

Planning Design Reports / Statements



Phase 2 Redevelopment of Sandy Park Stadium



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Introduction 0.1

Exeter Rugby Club (the Chiefs!) was granted permission for their new ground and associated facilities at Sandy Park on September 30th 2003 (main app no 03/1612/03). Subsequent applications were approved for the increase stadium capacity to approx 10,800, the access pedestrian bridge over the A379 and approvals for temporary and permanent spectator stands within the stadium itself.

Exeter Chiefs, 6 years on, now sit proudly at the top table of English Premiership Rugby encompassing sell out crowds with qualification to next season's Heineken European Cup competition. This has not only brought many successes to the Rugby Club itself but national recognition to the City of Exeter and put South West of England Rugby firmly on the map.

Fortunately Exeter Chiefs Rugby Club are now in a position to progress their new 4 year plan for the redevelopment and expansion of Sandy Park to augment its Premiership status together with substantial enhancement and growth of the clubs corporate conference and hospitality facilities.

The proposals briefly are to increase the ground spectator capacity from 10,744 to 20,600 in the form of an extension to the existing West stand and new permanent stands on the remaining 3 sides of the ground. The corporate hospitality and conferencing will be extended within the existing West Stand itself and within a newly constructed South Stand.

The proposals also include building a 1000 seated Conference Centre Suite and associated facilities behind the new Southern Stand on the current training pitch area. This function links into the main ground both physically and mechanically whilst providing an iconic statement of the club towards the motorway and surroundings areas of Exeter.

The external works are also to be re-planned to take account of match day drop off terminal for coaches/buses together with improved parking facilities of up to approx 400 spaces on non match days for the increased conferencing requirements.

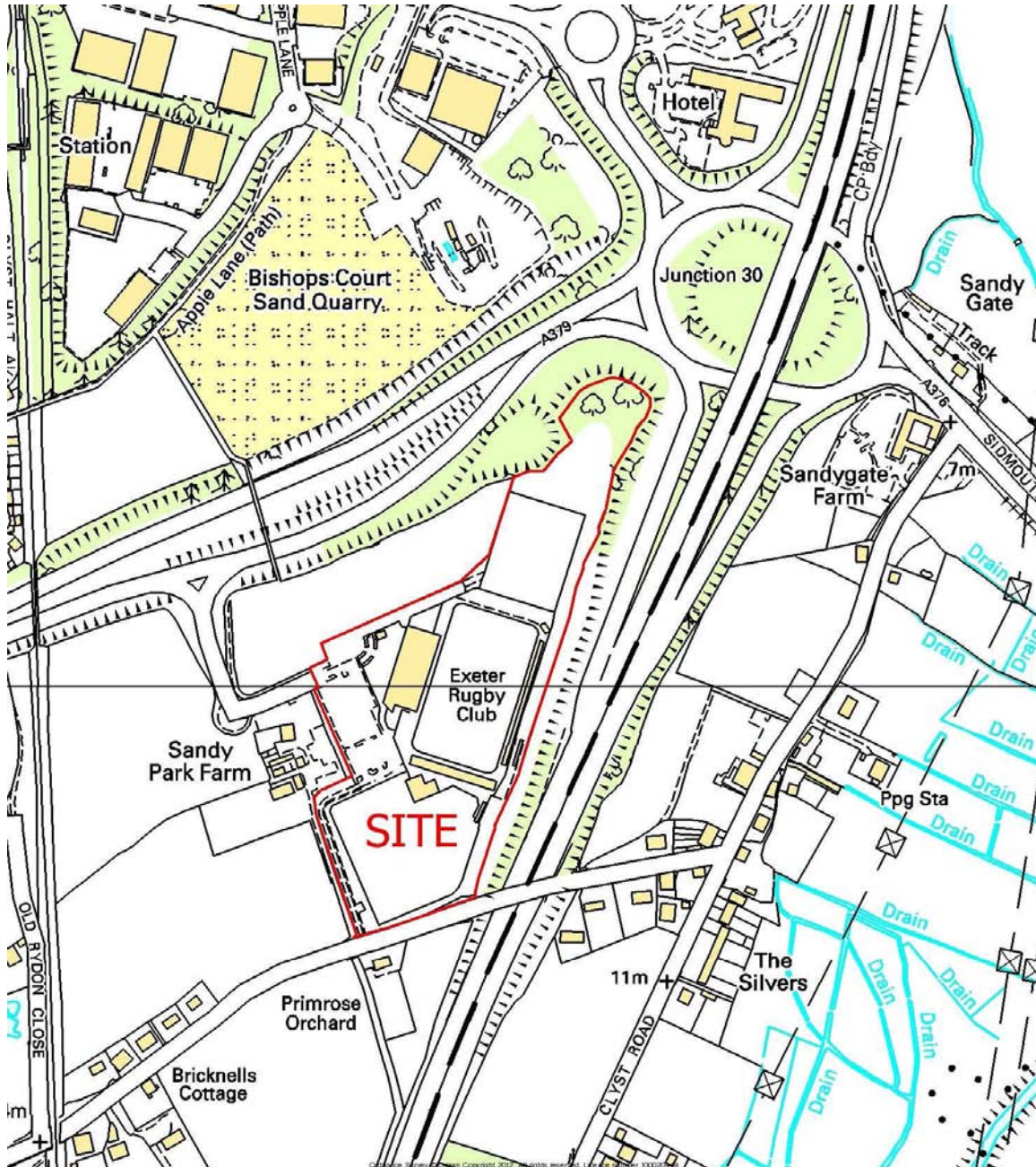
To facilitate the expansion of Sandy Park planning permission has already been granted by East Devon Council for a new Academy of Rugby training and associated facilities at Oil Mill Lane, Clyst St Mary, Exeter.

