

# RUGBY FOOTBALL UNION

# **Design and Access Statement**

Twickenham Stadium - East Stand Extension

June 2016





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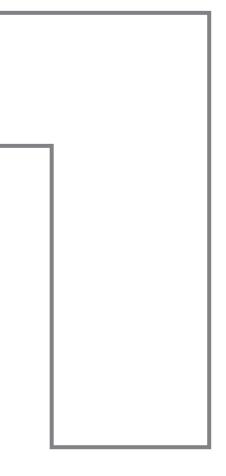
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# Introduction



Design and Access Statement





# **1.1 Executive Summary**

This Design and Access Statement aims to give an insight into the design process for the new east stand refurbishment project. It illustrates how the design has been informed by a thorough process of development of the hospitality brief required by the RFU, assessment and evaluation of the existing site and context, the specific technical requirements involved and the long term vision of the RFU for Twickenham Stadium.

The statement consists of three main sections: Assessment, Design and Access.

Assessment - Describes the assessment of the existing context and the site constraints of Twickenham Stadium, the key drivers for the design and the process of design review, evaluation and consultation that have informed the final design proposal.

Design - Explains the proposed scheme layout, scale and character of the design. This includes the external appearance and materials used to produce the new proposal.

Access covers how the public spectators and customers will arrive at the stadium, enter and move around the building once the new extension has been built, and how this impacts on the existing stadium and wider site experienced today.

In order to highlight the above a series of 2d and 3d drawings have been produced to illustrate how the building sits in the existing stadium context and streetscape. The report is to be read in conjunction with the suite of planning drawings submitted with the planning application and the various specialist reports submitted with the overall submission.





Rugby Football Union

Twickenham Stadium East Stand Extension

Design and Access Statement



### Background to the Application

# **1.2 Background to the Application**

Twickenham Rugby Stadium is the home of The RFU invests all of its profit back into rugby. England Rugby. With a spectator capacity The RFU currently has a 5 year strategic plan of 82,000 it is the largest dedicated rugby stadium in the world. Rugby has been played here for over 100 years, and the stadium is now also host to many non-sporting events including conferences and concerts.

A typical match day can see up to 82,000 spectators plus staff arrive at the stadium, many turning up a significant time prior to kick-off to enjoy the atmosphere in and around the stadium and hospitality from one of the hospitality areas currently located within the stadium. At present the current east stand houses a limited amount of hospitality at levels 01 (St. George's Suite) and 03 (boxes, Obolensky's suite and Wakefield's suite). The stadium has undergone a series of upgrade works in the last couple of years and the proposed extension and associated improvements are vital in improving the stadium's overall appearance by undertaking works to ensure the stadium remains a first class and World Class sports venue.

The RFU is a society registered under the Cooperative and Community Benefit Societies Act 2014 representing over 2.5 million registered players, and forms the largest rugby union society in the world, and one of the largest sports organisations in England.

with a priority to increase revenue for essential investment in the game. The proposed development of the east stand covered in this application will create space to allow the delivery of world class hospitality on match days that will release all the existing official licensed operators (OLOs) from various sites around the stadium thus delivering all official hospitality within the stadium. The new accommodation will also allow non-match day activities to take place within the new facilities to enable any revenue generated to be put back into grass roots rugby, community rugby projects, the community and the national team, for both men and women's rugby.



Plan of official licenced operators (OLOs) around the stadium



IT'S COLD, NOTHING BETTER TO WARM US THAN A BIG WIN! #CARRYTHEMHOME @IAMMCHARG STUART LANG D SIGNED SHIRT FOR GOOD LUCK #CARRYTHEMHOME @LIAMYARWOOD WEARING THE ROSE AND CHALLENGES SO THAT YOU CAN FEEL THE EXHILARATION OF VICTORY. #CARRYTHEMHOME @B Y IN THE EYES ~ WITHIN YOUR SOULS LIGHT YOUR FIRES ~ AND GO AND SCORE SOME TRIES #CAR H ON SATURDAY #CARRYTHEMHOME @MAR1AYD BEST OF LUCK TO ALL PLAYING FOR THE RED RO **@THECOMMUTERCODE** GOOD LUCK TO THE #ENGLANDRUGBY TEAM, DIG DEEP AND FIGHT HAR MCHARG STUART LANCASTER. THE MAN, THE \*TO BE\* LEGEND. ENGLAND FAN AND PROUD #CARI THEMHOME @MR\_ARSENAL\_BLOG COME ON LADS! LETS DO THIS! IT'S COLD, NOTHING BETTER LAYERS DELIVER! PLAY WITH PASSION AND PRIDE, PLAY WITH HEART. WE CAN'T ASK FOR MOR S COME ON ENGLAND, NOW IS THE TIME TO STAND UP AND BE COUNTED. #ENGLANDRUGBY @ANI RFORMANCE #PLAYHARDPLAYHARDER #CARRYTHEMHOME @MARKETING\_JAN COME ON ENGLAN NGS FLY! #CARRYTHEMHOME @AUTISMINRUGBY MAKE EVERY POINT COUNT. TAKE WHAT IS RIGH OOD LUCK #CARRYTHEMHOME @THECOMMUTERCODE GOOD LUCK TO THE #ENGLANDRUGBY

