disclaimer

In the event of exceptional or extenuating circumstances the FIH reserves the right to waiver compliance with the criteria specified in this document. In such cases the FIH will not agree to anything that could result in a hazardous or poorly performing hockey field being used.

As a condition of granting dispensation the FIH may require the hosts of a FIH World Cup or Olympic Games qualification tournament (e.g. a Continental Federation, National Hockey Association or third party) to satisfy additional technical or administrative conditions, some of which may incur additional costs.

7 Field criteria

Fields intended to host qualification matches for the FIH World Cups and Olympic Games should satisfy the following criteria:

Parameter	Minimum criteria	Recommended criteria
Number of fields required	8-team tournaments If an 8-team tournament is being hosted one Competition Field shall be provided. 12-team tournaments If a 12-team tournament is being hosted one Competition Field and one Training Field shall be provided. Notes: Wherever possible, the training field should be of a similar quality to the Competition Field, and at least satisfy the criteria of a an FIH Category 2 field. Training Field should ideally be at the same location as the Competition Field or be within 30 minutes travelling of the official team hotel(s).	
Field layout and dimensions	FIH Category 2 field as shown on Figure 1	FIH Category 1 field as shown on Figure 2
Type of field construction	The field may either be a permanent installation, or a Temporary Overlay Pitch (TOPS) laid at a temporary hockey venue.	

Parameter	Minimum criteria		Recommended criteria	
Type of playing surface[1]	FIH Approved [2], Global category Hockey Turf or FIH Approved TOPS field construction[3],			
Colour of playing surface	Field of play	Approved shade of blue or dark green	Field of play	Approved shade of blue
	Perimeter margins	Colour that contrasts with a hockey ball	Perimeter margins	
Field markings	The field shall be marked in accordance with the current *Rules of Hockey*. 5m dashed circle lines are required. No additional line markings should be present on the Field of Play, this includes cross pitch hockey training markings.			
Logos	No commercial logos should be present on the Field of Play or perimeter margins without the FIH's prior approval.			

[1] For qualification events other than FIH World Cups and Olympic Games, tournament organisers may consider allowing the use of FIH Approved National (sand-dressed) Hockey Turfs

[2] A list of FIH approved hockey turfs is available at FIH Quality Programme for Hockey Turf | FIH

[3] Available at 11 a-side hockey fields | FIH

Parameter	Minimum criteria	Recommended criteria
	Venue, and FIH Quality Programme logos may be positioned on the perimeter margins.	
Field orientation		The field should be aligned North/South, with a maximum deviation from north of ± 15^0.
Field irrigation	If the installed hockey turf requires irrigation, it should be in accordance with the *FIH Facilities Guidance – Hockey Field Irrigation – Performance and Operational Requirements*[4]	
FIH Field Certification	At the time of the event the field shall be certified as an FIH Category 1 or Category 2 field. Notes: FIH Category 1 fields are designed primarily to host top-level international hockey tournaments. FIH Category 2 fields are designed to host national & international matches. If a TOPs construction is being used the field shall be checked in accordance with the *FIH Hockey Turf and Field Standards* – Part 4 (TOPs).	

[4] Available at 11 a-side hockey fields | FIH

Parameter	Minimum criteria	Recommended criteria	
Perimeter fencing	Fencing should ensure hockey balls cannot leave the field and strike spectators or surrounding infrastructure. Notes: Fencing may be: • suspended ball catch netting, anchored fixed to prevent it billowing in the wind; • weldmesh or chainlink panels; • a combination of panels and netting	Fencing heights should be:	
		Side–line boundaries	≥ 1.2 m
		Along back–line boundaries where spectator seating will be located, or pedestrian access will be allowed	≥ 7.0 m
		Along back–line boundaries where spectator seating and pedestrian access will not be allowed (height along width of shooting circles	≥ 4.5 m
Access gates	Player and match officials' access gates should be adjacent to the point of access from the changing accommodation. At least one set of double gates should allow emergency vehicle access to the field.		
Field equipment (general)	Field equipment should comply with FIH quality and safety standards.		