Our Client and Exeter Rugby Clubs Chief Executive Mr Tony Rowe has held a number of public/members consultations on the new proposals on the 25th January and the 25th April 2012. Furthermore these proposals have been widely circulated throughout the local media recently.

The new proposals described above are submitted to the City of Exeter to underline the Rugby Clubs desire to maintain and improve upon its current facilities at Sandy Park, its national recognition as a first class Rugby Club and to assist in bringing much income and business to the local economy.

SITE LOCATION PLAN 0.2

(Please also refer to DWG 1032 PL01.01)



Planning Design Statement 0.3



Detailed Design

Design Site Parameters

Approach

The main approach to the ground is via the existing footbridge for pedestrians on match days or via Sandy Park Way for vehicles. Pedestrians approaching the ground are at first greeted with 2 Rugby Balls, 1 is the ticket collection point and the other rugby ball is a bar/refreshment outlet both at the upper level with food/bar outlets under the same rugby balls at the lower level adjacent to the shop area and VIP entrance. Entrances into the ground will be via the turnstiles positioned in the North West, South West and South Eastern corners of the ground.

Scale & Mass

The scale and mass of the proposals follow the current West stand and the previously approved east stand (app no 07/0324/03) with the north and southern stands rising to accommodate the proposed capacity figures by a storey. The new proposed Southern Conference Centre plugged into the south stand is in keeping with the overall scale of the stadium and tapering away to a single storey height further to the south and providing an architectural statement of the Rugby Club towards the motorway. Contextually to the north of the site is the new David Lloyd Sports Centre which with the Rugby Club supports the sport and leisure



industry. The M5 motorway is to the eastern boundary of the site. Further to the east towards Clyst St Mary the vision of the club will be enhanced with the removal of the existing flood lighting columns as the flood lights will be supported from the roofs of the new grandstands and subsequently remodelled for improvement. Indeed the east grandstand will follow exactly in height the previously approved application (07/0324/03). The western boundary to the rugby club site is lined with acoustic fencing to protect the existing properties of Sandy Park farm.

The proposals for ease of understanding are outlined via the 4 sides of the ground – **NORTH, SOUTH, EAST & WEST:**

- **WEST** - Extension to the existing West Stand lengthening the stand to the full length of the pitch thus removing the temporary stands either side, this includes an increase of approx 1600 seats overall, an increase in corporate boxes on the second floor, internal alterations to the existing and an extension of the western facing facade enlarging the existing conference and hospitality on both floors. The architectural aesthetics are to follow the existing materials and proportions.
- **SOUTH** - A new 4,600 all seated Grandstand with ground floor changing facilities for the Chiefs 2nd XV, spectator toilets, food and refreshment outlets and bars. A further 14 corporate boxes are contained at the top level of the stand. Beneath the seating on the first and second floors will accommodate bar and restaurant areas for both match days and conferencing requirements. The architectural appearance will be as mentioned above and follow existing material and language used in the existing West Stand, these are black marble effect tiling to the ground floor external wall and silver finish aluminium cladding panels with metal deck profiled roof.

Behind and connected to the new Grandstand to the south will be a new 1000 seat Conference Centre Suite. This will be an acoustically designed flexible conference space with retractable seating. The Centre will have an adjoining naturally lit atrium linked into the existing rugby club in terms of bars/restaurants with servicing plant and kitchens. Architecturally the appearance will be in the main a planar glass external wall through 3 storeys providing the naturally lit internal areas. The conference space will be a contained designed acoustic box, lined internally and externally with timber cladding inside of the glazing. The roof will have a curved profile made up of entirely photo voltaic's giving exposure to the south and the much needed sustainability requirements.

The southwest corner will have infill at high level linking the western and southern Grandstands together creating approx 1500 seats. Beneath this portion of the ground will be additional administration offices and the inclusion of 5no on site semi permanent flat apartments. These will be for the sole use of management and on site staff of the Rugby Club and not for market sale. The club operates long hours with conferencing and hospitality, it requires restaurant, duty managers and security to be on site 24 hours being on call at all times, the apartments are for this function.



- **NORTH** – This will be a new 4,600 all seated Grandstand, including first floor entrance level, from the main car park turnstiles, toilets, refreshments and food outlets for supporters. On the upper levels there will be a corporate restaurant/bar with approx 14 corporate boxes for match days overlooking the pitch on the top tier of the stand. The North West corner will have an infill as the south western corner creating a further 1100 seats.
- **EAST** –A new permanent Grandstand on the Eastern boundary including 1700 seats and approx 3000 standing areas with toilets, bars and food outlets beneath the stand. Also within this constructional sequence will be the final infilling of the north eastern and south eastern corners of the stadium mirroring the opposite corners being all seated and completing the ground into the final bowl effect of the stadium.
- **EXTERNAL WORKS** – The external works include enlarging the existing car park from 155 to 391 spaces on non match days and an amended layout allowing for a coach/bus terminal on match days. This will be facilitated by the removal of the rugby training pitch to the south of the site and relocating this together with 2 new further training pitches at Oil Mill Lane at Clyst St Mary as mentioned previously. Adjacent to the new main conference centre behind the south stand facing the motorway will be an area for deliveries and for Sky TV parking on match days.

- **Materials**

The external appearance of the stands will follow the existing materials currently adopted on the West Stand and as mentioned above, these are:

- Silver/grey composite aluminium cladding panels.
- Grey framed curtain wall glazing with matching glazed doors.
- Where necessary black marbled effect wall tiling at ground floor level.
- Euro clad grey profiles aluminium roof matching existing.

- **Materials to Southern Conference Suite**

- Silver/grey composite aluminum cladding panels.
- Full height patent planar glazing.
- Curved euro clad dark grey aluminum roof.
- Photo voltaic roofing panels

Floodlighting

It is proposed to remove the floodlight poles in the 4 locations of the ground and replace with the flood lighting mounted on the underside of the main roofs of the west and east grandstands.