# HUNDREDS BEFORE YOU. THOUSANDS AROUND YOU.

COME ON ENGLAND, IT'S OUR STADIUM, IT'S OUR TIMÉ, IT'S OURS FOR THE TAKING! #CAR \*TO BE\* LEGEND. ENGLAND FAN AND PROUD #CARRYTHEMHOME @MR\_ARSENAL\_BLOG CO TODAY TO BECOME LEGENDS! YOU HAVE 80 MINUTES TO CREATE RUGBY HISTORY. COME ON BOYS H PASSION AND PRIDE, PLAY WITH HEART. WE CAN'T ASK FOR MORE! #CARRYTHEMHOME @PAR IG TO THE ENGLAND MATCH AND NOT ME! I'LL BE WEARING MY ENGLAND SIGNED SHIRT FOR CHALLENGES SO THAT YOU CAN FEEL THE EXHILARATION OF VICTORY. #CARRYTHEMHOME @ D BE\* LEGEND. ENGLAND FAN AND PROUD #CARRYTHEMHOME @PAPER\_WIZARD ENGLAND ARIS OUNTED. #ENGLANDRUGBY @ANDY\_CARD JUST BROUGHT AN ENGLAND RUGBY SHIRT READY FOR RKETING\_JAN COME ON ENGLAND, IT'S OUR STADIUM, IT'S OUR TIME, IT'S OURS FOR THE BY MAKE EVERY POINT COUNT. TAKE WHAT IS RIGHT FULLY YOURS. WHEN FULL TIME COMES BASOU LIAMYARWOOD WEARING THE ROSE AND PROUD! #ENGLANDRUGBY #CARRYTHEMHOME THIS! IT'S COLD, NOTHING BETTER TO WARM US THAN A BIG WIN! #CARRYTHEMHOME , NOW IS THE TIME TO STAND UP AND BE COUNTED. #ENGLANDRUGBY @ANDY\_CARD JUST BROUGH ARDPLAYHARDER #CARRYTHEMHOME @MARKETING\_JAN COME ON ENGLAND, IT'S OUR STADIUM, " S OUR TIME, IT'S OURS FOR THE





Design and Access Statement



Twickenham Stadium and the Community



# **1.3 Twickenham Stadium and the Community**

The RFU is proud to be part of the Twickenham The RFU also support 22 local schools through community. They are committed to creating their Kick Start programme, making an annual opportunities and addressing issues of financial contribution to each of these, creating concern to local people. They demonstrate rugby-playing opportunities for young people this commitment by maintaining good relations and offering local children the opportunity with their neighbours and responding to the to visit the Stadium and watch world-class issues that they raise. They also work closely sport for free in the Home of England Rugby, with local businesses, many of whom supply Twickenham Stadium. the Stadium.

The vision of the RFU is to build healthy, vibrant and prosperous communities around Twickenham Stadium. For example, they:

• Generated over £96m of economic activity within Richmond upon Thames in 2013/14 (source EY Economic and Social Impact Analysis August 2015)

• Work with over 20 local businesses to supply the Stadium

• Pay £3m in local taxes

• Spend more than £2m on crowd safety and mitigating the impact of matches on local residents

• Invest over £100,000 in local community projects and in communicating with their neighbours

• Made 5,000 heavily discounted tickets available to residents for the HSBC London Sevens, and give residents access to 400 tickets for International matches





Design and Access Statement

Stadium Setting



# 1.4 Stadium Setting

The site (1) is located in Twickenham, West London. It is located a block north of the South Circular A316, Chertsey Road (2) and a short walk from Twickenham Rail Station (3) to the South East. The stadium is located largely within a mixed-use area, with a sewage works to the north, industrial estate to the east, Richmond upon Thames College (4) to the south and Chase Bridge Primary School (5) to the West and residential areas primarily to the south and north east. The site is largely level in its topography.

