

To: CORPORATE SERVICES (LICENSING) SUB-COMMITTEE		Subject: SAFETY OF SPORTS GROUNDS CERTIFICATION ARRANGEMENTS - BROADWOOD STADIUM, CUMBERNAULD
From: HEAD OF BUSINESS FOR LEGAL AND DEMOCRATIC SOLUTIONS		
Date: 28 July 2016	Ref: LD/RM	

## 1. Introduction

- 1.1. The Council has adopted practices in relation to its responsibilities for the certification of "Designated Sports Grounds" in North Lanarkshire and agreed to the establishment of a Safety of Sports Grounds Officer Working Group representing a variety of disciplines which assist the process of certification.
- 1.2. The Council has also agreed that a programme of annual inspections be established and over the past few months, Officers of the Working Group have carried out inspections at Broadwood Stadium, Cumbernauld, and met with representatives from the Stadium Management to discuss a number of issues relating to the General Safety Certificate for the ground.

## 2. Current Position

As a result of these inspections, the undernoted matters have been identified as requiring attention, details of which have been passed to the Stadium Management:-

### (a) Structural Integrity

- A number of damaged and corroded seats (particularly those seats located within the first four rows of the Main Stand) pose a risk to the users and, as such, require to be repaired, replaced or put out of operational use.

### (b) Electrical Installations

- The Council appointed RYBKA, Consultants, in May 2015 to inspect the electrical installations at each of the four stadia in North Lanarkshire.
- Attached, as Appendix 1 to this report, is a report by the Council's Consultants, RYBKA, providing commentary on works which had been carried out at the Stadium to the electrical distribution system following on from the RYBKA site inspection of May 2015. Setting out in Section 3 of the report, details of the status of upgrading and repair works which had been recommended for action in 2015.
- Attached, as Appendix 2 to this report, is an addendum report by RYBKA providing commentary on works which had been carried out at the Stadium to the existing emergency lighting installations following on from the RYBKA site inspection of 6 May 2015. Setting out in Section 2 of the report, details of the status of upgrading works and repairs which had been recommended for action in 2015.

(c) **Means of Escape and Building Standards**

- The escape route/final exit gates from the rugby pod area must be suitably signposted and be unlocked.

(d) **Fire Safety**

- The penetrations throughout the Main Stand between the ground floor and first floor and between the ground floor rooms and protected areas should be suitably fire protected.
- In the event that the South and Away Stands are used for an event, the removal of the items which are stored under these Stands prior to the event taking place.
- The completion of the fire detection/alarm system linking the new rugby pod area to the Stadium.

(e) **The Safe Capacity of a Sports Ground**

- The submission of detailed calculations and drawings for the safe capacity of all parts of the Stadium, calculated in accordance with Section 2 of the Guide to Safety at Sports Grounds.

3. **Recommendation**

It is recommended that the Sub-Committee hear verbal updates on any outstanding issues by the appropriate officers and from the Stadium Management of Broadwood Stadium and consider the renewal of the General Safety Certificate accordingly.

  
 **Head of Business for Legal and Democratic Solutions**

**NORTH LANARKSHIRE COUNCIL****CONDITIONING REPORT ON THE ELECTRICAL DISTRIBUTION SYSTEM****BROADWOOD FOOTBALL STADIUM****1.0 INTRODUCTION**

This addendum report has been prepared at the request of North Lanarkshire Council to provide commentary on works carried out at the Broadwood Football Stadium to the electrical distribution system following on from the Rybka 2015 site inspection of May 2015

The information contained within this report has been obtained from the following:

- Undertaking a visual inspection carried out on the visible parts of the electrical distribution system.
- From on-site discussions with the staff
- From reviewing the current electrical 'test' sheets

No electrical tests were undertaken on any electrical cables.

No manually operated isolator switches, MCCB's, MCB's or RCBO's were activated, to prove whether or not they were still operating correctly.

Those parts of the electrical installation which have been built-in, covered up or made inaccessible within the normal course of construction, fitting out or occupation were not inspected. Consequently, liability is not accepted for any faults which may become apparent at a later date due to a concealed defect.

The existing standby generator sets were not tested during our inspection of the electrical distribution system.

Our comments and recommendations on the condition of the electrical distribution system relate to the condition of the existing electrical equipment and cable installations installed and highlights any departures from the current standards & regulations, and does not constitute a check on the performance of the installations currently in use.