This will positively reduce the amount of light spillage outside of the ground and focus the lighting to inside of the stadium with minimal spillage. A specialist report/input will be forwarded in due course.



Sustainability Strategy 0.4

In general terms we are considering the following sustainable approaches for inclusion within the overall proposals both in functionality and financial viability for delivery.

Natural Passive and Low Energy

The new buildings will be designed in accordance with the current version of Approved Documents of the Building Regulations with relevance to Environmental Design.

The intention is that the new buildings will be low energy use and ventilated naturally where possible given the proximity to the motorway using passive stack techniques. The new conference centre to the south will be ventilated via windows, grilles and roof mounted ventilation devices.

The mechanical and electrical building services and engineering systems will be designed to take full cognisance of the occupational needs & activities and will provide comfortable and light environments. At the same time they will need to be simple, cost effective, efficient and utilising best practise principles.

Servicing principles are kept as simple as possible with centralised plant wherever practicable and the main service routes utilising discreet service zones.

Natural Ventilation

The most desirable ventilation solution is natural because it is cost effective to install, efficient to run, provides occupancy control, and allows for a variety of ventilation rates. The system relies on the natural buoyancy of warm air rising in the room from occupants and equipment.

To make natural ventilation work correctly careful attention must be paid to its use. For example the room depth to height ratio must be carefully considered. For large rooms it is therefore important to keep the ceiling as high as possible. It is also important to consider the window design. It is essential that there is enough free area to allow the natural passage of air through or around the opening. This is often confused with the area of openable glazing. As a general rule the effective opening area should be at least equal to 5% of the gross floor area of the room served. Again as mentioned above careful design is required by specialists with the close proximity of the motorway adjacent to the ground.

Night Time Cooling

During the summertime the ventilation system is allowed to run in full fresh air mode during the night. This ambient air at relatively low night time temperatures is circulated through the rooms and areas which reduce the room temperature, and effectively stores cooling in the ceiling slabs to maintain room comfort throughout the following day.



Single Sided Natural Ventilation

An alternative to opening windows may have to be considered if rooms are deep plan or have limited external wall space for windows. Roof-mounted wind and stack ventilators are a good solution; wind from any direction strikes the louvres on the ventilator and is channelled down into the occupied space. At the same time, warm air rises and is exhausted from the building on the down-wind side of the ventilator. Roof ventilators may be suitable where external noise and security issues preclude the use of openable windows, and where air at high level is cleaner than that at ground level. They also provide good night-time cooling.

Typical Roof Top Ventilators

Roof ventilators are often used in conjunction with opening windows and dampers to control the fresh air supply in response to internal and external conditions. Roof ventilators may need to be fan-assisted (mixed mode) to provide additional air movement.

Heating Services

The proposal is that the primary plant for the new buildings/south stand where needed will be located in plant room above the main conference floor.

- Air source heat pump heat vessel & pumping (heat pump will be sited externally)
- High Efficiency Gas Fired Condensing Boiler
- Underfloor heating distribution
- Potential ground source heat pumps, this is to be investigated to be considered beneath the main car park areas and utilizing the natural expanse available.

The buildings will be served by Low temperature underfloor heating system. The system comprises a matrix of plastic pipe work sandwiched between a top layer of screed and the floor slab below. The matrix has a layer of insulation below. Other combinations of floor coverings can also be used, such as chipboard and carpet which, when used with electrical heating, provide a relatively quick warm up and cool down cycle. Underfloor heating systems contain water at a temperature of approximately 40- 45°C.

Ventilation Services

The new buildings will be designed to maximise the use of natural ventilation to help save energy and reduce the building carbon footprint. Whilst it is the intention that the new buildings where possible will be primarily a naturally ventilated in accordance with the Part F of the Building Regulations, certain areas will have to be mechanically ventilated. Mechanically ventilated areas will include in the main, conferencing/hospitality suites and the main southern conference area where sound insulation from external areas such as the motorway is kept to a minimum.

Roof Mounted Photo Voltaic

Photo Voltaics are southerly roof mounted panels to generate the clubs own green electricity for the use of the building, Photo Voltaics help reduce the carbon footprint of the building and reduce reliance of fossil fuels. This will be proposed to be situated on top of the southerly facing roof of the conference suite.



Access Statement 0.5

Introduction

The Sandy Park Stadium is located on the raised headland between the M5 and the A379 and close to the Sandy gate roundabout.

The home of the Exeter Chiefs rugby club was developed and constructed seven years ago with stadium accessibility features following the guidance that, to date has not been superceded.

It is still the relevant guidance for the phase 2 development now being proposed.

As well as being the venue top flight rugby there is currently provision for conference and banqueting facilities at the stadium.

A review of the Phase 1 provisions

In order to establish how well the original provisions have been received and work in practice, a review of the existing external arrangements was carried out. This has involved stakeholders and service providers and the results have been used to establish if any improvements should be made.

Discussions have taken place with the clubs representatives and local access groups in order to identify any observed issues resulting in complaint or praise from building users or staff.

Results of the review revealed that:

- The club has a designated liaison person who facilitates the match day needs of people with disabilities, the elderly and persons with young children.
- The staff has been provided with general inclusive and disability awareness training.
- Procedures are in place to register and act upon suggestions, praise or complaints by visitors and staff regarding equality issues and facilities provided.
- To date there have been no complaints received regarding access, facilities and staff assistance. There have however been numerous registered comments of praise for the transport and access policy by wheelchair users and persons with ambulant impairments.
- The club is aware of and has regular communication with local access groups.
- There have been no issues to resolve regarding bus, taxi and car drop off /pick up arrangements to date.
- Discussions with regular visiting wheelchair users regarding their experiences has uncovered no essential provisions that could be improved upon and feelings mirrored the club representative's comments.