Parameter	Minimum criteria	Recommended criteria
Hockey goals & nets	Number required: One pair plus one spare (3 goals & nets in total)	FIH Approved goals and nets should be used[5].
Corner flags	Six corner flags (1 set and two spare) They should be mounted on flexible (22mm diameter) posts and be fitted into surface mounted base plates or ground sockets.	
Team benches	2 x 11 (min) seats Team benches should be positioned either side and within 10 m of the centre line. They should not be positioned on the run-off of the field but should allow players immediate access to the field.	Wherever possible, FIH Approved team shelters/benches should be used[3].
Technical Official's booth	A suitable Technical Officials' booth shall be provided. The structure shall be watertight and provide impact protection from hockey balls leaving the FoP. The booth shall be positioned so it is aligned with the centre-line of the field and allow easy access to the FoP by match officials.	Wherever possible, a FIH Approved Technical Official's booth should be used[5]. The booth may be positioned adjacent to the team benches or within a spectator stand on the same side of the field as the team benches.

[5] A list of FIH Approved Field Equipment can be found at FIH Quality Programme for Field Equipment | FIH

Parameter	Minimum criteria	Recommended criteria
Sports Lighting (general)	The category of lighting required shall be determined by considering: • the type of media coverage that will used to broadcast the event • the scheduling of matches (daytime or night–time) Notes: For venues not able to satisfy the specified lighting criteria a Broadcast Suitability Test as described in Appendix A should be given. If the results of the test show the lighting to be suitable for the type of broadcasting been undertaken dispensation from the mandatory lighting criteria given.	
Televised coverage during evening[6] play	FIH lighting category TV2[7]	FIH lighting category TV1[7]
Televised coverage during daylight[8] hours	FIH lighting category TV3[9]	
On–line streaming during evening play[6]	FIH lighting category TV3[7]	
On–line streaming during daylight[8] hours	FIH lighting category 1 (non–televised matches)[10]	

[6] Evening play is defined as any match that commences within 2 hours of Civic Dusk. The 2 hour period is to ensure a match is concluded before dusk and makes allowance for any delays or penalty shootouts, etc.

[7] Facilities Guidance – Lighting for Televised Hockey Sports lighting for outdoor hockey | FIH

[8] Daylight play is defined as any match that concludes at least 2 hours before Civic Dusk. Civic Dusk is when the geometric centre of the Sun's disk is 6 degrees below the horizon.