This addendum report should be read in conjunction with the Rybka document;  
**'Conditioning Report on the Electrical Distribution System, Broadwood Football Stadium' Dated 29<sup>th</sup> May 2015.**

**2.0 ELECTRICAL TEST SHEETS, 'O&M' MANUAL AND 'AS FITTED' DRAWINGS**

Annual Test:

The annual electrical test should include for the testing of 20% of all sub-mains power cables and the testing of 20% of all outgoing lighting and power circuit cables from each distribution board. Different lighting and power circuits should be tested during the annual testing exercise.

Five Year Test:

The five yearly electrical tests should include for a 100% testing of all sub-mains power cables and a 100% testing of all lighting and power circuit cables have been completed over the 5 year period.

The electrical test sheets available and witnessed for the stadium require updating. A new certification was issued on the 5<sup>th</sup> of January 2015 for the new office layout rewiring. The last Periodic Inspection noted in the file was for the 25<sup>th</sup> of July 2014 when 30% of the installation was tested.

Other periodic inspection data was dated 25<sup>th</sup> July 2014, accounting for final circuit and sub-mains cable testing taken within the East Stand and excludes any final circuit/cable test taken within the South Stand, West Stand and the Football Academy Building.

Our inspection of the electrical test sheets confirm the following:

- That the final circuit testing exercise has not been carried out on all distribution boards located throughout the East Stand.
- That 80% of the outgoing circuit have been tested from the distribution boards tested.
- That all sub-mains cables contained within the East Stand have been tested.
- There are no non-compliance test results for any of the circuits/cables tested.
- That the electrical test results provided comply with the requirements set out within Part 4 : Protection for Safety, and Part 6 : Inspection and Testing, of BS.7671 (IET Wiring Regulations).

The electrical test sheets also highlight a number of action points on the electrical installation that need to be undertaken to maintain the electrical safety of the installation (21No. Items).

Albeit that sample testing on the electrical cables/wiring systems has been carried out the exercise undertaken does not automatically provide any certification nor guarantee that the 'whole' electrical installation is electrically safe and fully compliant with BS.7671 and the 'Electricity at Work Regulations 1989'.

Although there is no set guidelines within BS.7671 or the 'Electricity at Work Regulation 1989' to advise on the extent of electrical testing required or the time periods on when electrical testing should be carried out, it is recognised throughout the electrical industry that, for this particular building, sample testing (in the region of 20%+) should be carried out annually with a 100% electrical testing programme conducted every 5 Years.

A record of all electrical repairs carried out on the electrical installation is achieved by retaining the invoices of all replacement parts within a file held within the Facilities Management office.

There are no 'O&M Manuals' or 'As Fitted' drawings on site containing the details of the electrical installation installed throughout the Football Stadium.

### 3.0 UPDATE OF 2015 RECCOMENDATIONS

From our observations and inspection we noted the following when comparing the installation to the 2015 report

#### 3.1.1. Recommended Upgrading Works

2015 Action	2016 Status	Comment
Investigate and replace the current switching arrangement provided adjacent to Distribution Board 'K	No evidence to support all works had been completed	
Undertake all action points noted within the electrical test sheets	No evidence to support all works had been completed	
Undertake all action points noted within last years report	Not completed.	

### 3.1.2. Repair Works

2015 Action	2016 Status	Comment
Undertake all repair works noted within the electrical test sheets	No evidence to support all works had been completed	

3.1.3 We would also recommend that an exercise be undertaken to produce the following:

2015 Action	2016 Status	Comment
An 'Operating and Maintenance' Manual for the electrical distribution system installed within the Football Stadium	Works not completed	
A set of 'As Fitted' drawings recording the location of the electrical switchgear and route of all sub-mains cables installed throughout the Football Stadium	Works not completed	
An accurate wiring schematic for the electrical distribution system installed within the Football Stadium	Works not completed	

### 3.2 Additional Items noted

We noted that the Periodic Inspection labels to distribution boards were generally out of date with the 'date of next inspection' noted generally August 2014 as or 3/7/15. This shortfall in the equipment labelling needs to be addressed.

Where certification is available the Periodic Inspections should be labelled on the electrical equipment. Where periodic Inspection certification is not available and the equipment is out of test as well as having an out of date label

### 4.0 SUMMARY

The electrical installation provided throughout the stadium is considered to be in a good condition with only a few minor elements requiring attention.