The following was fairly typical of the verbal response from stadium users with disabilities

"As a wheelchair user and travelling supporter visiting many of the national grounds, I would say that Exeter has the best access and facilities of all the grounds I have visited. Staff are helpful and aware of what I may need assistance with"

The review did not identify any existing facilities that require redesign or substantial remodelling in Phase 1.

Advice and observations on access issues supplied as part of this process have helped to inform the proposed phase 2 schemes and make it more accessible and inclusive.

The physical survey carried out to identify any shortcomings relating to the condition of the approach measures serving the stadium did not uncover any major issues. There were some minor items relating to minor maintenance issues, which will be picked up during cyclical routine maintenance.

Building on a Good initial inclusive Design- Phase 2 Access Measures

Careful consideration has been given to not only following the recommendations of the guidance documents but also to the overarching objectives of inclusive design.

This has included:

- *early consideration of how to make the site logical and simple to use.*
- *consideration of simple but effective way finding measures and where they can be introduced to help reduce confusion.*
- *Good artificial lighting levels applied at entrance locations for evening use and poor daylight.*
- *Good practical and tactile external surface finishes*
- *Consideration of the Equality Act protected characteristics categories*
- *Consideration of how everyone can get to and move through the space on equal terms*

Vehicular access and transport links

The vehicle, pedestrian and cyclist access routes leading to and circulating around the stadium were originally planned and carried out in accordance with the Exeter City Council Planning Department and the Devon County Council Highways department guidance.

The main vehicular access is from the eastbound carriageway of the A379 via a 'turn left in- turn left out' access road. A secondary access road joins onto Old Rydon Lane but this is not available for general public vehicular access.

Pedestrian and cycle access to the site is provided by a cycle/footpath that joins the local network and runs to the stadium and through the site. The new path connects with Apple Lane to the north of the A379 and with Old Rydon Lane to the south of the site. The pedestrian bridge forms an integral part of this cycle footpath route.

For transport safety and convenience the principles of prioritising pedestrians first, followed by cyclists and then vehicles was followed in the initial stadium sites design. Suitable access measures for the emergency services were also provided.



Arriving by foot

Pedestrian arrival benefits from the provisions made in phase 1 works, these measures will be extended during Phase 2 and will include good visual contrasting and way finding measures following Approved Document M 2004 edition or BS8300 2001 edition.

Seating, walkways and handrails are to be designed following the Green Guide (Guide to Safety at Sports Grounds)

Internal spaces and circulation route design will follow the guidance laid out in Approved Document M: 2004 edition

Arriving by bicycle

Weathered sheltered facilities are provided for bike storage with security fixing positions

Arrival by car, taxi and bus

Spectators with impaired mobility will on match days have the option of a disabled parking bay closely positioned, and with level or suitable gradient access from that position, to the main entrance as well as the west, east and north stands entrances. Route design will fully meet the guidance given in the Approved Document M 2004 edition. These measures are also fully accessible to persons arriving by public transport from the set down/pick location

With the increase of the stadium's capacity and facilities it was identified that there is a need to substantially increase the number of disability parking bays. The number of spaces has been doubled and all have been strategically sighted to make access to the facilities as direct as possible.

A new setting down and pick up position has been made for coach, taxi and car drop offs with enough space to accommodate extending vehicle ramp and platform lift vehicle provisions.

Entrance Doors

Entrance doors to the building will have suitable vision panels and a clear open width of 1000mm. Handles and fitting will be visually contrasting and have simple lever handles to open. Any self closing devices will not require more than a 30N lateral force to open the door or doors will be of automatic operation with level access thresholds. All design elements will follow the Approved document M guidance.

Facilities within the Stadium

Plans of the internal layout have been provided in order to demonstrate that the design exercise has not been about providing separate facilities for vulnerable groups but rather that it has taken an approach of integral design that provides for the use of the same entrances and circulation routes within the building without detours and segregation.

Refreshment and retail points, WC, s and entertainment seating positions have been carefully considered in order to ensure facilities and access to them is on equal terms.

The following is a brief overview of the measures that are intended to be incorporated and will be supplemented with finer detail on the plans and in the Building Regulation specification for approval at Building Regulation application stage.



VERTICAL CIRCULATION

Vertical circulation internally by wheelchair suitable lift and ambulant disabled stairways to all accommodation. All floors will be accessible by lift

HORIZONTAL CIRCULATION

Corridors sub division doors will be on hold open devices linked to the fire detection system

Internal doors generally will be 800mm clear open width and will have diagram 9 vision panels along with a 300mm clear leading edge on the pull side of the door.

ACCESSIBLE WC PROVISIONS.

Wherever possible the full access disabled WC measures have been incorporated into the main male and female washrooms areas.

At least one full access WC compartment is to be provided for every 15 wheelchair spectators, these spaces will also accommodate a space for pull down baby changing facilities.

40 metres will be the maximum travel distance from disabled spectator seating to suitable disabled WC facilities

One ambulant disabled fitted out WC compartment is to be provided within each single sex toilets area.

RECEPTION AND COUNTERS and CONFERENCE ROOM

Will be designed in accordance with approved Document M Para 4.13 and Para 2.30 of the Accessible stadia guide. Aids to communication will follow BS8300 guidance.

TICKETING OUTLETS

Will follow BS8300 Para 11.1.0 specific guidance where there is customer/vendor screen separation. A single window with aid to communication will be provided and clearly identified and a management system incorporated that allows a separate queue at that window.

WAYFINDING

Using RNIB guidance, the provisions will identifying floor levels and individual rooms and provide direction and location information

SWITCHES SOCKETS AND OUTLETS

Positioning will accord with Approved Document M 2004. Para 4.30 (a to m)

REFRESHMENT OUTLETS

Will all be fully accessible with counter designs to accommodate wheelchair users? Detailing will follow Approved Document M 2004 edition Para 4.13 guidance and the Accessible Stadia Guide Para 2.30. Restaurants And Bar Areas will accord with the guidance of BS8300 Chapter 11.