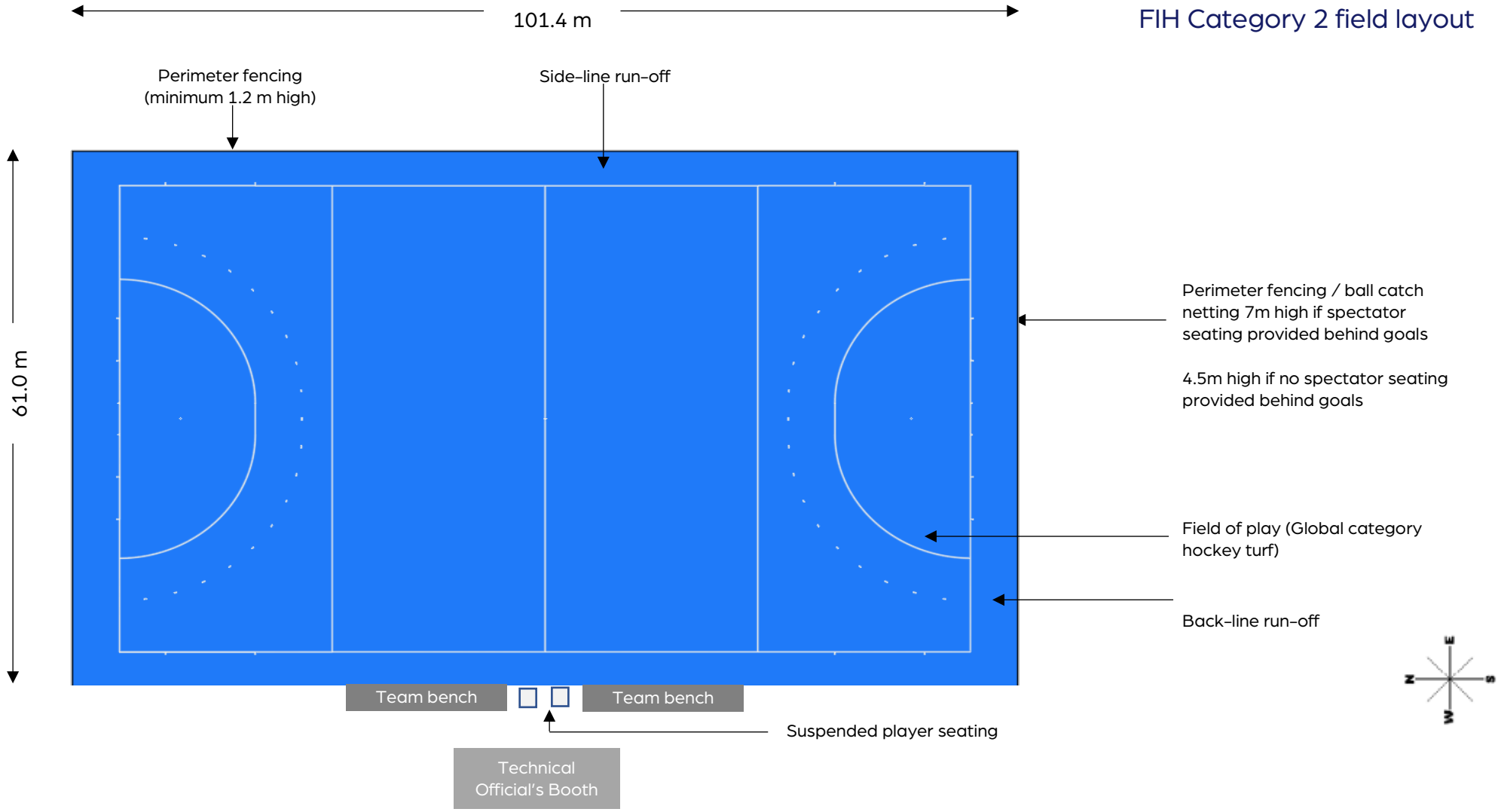
[9] Facilities Guidance – Lighting for Televised Hockey Sports lighting for outdoor hockey | FIH

[10] Facilities Guidance – Lighting for Non–televised Hockey Sports lighting for outdoor hockey | FIH