The electrical installation will be fully compliant with the current regulations set out within BS.7671 and the 'Electricity at Works Regulations 1989' when the following actions have been completed:

The main concern is confirming the Periodic Inspection Certification and up periodic inspection labelling is accurately date stamped and labels are affixed correctly to installed electrical equipment.

## **NORTH LANARKSHIRE COUNCIL REPORT ON EMERGENCY LIGHTING INSPECTIONS**

### **BROADWOOD STADIUM**

#### **1.0 INTRODUCTION**

This addendum report has been prepared at the request of North Lanarkshire Council to provide commentary on works carried out at the Broadwood Stadium to the existing emergency lighting installation following on from the Rybka 2015 site inspection of emergency lighting which was carried out to compare compliance to BS EN 50172, BS EN 1838 and BS5266-1 : 2011.

This addendum report is linked to the document; **North Lanarkshire Council Safety at Sports Ground Annual Inspection 2016.**

The follow up site inspection visit was carried out on the 6<sup>th</sup> of May 2016.

The information contained within this report has been obtained from our on-site discussion with the staff, from reviewing the current Emergency Lighting Certificates and from our inspection carried out on the visible parts of the emergency lighting installation.

No physical light meter measurements were taken.

Where practical, the emergency lighting system was operated to view the coverage and general effectiveness of the system.

We did not inspect those parts of the installation which were built-in, covered up or made inaccessible within the normal course of construction, fitting out or occupation. Consequently, liability is not accepted for any faults which may become apparent at a later date due to a concealed defect.

Our comments and recommendations on the emergency lighting installation relates to the condition of the existing emergency lighting installation installed and highlights any departures from the current standards & regulations, and does not constitute a check on the performance of the installations currently in use.

This addendum report should be read in conjunction with the Rybka document;  
**'Report on Emergency Lighting Inspection, Broadwood Stadium' Dated 8<sup>th</sup> April 2015.**

## 2.1 TEST CERTIFICATE, LOG BOOK, O&M MANUAL AND 'AS FITTED' DRAWINGS

A copy of the emergency lighting 'Test Certificate' and the 'Service Log Book' are kept on site and are up-to-date. The emergency lighting 'Test Certificates available differed by area and

Emergency Lighting Certificate	Area	Expiry date
GMA00086EM	Gymnastics Centre	01/03/2017
GMA00087EM	Broadwood Lesiure Centre	02/03/2017
GMA00070EM	Broadwood Stadium	03/06/2015
GMA00061EM	Broadwood Stadium	26/09/2015

The maintenance manager was not available during our visit and whilst the current emergency lighting certificates were not available on file we did not find any unsafe areas. We expect the certification will be available for the Council visit and would ask the operations team to follow up on the emergency lighting certification.

A new office layout completion certification was issued on 27/01/2015, this area will require to be incorporated into the 2016 emergency lighting certification.

The log book records the weekly test dates.

There are 'O&M Manuals' and 'As Fitted' drawings on site for the new Leisure Centre but not for the Football Stadium.

## 2.2 SUMMARY

The emergency lighting system provided throughout the stadium is compliant with BS EN 1838 but currently not fully compliant with BS.5266-1. To be fully compliant with BS5266-1 the end user needs to undertake the recommended upgrading works detailed within Clause 2.3.1 and the repair works noted within Clause 2.4

## 2.3 UPDATE OF 2015 RECCOMENDATIONS

From our observations and inspection we would recommend that the following upgrading works and repairs be carried out:

### 2.3.1 Recommended Upgrading Works

2015 Action	2016 Status	Comment
Provide stand-alone, self-contained, external emergency luminaires outside and adjacent to the main office entrance	Works not completed	
Provide stand-alone, self-contained, emergency luminaires within the Switch Room	Works not completed	
Provide stand-alone, self-contained, emergency luminaires within Vending Store DB Room	Works not completed	

We would also recommend that an exercise be undertaken to produce the following:

An 'Operating and Maintenance' Manual for the emergency luminaires and the emergency lighting system installed	Works not completed	
A set of 'As Fitted' drawings recording the location and type of all emergency luminaires installed throughout the Stadium	Works not completed	
A wiring schematic for the emergency lighting system installed	Works not completed	

**2.4 ADDITIONAL ITEMS NOTED**

Repair works are detailed in all available emergency lighting certificates. We cannot confirm completion of 2015 items until we have seen the 2016 Emergency lighting certification.