AUDIENCE AND SPECTATOR SEATING

The intended elevated wheelchair user spectator seating positions have been indicated on the plans.

There are 112 elevated positions and a further 38 positions (not shown on the plans) which are being provided at pitch level (19- West stand and 19- North stand) this will accord with the Green Guide table 4 guidance which recommends 150 positions.



The location and quality of viewing areas has been considered following BS 8300 Para 11.31 guidance and paras 2.18 and 2.19 of the Green Guide. Conference room positions have been determined following approved Document M guidance and will exceed the 1% for permanent seating guidance. Hearing enhancement will follow Para 4.36 and any podium provision will be suitably ramped.

Storage points will be provided for wheelchairs, buggies and walking frames to accommodate ambulant disabled supporters who may use support aids to get to the stadium and can then transfer to a standard stadium seat. This may also help to 'free up' some wheelchair spaces.

Accessible Wheelchair user choice and options on stadium seating has, through the design process been envisaged and intended as extensive. This will allow for greater flexibility on preferred seating arrangements in relation to family and friends

FINISHES

Visual contrasting measures will follow Approved Document M 2004 guidance and will be submitted for approval by Building Control before installation and application.

EVACUATION

Escape stairs will all be in protected areas suitably designed as wheelchair user refuges. Provisions will follow paras 4.7 to 4.13 Approved Document B guidance. These refuges will include BS5839 part 9 emergency voice communication and type B outstations. Policy and procedures for safe evacuation. Fire Marshall checking of refuges and other Fire management policies and procedures will be put in place to meet the ongoing requirements of the Regulatory Reform (Fire Safety) Order 2005

Evacuation from the stand and from areas around the pitch will be in accordance with the requirements set out in the Guide to Safety at Sports Grounds (4th edition) –The Green Guide.

Reference documents

The Equality Act 2010

Guide to Safety at Sports Grounds (fourth edition) - The Green Guide.

Approved Document M (2004 edition)

BS8300:2009 – The Design of Buildings and their approaches to meet the needs of Disabled people.

Sport England Design Guidance Note- Access for Disabled people.

NADS policy guidance



Structural Design Statement 0.6

West Stand:

Roof structure:

The existing roof structure consists of a series of identical bays comprised from cantilevered cellular members supported at the base via connection to the bowl structure and hung at approximately 2/3 point via strut and tie system above. Imposing CHS stays exist at each longitudinal grid intersection with GL 6. Plan bracing provides a system to transpose lateral stability into the vertical braced bays.

The rear section of the proposed roof is to follow suit of the existing geometry, cantilevering past the bowl approximately 1.2m. An additional vertical stay is to be introduced at gridline 8 along with further strut/ tie members to create a high level truss aiding in the support of the proposed bowl structure.

Superstructure:

The existing West stand terracing is to remain largely unaltered, with seating constructed using steel framing with precast terrace units to the north and south ends. The existing rear façade (West face) is to extend approximately 7m to the west, along with the introduction of new entrance lobby. This will require significant alteration to the existing steel frame and the addition of new frame and pre-cast concrete floor planks from ground to second floor.

The existing stability bays will remain active where ever possible, with the introduction of new stability systems to the extended areas of structure.

Substructure:

Using information presented from the original grand stand design it is proposed that a series of integrated reinforced concrete ground beams, pile caps, and piles be used throughout the alteration and expansion of the West stand.

North Stand (Incl N/W & N/E corners):

Roof structure:

The roof structure to the proposed North stand is to be constructed following the aesthetic design of the Existing West stand. Striking CHS stays are to stand vertically proud above the roof line as part of a strut & tie/ truss system aiding in the support of over sailing cantilevered roof beams. A series of RHS purlins with profiled metal deck cladding is to span over. Horizontal plan bracing is to be provided to transfer all lateral forces into the vertical bracing systems.

Superstructure:

The super structure is to comprise of a steel frame with pre-cast terracing units to ground, first, second and third floors and pre-cast concrete floor planks.

There is to be an extensive retaining wall cast to the rear most face of the North stand, where the stadium intersects with existing artificial training surface - This is to be integrated within the bowl structure.



Both corner stands are to be constructed as per the main North stand in principle.

Stability bays are to be provided in various locations, ideally within the lift & stair cores.

Substructure:

Using information presented from the original grand stand design it is proposed that a series of integrated reinforced concrete ground beams, pile caps, and piles be used throughout the construction of the North, N/W, and N/E stands.

South Stand (Incl S/W & S/E corners):

Roof structure:

The roof structure to the proposed South stand is to be constructed following the aesthetic design of the Existing West stand. Striking CHS stays are to stand vertically proud above the roof line as part of a strut & tie/ truss system aiding in the support of over sailing cantilevered roof beams. A series of RHS purlins with profiled metal deck cladding is to span over. Horizontal plan bracing is to be provided to transfer all lateral forces into the vertical bracing systems.

The roof structure to proposed conferencing hall is to be long span steel beams/ trusses to maximize the open plan floor area below. Purlins with cladding panels over, with plan bracing re-directing all lateral forces into the vertical bracing systems.

Superstructure:

The super structure of both the stadium and conferencing hall is to comprise of a steel frame with pre-cast terracing units to ground, first, second and third floors to the stadium and pre-cast concrete floor planks with structural screed over to ground, first second and third floors to the stadium and ground first and second floors of the conference hall. Both corner stands are to be constructed as per the main South stand.

Stability bays are to be provided in various locations, ideally within the lift & stair cores to stadium and conferencing hall.

Substructure:

Using information presented from the original grand stand design it is proposed that a series of integrate reinforced concrete ground beams, pile caps, and piles be used throughout the construction of the South, S/W, and S/E stands of the stadium and extent of the conferencing hall.