The site comprises the stadium with associated outbuildings, concourses and car parking areas. The outbuildings include turnstiles, workshop and external storage and plant. The stadium has four named stands which surround the pitch, these are North, South, East and West stands. The west car park is used as a hospitality zone on match days and is the main arrival point for home and away teams.

With residential areas close to the stadium, the surrounding roads are resident permit holders only and the RFU discourage parking outside of their designated areas. Demand for match day parking is high and must be booked in advance. The RFU issue up to 336 free parking spaces for all international matches through priority wheelchair access.

Car parks are located to the North and West of the stadium with a number of designated car parks. These are the Rosebine Avenue car park located next to Harlequins RFC, Tesco car park off Mogden Lane, Cardinal Vaughan car park, the North car park and the West car park.

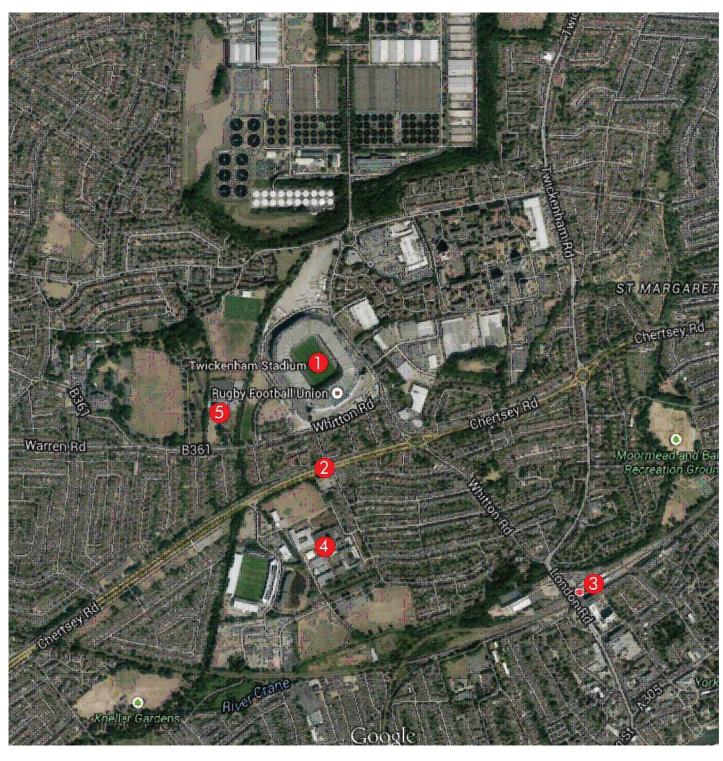
Shuttle buses from nearby train stations stop adjacent to the stadium on Rugby Road. Buses 281, 267 and H22 all run regular services which pass close to the stadium. Alternatively, access to the stadium is by 33, R68, R70, 290 or 490 buses to Twickenham town centre (King Street) – the stadium is a 10 to 15 minutes' walk away.

For certain events parking facilities are available in the Stadium's North and West car parks.

The stadium sits on a predominantly flat site with access gained by general spectators from 6 designated entrances located on the West, North and East sides of the ground. An external perimeter fence acts as the first point of entry and ticket control line. Access via the South Stand is controlled and restricted.

The stadium has a set of ground rules that need to be adhered to on access to the site past any of the controlled ticket points.

Access for general spectators to the upper levels is via 22 open staircases arranged around the ground within the perimeter fence. 5 public access lift cores, each with 2 lifts, also enable spectators access up to upper concourses and hospitality areas around the ground.







# **Project Summary**



The Brief



# 2.1 The Brief

In March 2015 Mott MacDonald together with the International Stadium Group (ISG) developed a feasibility study for the possible upgrade / refurbishment of the existing Twickenham Stadium to incorporate improved facilities for Debenture holders and for the hospitality customers currently serviced by the OLOs off site which has led to the proposal to extend the East Stand.