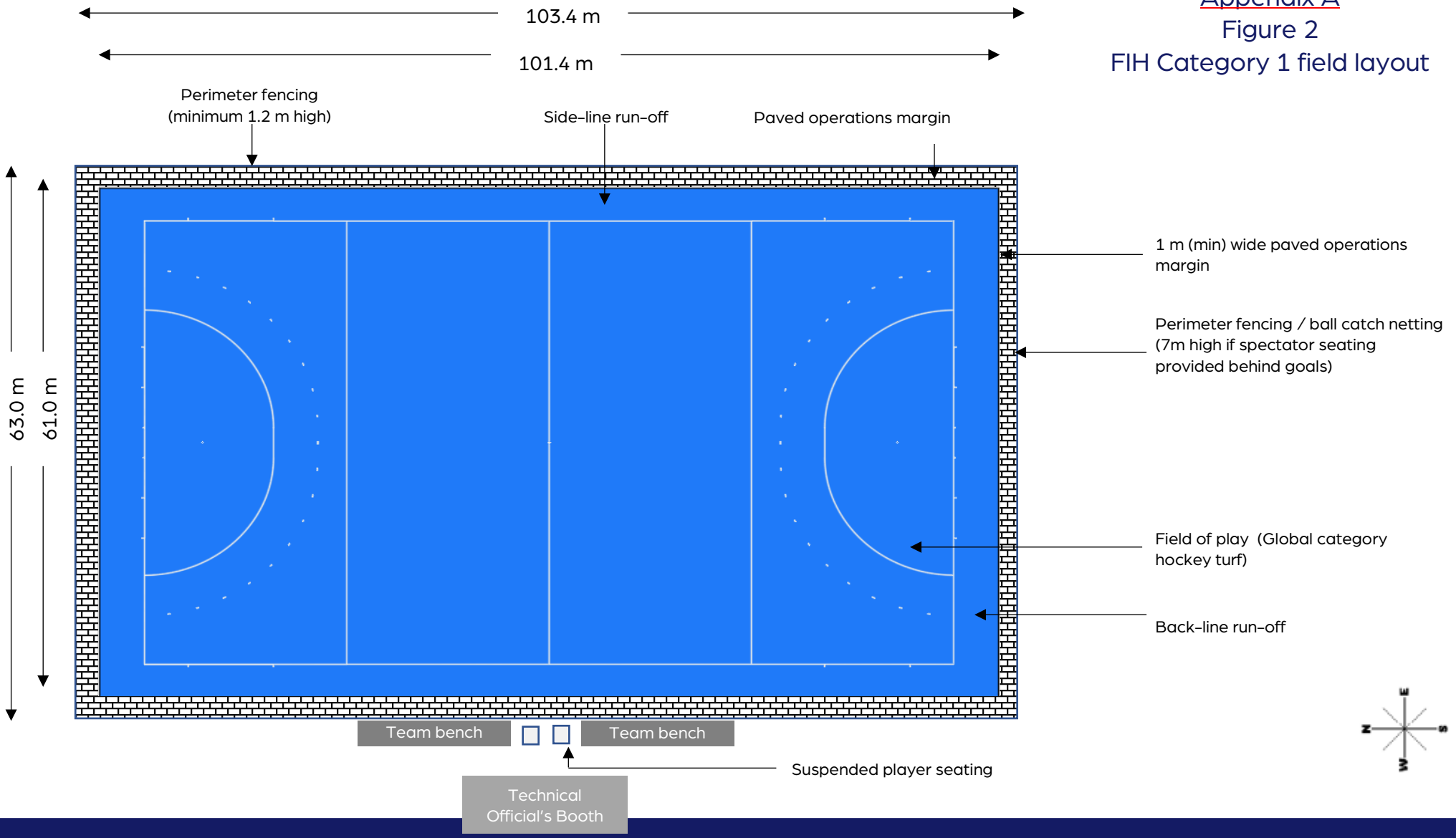
Parameter	Minimum criteria	Recommended criteria
Scoreboards	A digital or video scoreboards should be provided. It should comply with the *FIH Facilities Guidance – Scoreboards for international Tournaments*[11]	

[11] Available at Facilities Guidance Resources | FIH

Appendix A
Figure 1
FIH Category 2 field layout



Appendix A
Figure 2
FIH Category 1 field layout



Appendix A – Broadcast Suitability Test

Broadcast suitability tests should be undertaken at venues being considered for televised hockey matches that do not have lighting that complies with the appropriate criteria specified in Section 2 or 3 and measured in accordance with Appendix A.

All costs incurred in organising a broadcast suitability test shall be met by the venue/host applying to undertake the test.

Working with a professional broadcast production company, approved in advance by the FIH Broadcast Department, a video of hockey being played under the lighting conditions being proposed should be submitted to the FIH Broadcast Department to allow an assessment of the suitability of the broadcast imagery to be made. The video should show hockey being played. It should be at least 30 minutes in length and include imagery from each of the 11 positions highlighted in the following figure.

For each location, the following images should be included:

1. Long/wide shots (LS)
2. Medium shots (MS) of play
3. Close-up (CU) shots of the ball/stick/surface
4. CU shots players faces

For venues wishing to host televised matches in the evening or hours of darkness, the lighting tests and broadcast suitability video should be undertaken under dry conditions, during the hours of darkness.

For venues wishing to host televised matches during the hours of daylight lighting tests and broadcast suitability video should be undertaken under dry conditions, during the period of civic dusk minus one hour (e.g. if civic dusk is at 8.00pm, the lighting test and video should commence no earlier than 7.00pm).

Notes:

- The lighting and video tests do not need to be made on the same day but should be undertaken under similar lighting and weather conditions.
- If the full lighting test is made on a different day to the video test, the vertical and horizontal lighting levels in each of the nine positions highlighted in Figure 1 should be measured immediately prior to the video being filmed.