East Stand:

Roof structure:

The roof structure to the proposed East stand is to be constructed following the aesthetic design of the Existing West stand. Striking CHS stays are to stand vertically proud above the roof line as part of a strut & tie/ truss system aiding in the support of over sailing cantilevered roof beams. A series of RHS purlins with profiled metal deck cladding is to span over. Horizontal plan bracing is to be provided to transfer all lateral forces into the vertical bracing systems.



Superstructure:

The super structure is to comprise of a steel frame with pre-cast terracing units to ground, first, and second floors and pre-cast concrete floor planks with structural screed over to the ground and first floors.

Stability bays are to be provided in various locations, ideally within the lift & stair cores.

Substructure:

Using information presented from the original grand stand design it is proposed that a series of integrated reinforced concrete ground beams, pile caps, and piles be used throughout the construction of the East stand. It is to be noted that substructure to this stand is expected to be more excessive due to the close proximity of the boundary and the steep banking and motorway (M5) that lay beyond.

Dynamics & Robustness/ Disproportionate collapse:

The dynamics of the various structures are to be assessed to provide a suitable comfort level to the user of the building appropriate to the activities of the occupants.

The stadium dynamics are to be designed in accordance with the IStructE publication "Dynamic performance requirements for permanent grandstands subject to crowd action", December 2008. In accordance with this publication the target design natural frequencies for the stadium stands are to be followed for the additional structures.

Part A of the Approved Documents to the Building Regulations requires that consideration is given to robustness and disproportionate collapse in the design of buildings. In accordance with Requirement A3, the conferencing hall to the south stand and the stadium structure has been classed as type 3.



Drainage Strategy & Flood Risk Statement 0.7

Introduction

Sands Consultants were commissioned by Exeter Rugby Group, to produce a drainage strategy and flood risk statement for the proposed expansion of the Exeter Chiefs' Stadium and conferencing capacity at Sandy Park. This statement has been produced to support the detailed planning application.

It is intended and therefore detailed within this statement, to follow the principles and design strategy as detailed in the previously approved Floor Risk Assessment submitted in April 2007.

During the production of this statement, consultation has been undertaken with various bodies including the Environment Agency (EA) and South West Water (SWW).

Existing Site Conditions

The site is located adjacent to junction 30 of the M5 motorway on a site sandwiched between the M5 motorway and the A379. The site is located approximately 4km south-east of Exeter city centre.

The site at present consists of an established rugby stadium comprising one spectator grandstand to the west, and two terraced seating areas to the north and south and a covered standing terrace on the east side of the pitch. There is also an existing training ground, an all weather pitch and an associated parking area. The site has an overall approximate area of over 6.0 hectares.

The existing topography indicates that the site generally falls from north to south at an average gradient of 1 in 213, although due to the nature of the development there are large areas of level ground associated with the pitches.

Surface water runoff generated within the site drains a combination of shallow crated soakaways and borehole soakaways, which are located within the site boundary. The existing foul water drains to a pumping station situated to the south of the site and is pumped to an existing SWW public sewer in Old Rydon Lane.

The EA indicative flood risk map, which can be viewed on their website, indicates that the site falls wholly within flood risk zone 1 – low risk area of flooding from rivers and/or the sea.

There are no existing flood alleviation measures that directly affect the existing site.



Proposed Site Conditions

During the 2011/12 season the Exeter Chiefs finished fifth in the Premiership and achieved qualification to the European Heineken Cup, which represents the top flight of cup competition in European Rugby Union.

The Exeter Rugby Group is therefore proposing an expansion to the Sandy Park facilities to ensure maximum benefit can be gained from their achievements and to grow the facilities available to all.

The new proposals include a phased construction to increase the existing stadium capacity from 10,744 to 20,600, an increase to the overall conferencing/hospitality facilities within the stadium together with provision of a south conference centre with a circa 1000 seat capacity.

The proposed expansion results in the reduction of the existing parking area, which will become a coach and bus drop off and pickup area. The onsite parking area will be moved to the south-east corner resulting in the loss of the current training pitch.

The existing access will be maintained off the A379. As with the proposed development zone, the site entrance is within a flood risk zone 1 – low risk area. Therefore access to and egress from the site is afforded for both emergency and general public during the required design events.

Table 3 within the Technical Guidance, which is published alongside the NPPF, (TG-NPPF), requires that all developments are located with their appropriate risk zones, i.e. assembly and leisure, which is classed as a “Less Vulnerable” development should not be placed within areas of high flood risk zones.

The proposed expansion of the existing facilities at Sandy Park, Exeter as noted previously is located within flood risk zone 1 – low risk zone, and therefore is considered to be satisfactory.

Drainage Strategy

As with the existing, it is proposed that the expansion works will maintain a separate foul and surface water drainage networks.

The existing foul water drainage network will be amended and where necessary extended to accommodate the proposed expansion works. The foul water will continue to discharge to the existing foul water pumping station. However, the pumping station will be assessed during the detailed design stage and if proved necessary, will be upgraded to accommodate any additional flows.

The surface water system will be designed to contain the 1 in 100 year storm event with no onsite or offsite flooding.

Surface water will be discharged by the use of onsite soakaways, which will consist of crated or large diameter lined soakaways with deep boreholes to the minor aquifer. This will ensure that the clay lenses within the sandstone



are penetrated to allow sufficiently large effective surface areas to be achieved for these soakaways.

It maybe necessary to undertake further geotechnical investigations to ascertain the permeability of any suitable sub-strata soils in the locations of the proposed new soakaways. Any surface water that can be discharged via the use of soakaways will be incorporated into the design. The design based upon the results of the site investigation shall ensure that greenfield run-off rates will be restricted to existing flows or lower.

The site resides on a high point where all sides are bounded by lower lying areas. Should there be any failure or flooding of the surface water system in storms intensities greater than the 100 year design event, any floodwaters would follow the natural topographical flood routing through the site and run-off via the south-east banks.