The project has subsequently been developed with the client and the design team to capture the principles of the RFU requirements while taking account of the site and its context. The areas of floor space established on the enclosed plans are in-line with associated room area occupation densities as required by the RFU and their stakeholders.

The briefing sessions held with the RFU and other key stake holders have established a broad catering strategy which requires kitchen areas and production kitchens with associated links are proposed to be located at levels 1(Ground Level) and 3.

The development of the east stand elevation has been undertaken in consultation with an RFU Executive Steering Group and also with Planning and Design Officers of the London Borough of Richmond upon Thames.



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Design and Access Statement

Project Programme





# 2.2 Project Programme

Subject to all statutory requirements being fulfilled and working around a year-round schedule of events at Twickenham Stadium, the key dates within the proposed programme for the project are as follows:

Planning application and target planning consent – June to November 2016

Start on site – March 2017

Construction period – March 2017 to June 2018

Completion and occupation – June 2018

Please see the detailed programme following for more specific items.

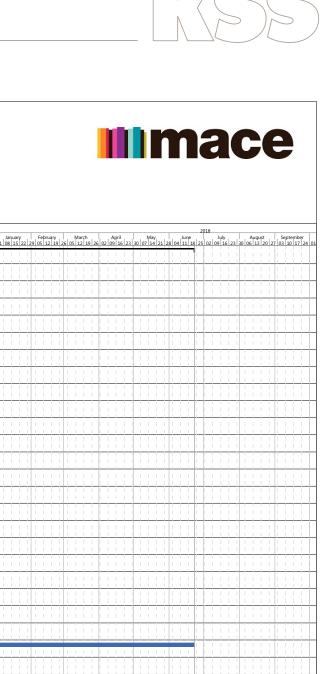


Design and Access Statement

Project Programme



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182	Procurement of East Stand Shell & Core	227 days?	Thu 28/04/16	Fri 10/03/17																													
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### Project Scope

# **2.3 Project Scope**

The scope of the project and architecture is to extend the existing East Stand in order to deliver the space required to accommodate the hospitality and debenture holder facilities. This forms the business case for the development. There is no increase in stadium seating capacity proposed, although a minor reduction in numbers is required to accommodate a number of the proposed changes in bowl access arrangements.

The design is based on the extension of the existing east stand at Levels 3, 4, 4A and 5 to a realigned security fence line along Rugby Road. Extending at Level 03 and above preserves the existing vehicle deliveries and servicing access arrangements around the stadium at ground floor. The extent of the proposed extension is maintained behind the existing fencing/turnstile line. Minor extensions at ground level (Level 1) provide new reception areas to the new hospitality spaces.

Although existing vertical circulation comprising escalators, lifts and stairs are maintained in the current positions, the proposal incorporates further dedicated hospitality lifts to the north of the centre of the east stand and a further goods lift in the NE corner to service the kitchens and bars in the new extension.

The customer journey and access to the stand is considered of paramount importance to enable the venue to operate successfully in both match days and non-match days.

It should also be noted that accessible seating linked to hospitality accommodation is proposed at L4A to the rear of the mid-tier as no accessible seating is available at LO4. The suites and WC accommodation at all levels has also been designed to meet accessible stadium standards.

The configuration of the proposal has also been planned to ensure that the extension and refurbishment works can be delivered whilst preserving stadium operation through the construction programme.

The proposed east stand extension significantly improves the operation and quality of the following areas:

At levels 1 & 2, the existing SE and NE corner bar areas are over sailed by the new extension, effectively providing significantly more protection from the elements.

At level 03, level 04 and 04A the additional space provides additional accommodation and area for both major games and other event modes. The proposal also resolves current deficiencies in WC accommodation. The qualitative aspect of the concourses is also significantly improved.

In addition to the overriding brief requirements, the following key areas have been considered in the design of the East Stand refurbishment:

• Extend a new level 02 slab over what is currently the St George's Suite to create

hospitality space linked by two new vomitories to the lower seating tier to take spectators directly out into the bowl from their tables.

• Turnstile arrangement to relate to the optimum operational requirements with focus also in creating the highest quality hospitality ticket access arrangement. Turnstile lines have been appraised with the safe movement and egress of spectators in mind and concourse widths and escape gates in accordance with the Safety at Sports Grounds - Green Guide.

 Routes from suite to bowl seat are as clear and short as possible

• To retain existing concourse concessions on Levels 4 and 5 to prevent impact on RFU business during and after the refurbishment of the proposed east stand project.





