Planning

Civil Engineering Consultancy Site Investigation Specialist Testing Sports Surface Advice

Project Management

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## FIELD PERFORMANCE REPORT

## In accordance with

## BS EN 15330-1:2013 – Hockey & Football [Short Pile]

Field Reference:	Tweedbank Sports Ground
Field Address:	Tweedbank Industrial Estate Tweedbank Galashiels TD1 3RS
Report Number:	17092/2622s
<b>Report Status:</b>	FINAL
Issue Date:	13/05/2016
Client:	Scottish Borders Council Council Headquarters Newtown St Boswells TD6 0SA

#### FOREWORD

1. This report has been prepared by Sports Labs limited with all reasonable skill, care and diligence within the terms of the contract with the Client and within the limitations of the resources devoted to it.

- This report is confidential to the Client and Sports Labs Limited accepts no responsibility whatsoever to third parties to whom this report, or any part thereof, is made known. Any such party relies upon the report at their own risk.
- 3. This report shall not be used for engineering or contractual purposes unless signed by the Author and the Checker and unless the report status is "Final."
- 4. \*Not all tests carried out are within our scope of ISO 17025 Accreditation.
- 5. Comments and opinions are outwith the scope of our ISO 17025 accreditation.



2614







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## 1.0 INTRODUCTION

- 1.1 Sports Labs were requested by Scottish Borders Council to carry out performance testing on the synthetic pitch at Tweedbank Sports Ground. Testing was carried out in accordance with BS EN 15330-1:2013 (Hockey & Football [Short pile]) Regulations for the parameters examined.
- **1.2** Testing was carried out on 13/05/2016 in overcast and dry conditions.
- **1.3** The pitch is constructed on an engineered base underlying an insitu shockpad. The synthetic layers comprise of: Short pile, polyethylene fibre carpet, infilled with rubber and sand.

Substrate Type:	Engin	eered	Infill Type:	Sand	
Carpet Name:	Unkr	nown	Shockpad:	Insitu	
Air Temperature during testing (°C):	AM	PM		Overcast, Dry	
	9	N/A	Weather Conditions:		
Surface	AM	PM	Wind Speed	1.3	
Temperature during testing (°C):	8	N/A	during testing (m/s):		
Humidity (%):	AM	PM		NL	
	63	N/A	Operator:		

PREPAREDKeith MacphersonBYField Testing Manager

CHECKED BY Richard Nixon Director



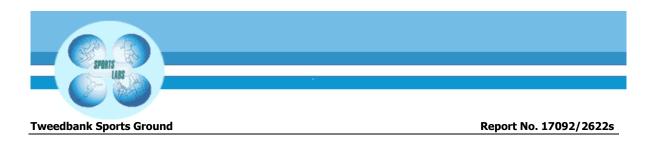
#### Tweedbank Sports Ground

#### Report No. 17092/2622s

#### 2.0 TEST PROGRAMME

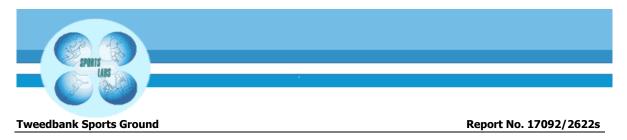
- 2.1 Testing was carried out at 5 locations across the pitch, as show in Appendix A.
- 2.2 The suit of testing was carried out in accordance with the requirements of BS EN 15330-1:2013 (Hockey & Football [Short pile]) for the parameters examined as follows:
- 2.2.1 Rotational Resistance EN 15301-1:2007
- 2.2.2 Shock Absorption EN 14808:2005
- 2.2.3 Vertical Deformation EN 14809:2005
- 2.2.4 Porosity EN 12616:2013
- 2.2.5 \*Surface Regularity and Dimensions EN 13036-7:2003

\*Not all tests carried out are within our scope of ISO 17025 Accreditation.



### **3.0 TEST RESULTS**

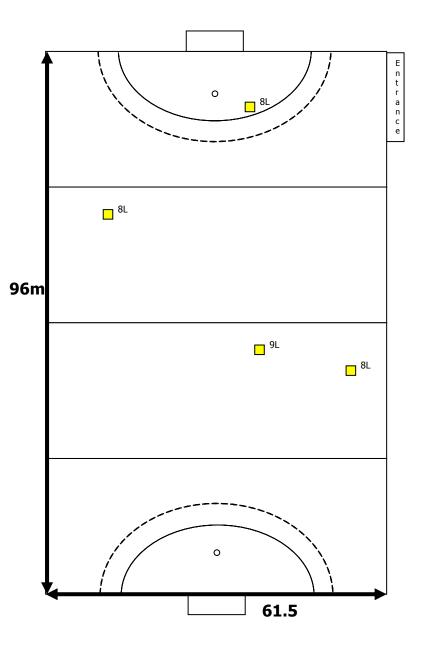
Test	Requirements	Location					Pass /
		1	2	3	4	5	Fail
Rotational Resistance	25Nm to 50Nm	27	27	26	27	27	Pass
Shock Absorption	40-70%	53	49	51	46	44	Pass
Vertical Deformation	3.0 – 10.0mm	6.8	6.0	6.0	5.7	5.3	Pass
Water Permeability	≥180mm/h	3509	3373	3247	3581	3340	Pass
Surface Regularity	No deviations >6mm			4			Fail



### 3.1 SURFACE REGULARITY AND DIMENSIONS

Plan showing surface irregularities exceeding maximum requirement of 6mm under a 3m straight edge.