A drainage ditch was created at the foot of the east bank when the M5 was built to ensure that high intensity storm water does not discharge onto the motorway. Any flood waters generated from high intensity storms would flow southerly to an existing culvert underneath the M5 motorway to discharge to the River Clyst.

Conclusion

The proposals with this drainage strategy and flood risk statement follows the philosophy of the previously approved flood risk assessment, whereby all surface water runoff will be discharged via proposed onsite saokaways, including borehole soakaways which will allow recharge of the existing groundwater.

The flood risk for the proposed development has been assessed within this statement and it is concluded that the proposed development would not increase any existing onsite and/or offsite flood risk.



Travel / Highways Plan 0.8



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Transport Strategy

Sandy Park, Exeter

July 2012

Client: Exeter Rugby Group Ltd.

Project Reference: 12.04.110

Revision P03



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7.0	Summary and Conclusion

1.0 INTRODUCTION

- 1.1.1 Sands Consultants have been appointed by Exeter Rugby Group to consider the transport implications associated with proposals to expand the Exeter Chiefs' stadium and conferencing capacity within Sandy Park.
- 1.1.2 Since the production of the original Transport Assessment & Match Day Transport Strategy which supported the planning application for Sandy Park in 2003, the Sandy Park facility was opened in 2006 and has been running and adopting a successful transport strategy.
- 1.1.3 The Exeter Chiefs achieved promotion to the Premiership league in 2010 and have remained there with their third season in the top flight starting in August 2012.
- 1.1.4 In the 2011/2012 season the Exeter Chiefs finished fifth in the Premiership and achieved qualification to the European Cup Heineken Cup which also represents the top flight of cup competition in European Rugby Union.
- 1.1.5 The Exeter Rugby Group is therefore proposing an expansion to the Sandy Park facilities to ensure maximum benefit can be gained from their achievements and to grow the facilities available to all. The new proposals include a phased construction to increase the stadium capacity from 10,744 to 20,600 spectators, an increase to the overall conferencing/hospitality facilities within the stadium together with provision of a south conference centre with a circa 1000 seat capacity.
- 1.1.6 Exeter Rugby Club were granted planning permission in November 2009, to increase the capacity of the stadium to 13,956. This application is looking to increase the permitted capacity by 6,644, from 13,956 to 20,600.
- 1.1.7 The transport initiatives set out within the original planning approval in 2003 have been implemented together with new initiatives which have been developed to encourage reduced car use to the site, especially on match days. These existing initiatives are discussed within this report, together with consideration of any necessary updates and additions required to accommodate the expansion proposals.
- 1.1.8 At this stage we have made contact with Devon County Council Highways regarding this application.

2.0 THE SUCCESS STORY SO FAR

2.1 Introduction

- 2.1.1 Exeter Rugby Group was granted planning permission to build the new stadium and associated facilities at Sandy Park in March 2004 and the complex opened in 2006. Subsequent planning applications were submitted and approved to bring the stadium's capacity up to its current capacity of 10,744 spectators.
- 2.1.2 Exeter Rugby Club were granted planning permission in November 2009, to increase the capacity of the stadium to 13,956. This application is looking to increase the permitted capacity by 6,644, from 13,956 to 20,600.
- 2.1.3 A typical weekday at Sandy Park does not generate the potential for significant highway impact within the local road network. However, on a match day, a tailored Match Day Transport Strategy is in operation to manage the sizable arrivals to the stadium. This strategy forms part of a commitment to promote, manage, monitor and review sustainable travel to the stadium;
- 2.1.4 These initiatives are geared primarily to reduce the amount of travel by private car whilst also managing the residual car trips so as not to provide a detriment to the safety or operation of the local road network. These initiatives include:

Encouragement of Non-Car Travel

- Clear presentation of travel options available to Sandy Park are easily accessible on both the Exeter Chiefs and Sandy Park websites;
- No spectator parking on-site (other than disabled provision and limited VIP spaces);
- New footway and cycleway infrastructure directly into the stadium (over the A379 via Baker Bridge) from the adjacent residential area and route from train station;
- Match day shuttle bus services provided directly into the stadium from various locations across the city;
- Discounted rail travel upon production of a valid match day ticket;
- Coach parking provided.

Management of Car Travel

- Match day Controlled Parking Zone (CPZ) within the local road network;
- Offsite parking areas provided with appropriate signage and a shuttle bus system provided directly into the stadium.

- 2.1.5 The existing infrastructure and current initiatives are detailed further below:

2.2 Clear Presentation of Travel Options

- 2.2.1 The Sandy Park management team are committed to encouraging spectators and visitors to use sustainable modes of travel to the site.
- 2.2.2 The various travel options available are clearly set out on both the Exeter Chiefs and Sandy Park website together with links to further information as necessary.
- 2.2.3 These details are updated as necessary and any specific information in relation to matches with large attendance predictions is also posted. This is managed by Mark Stevens, the Communications/ Media Manager.

2.3 No Spectator Parking On-Site

- 2.3.1 There is currently parking provision for 154 cars within Sandy Park although this is not available for general spectator use on match days.
- 2.3.2 On-site parking on match days is reserved for wheelchair dependant blue badge holders only who are required to pre-book their request for parking in advance of a match day.
- 2.3.3 Westpoint is used on match days for spectators to park, at a cost of £5 per car. There is then a free shuttle bus service to transport the spectators from Westpoint to the stadium. There are currently 10 buses which operate this route in a constant loop, which run from 3 hours before kick off to 3 hours after the game has finished.
- 2.3.4 Non-wheelchair dependant blue badge holders can park at Westpoint free of charge, and use the shuttle service. Again, blue badge holders only who are required to pre-book their request for parking in advance of a match day.
- 2.3.5 VIP parking is available at the Friends Life car park in Clyst St Mary, this is available for VIPs and Press who pre-book with the club. Coaches are then used to transport the VIPs to the stadium.
- 2.3.6 The car park marshalling is undertaken by an external company, appointed by the rugby club.