Design and Access Statement





# 2.4 The Design Team

Architect and Principal Designer:



Building services:

Cost Consultant:

Project Mangers:

Client Representative:



Fire Consultant:

Planning Consultant:



Ticketing and Marketing Strategy Consultant:

Structural Engineers:

Civil Engineers:

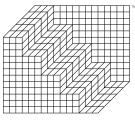


Principal Designer: KSS with CDMS















Rugby	Football	Union
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Design and Access Statement

The Design Team



Arboriculture: 103 Acoustic Consultant: innovation environmental **pps**group<sup>O</sup> Public Relations Consultant: Transport Consultant: Construction Legal: Catering Design: F, Flood risk assessment: movement Movement Consultant: Hospitality & Catering Consultants: BREEAM Consultant: MAINERASSOCIATES







Alan Brockington Catering Design



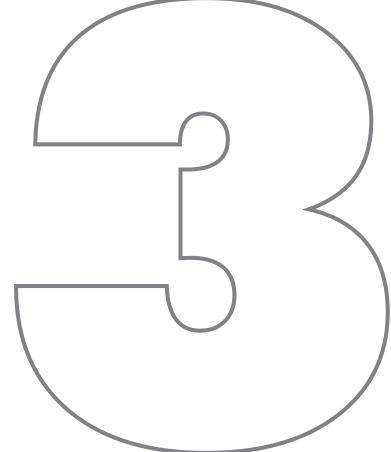




Keith Prowse

The Design Process





Design and Access Statement



Existing context

# 3.1 Existing context including scale and materials

Floor levels through the new extension have generally been retained on the same level as the existing floors with the exception of the new level 05 terrace which relies on a raised concourse level in order to create an acceptable ceiling height in the new hospitality level 4A below.

The current section around the stadium has level concourses at the upper levels 04 and 05. Level 03 creates a loop of hospitality boxes around the stadium, with the President's suite and Members' bar in the west stand and Wakefield's and Obolensky's hospitality suites in the east.

The east stand section is more complicated in that there are a series of floors affected by the proposed refurbishment.

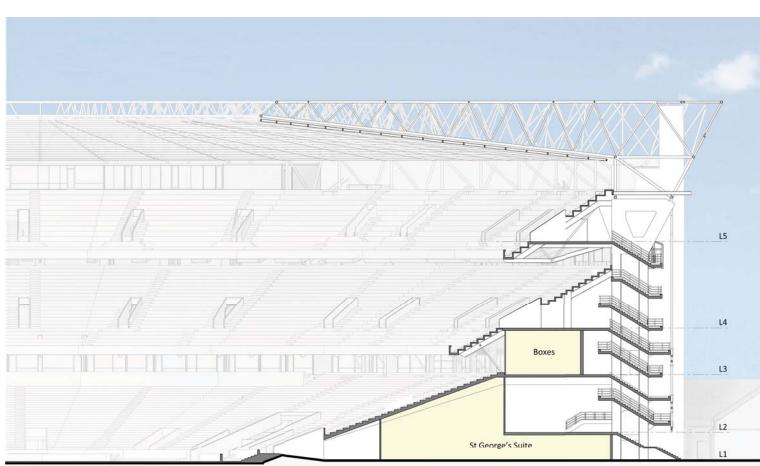
There is very little hospitality space present within the current east stand comprising at ground floor (level 01); the St George's Suite and the level 03 boxes (with associated kitchen). Of this limited area, only level 03 boxes have a view over the field of play. None of the space overlooks Rugby Road allowing natural light in from the east. The rest of the section highlights a large amount of open concourse on levels 04 and 05.



Existing stadium as seen from the north







Existing Hospitality Space

### Existing section





Existing Materials



## Existing materials

The most recent development at Twickenham stadium is the south stand. Completed just over a decade ago this recent addition has a stone clad façade with extensive curtain walling forming a series of sweeping curved forms to the east and west and a central section that forms the main entrance to the south stand. With the façade being south facing there are a number of steel canopies and solar shading devices bolted onto the façade. The stone is white in colour and the curtain walling has dark grey mullions. Canopies are of white painted steel construction with a glass roof. Because of the orientation the glass has a tint to reduce thermal gain which gives it a hint of green.