In the surface measured there were  $\underline{4 \text{ deviations found}}$  in excess of this requirement, as shown in the diagram below.





#### **Tweedbank Sports Ground**

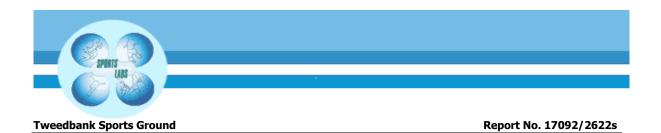
#### 4.0 DISCUSSION/COMMENTS / VISUAL ASSESSMENT

- 4.1 The results obtained from the testing exercise showed the surface did not comply with the specification limits as set out in BS EN 15330-1:2013 (Hockey & Football [Short pile]) for the parameters examined. Specifically the surface failed to meet the requirements of surface regularity.
- 4.2 This surface requires a proper maintenance regime. Maintenance of the surface is important to its continued performance and longevity.
- 4.3 Fencing: Lower Rebound boards: The Rebound boards are generally in good condition some boards are starting to loosen and should be checked and tightened accordingly. Rubber matting behind the goals has become loose and should be reattached to the boards.

Fencing: - Upper Weld Mesh: The weld Mess fencing is in the main in good condition however some areas are poor especially at the ends of the court around the goals. On several panels the welds have broken and have left wire fencing protruding. These have resulted in hand and finger traps and also wires exposed at eye level. These pose a significant risk to the end user.

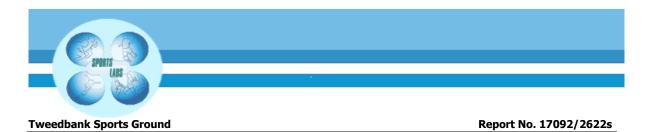
4.4 Goals: - The Football goal frames and nets were in good condition. The goals should be inspected and tested in accordance with the BS EN 748 and BS EN 8462 if this has not been undertaken in the past two years. This will ensure that the goals conform to the minimum safety standards for goals.

Goals: - The Hockey goal frames and nets were in good condition.

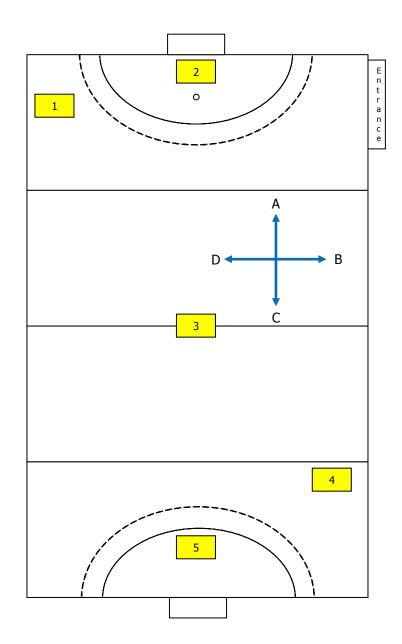


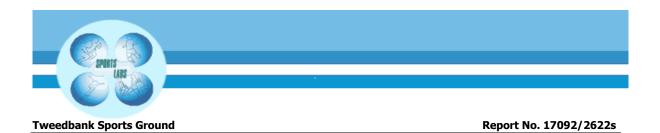
# **APPENDIX A**

# **TEST LOCATION PLAN**



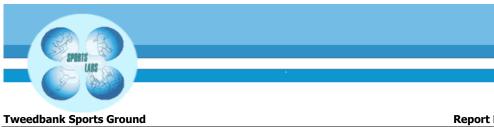
### **TEST LOCATIONS**





# APPENDIX B

# SITE PHOTOGRAPHS



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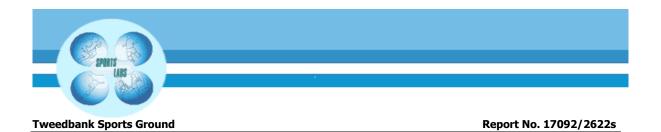
### SITE OVERVIEW







DEFECTS



Damage to Mesh fencing Damage to Mesh fencing Damage to Mesh fencing Rubber matting loose on boards.

VISUALS

End of Report