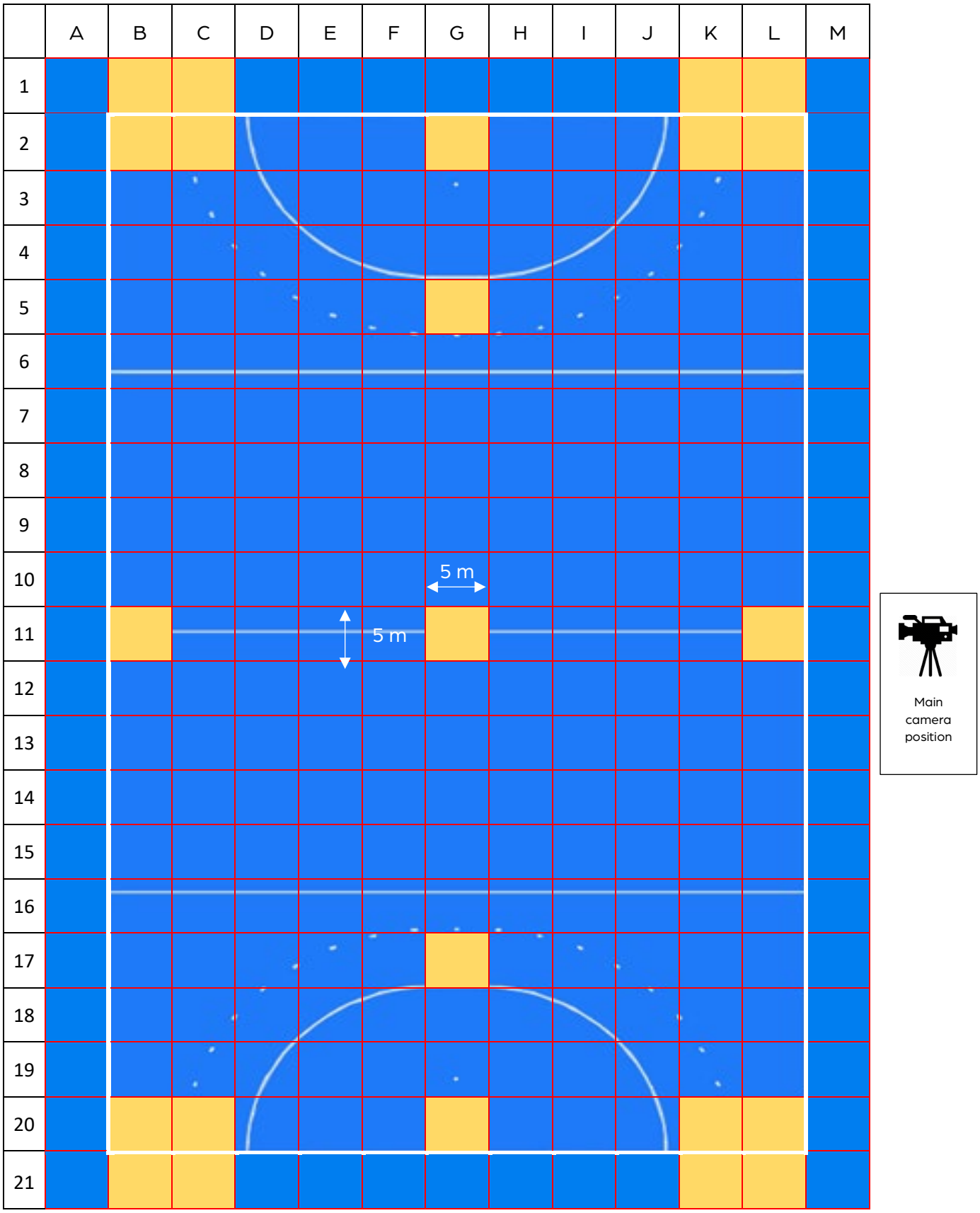


Figure 1 – lighting test and key video imagery positions

Rue du Valentin 61
1004 Lausanne
Switzerland

www.fih.ch