The remaining three elevations to the stadium are 'raw' in appearance with the expression of the main exposed concrete 'soldier' columns and open staircases with galvanised steel handrails the dominant feature. These three elevations express the sloping bowl seating from the outside and a number of bolt on accommodation pods, mainly for hospitality boxes, are present. Two south corner drums are exposed concrete in construction and form major access and egress ramps from the Level 4 and 5 concourses.

The perimeter fence is mainly green palisade fencing with gates within and the main Lion Gate to the west is of stone post and timber gate construction to highlight its importance and significance, being the main player and

VIP entry point into the west.

The main roof structure plays an important part in the identity of the stadium. The functional steel construction or 'crown' creates a recognisable form all the way around the stadium and is visible in more distant views. This is the one continuous form that appears all around the stadium.



Existing east facade concrete



Existing south east corner glazing and cladding Existing east turnstiles





Design and Access Statement



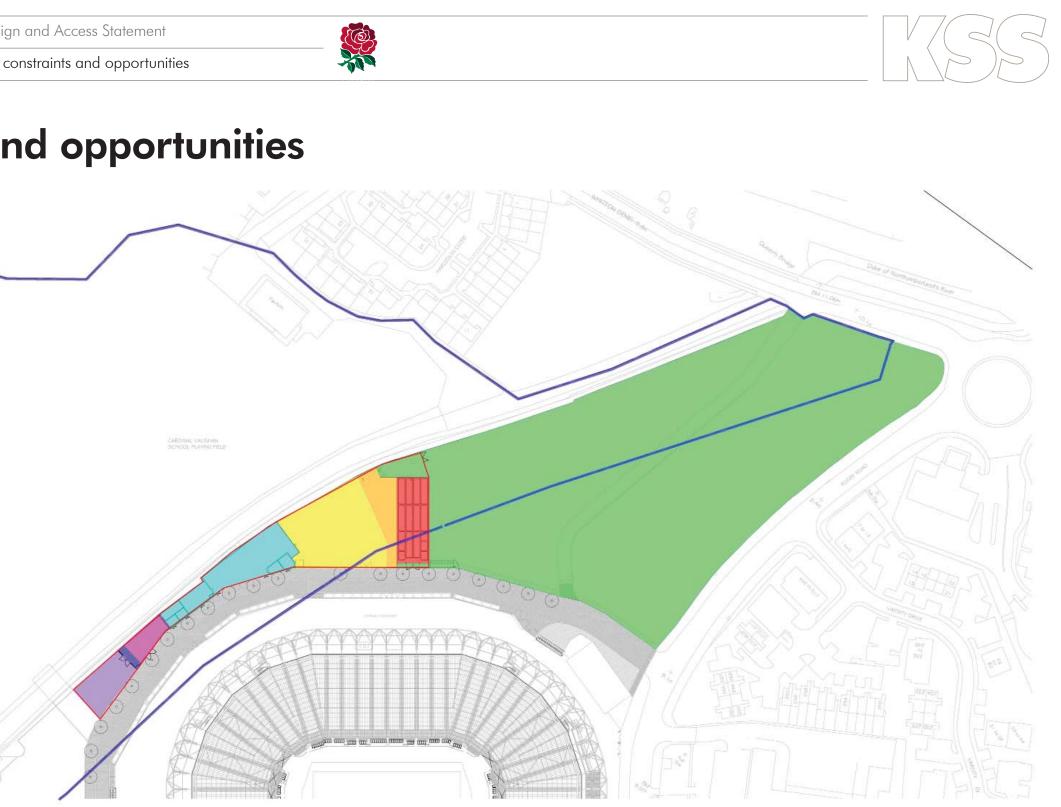
### Site constraints and opportunities

# 3.2 Site constraints and opportunities

Twickenham Stadium, is set in land owned by the RFU. The most recent development of the south stand has seen significant expansion of the accommodation available on site.

The stadium site is generally fenced around, however a large open plaza area exists to the south of the stadium. A perimeter access road to the north of the stadium provides access from Rugby Road to the north and western car park areas and separates the fence and turnstile encircled ticketed stadium area from the un-surfaced northern car and coach park area.

The perimeter fence that runs north to south along Rugby Road sets out the extent of the stadium boundary at this location. This represents the narrowest distance between stadium and the public domain around the site. All areas of the proposed development are outside of the Metropolitan Open Land along the western site boundary.





Metropolitan open land extent on the site