2.4 New Footway and Cycleway Infrastructure

- 2.4.1 As part of the original construction of Sandy Park, a new footway/cycleway link was provided over the A379 in the form of Baker Bridge. This enabled the creation of a new route through the stadium linking north to Apple Lane and residential areas and south connecting into Old Rydon Lane. There are cycle parking facilities on site.

2.5 Match Day Bus Services

- 2.5.1 The club provides three match day bus services which run in addition to the scheduled local bus services. These services run for every Exeter Chiefs home fixture.
- 2.5.2 The current match day services are:
- 2.5.3 The No 77, which is run by Dartline Coaches, starts in Alphington at Chantry Meadows and picks up at Cowick Lane, Cowick Street (First & Last), Fore Street (BHS), Topsham Road (County Hall) to Sandy Park. Buses run every 20 minutes.
- 2.5.4 The No 78, also run by Dartline coaches, starts at Exeter St Davids Station and picks up at the following destinations en route to Sandy Park: City Centre, Blackboy Road, Pinhoe Road, Sainsbury's Pinhoe, Monkerton Link Road and Sowton Industrial Estate before arriving at Sandy Park.
- 2.5.5 The C bus, which is run by Stagecoach, starts at Exeter St Davids Station and picks up at Exeter Bus Station, Heavitree (Co-Op) to Sandy Park and will run every 15 minutes.
- 2.5.6 Stagecoach offer an Exeter dayrider ticket for only £3.50 which allows unlimited travel on all of their city buses. Please visit the Stagecoach website for more details www.stagecoachbus.com
- 2.5.7 For up to the minute match-day timetable information, visit www.stagecoachbus.com/serviceupdates.aspx
- 2.5.8 In addition for those travelling from further afield, Stagecoach offer an explorer ticket for only £7.25 adult, £4.80 per child for unlimited travel on their entire network of buses, again visit www.stagecoachbus.com for more details

2.6 Discounted Rail Travel

- 2.6.1 The Exeter to Exmouth railway line runs right past the stadium with a regular service on match days. Using the bridge over the A379, Digby & Sowton Station is less than 10 minutes' walk from Sandy Park.
- 2.6.2 Supporters who are attending any games by First Great Western Trains are able to claim a 10% discount on their rail ticket, providing they produce their match ticket when purchasing.
- 2.6.3 First Great Western have set up a number of match day special trains and anyone wishing to find out more should visit their official website at www.firstgreatwestern.co.uk In addition you can use their text feature which shows up to date train departures from their stations. If you text DIG or EXD (for Digby and St Davids respectively) to 84950 you will get an answer showing the next five or six departures with their expected times.
- 2.6.4 Supporters can also call 08457 48 49 50 to get an update on train times

2.7 Spectator Coach Parking

- 2.7.1 There is no coach parking at the stadium. Coaches are free to drop off at the stadium before the match, then park at Westpoint. Private hire coaches are not allowed to return to the stadium to pick up spectators until 1 hour after the match has finished, as a measure to ease the profile of leaving spectators.

2.8 Local Authority Reviews

- 2.8.1 At the time of the original planning application for Sandy Park in 2003, The Match Day Transport Strategy was somewhat of a 'new animal' for both Exeter City as planning authority and Devon County Council as highway authority.
- 2.8.2 The Sandy Park location as a development site was, in itself, considered as being potentially unsustainable with limited provision for access by bus, walking and cycling. Travel measures therefore needed to be practical, deliverable and sustainable in order for the overall aims and targets of the transport strategy to be met.
- 2.8.3 In April 2009 the DfT published the document "Good Practice Guidelines: Delivering Travel Plans through the Planning Process". The document sets out practical guidelines and refers to case studies to help ensure that, where travel plans are put in place for new developments, they are effective and deliver the expected changes in travel behaviour.
- 2.8.4 One of the case studies highlighted in the document is the Sandy Park Access Strategy and Travel Plan where Devon County Council summarise the monitoring of travel to matches at that time together with results of mode share against the initial targets set. Devon County Council concluded that the access strategy has proved to be 'a practical document that works well in practice'.
- 2.8.5 This Transport Strategy therefore reviews the success to date with the promotion of travel modes to the site and considers any changes required to manage increased crowd capacity in the expansion proposals.

3.0 REVIEW OF SANDY PARK OPERATIONS

3.1 Introduction

3.1.1 The following four scenarios have been considered in order to review the current Transport Strategy, to identify experiences gained and changes implemented to date with the Sandy Park operations:

- Typical weekday operation
- Weekday evening matches
- Average weekend match day
- Sell-out weekend match day

3.2 Typical Weekday

3.2.1 During a typical weekday, the Sandy Park operations currently comprise:

- 1st Team Exeter Chiefs training sessions
- Other training sessions
- Administration and maintenance operations associated with the Rugby Club
- Conference and function rooms usage
- Administration operations associated with conference/function room usage

3.3 Weekday Evening Matches

3.3.1 The Exeter Chiefs reserve team, The Braves, hosted 5 A league matches all played on a Monday evening between early September and late April, including the final on April 30th which they won.

3.3.2 The average attendance for the four pre-final games was 1,070 spectators with 2,368 in attendance for the final itself. Spectators were able to park on-site on for these matches.

3.4 Typical Weekend Match Day

3.4.1 During the 2011/12 season, the Exeter Chiefs hosted eight premiership games on a Saturday. The kick-off times were split as follows:

3.00pm - 5 matches
3.45pm - 1 match
6.00pm - 2 matches

3.4.2 The Harlequins match was a sell-out with an attendance of 10,602. This match took place on Saturday 31st December 2011 with a 3.45pm kick-off.

3.4.3 The average attendance for the remaining seven Saturday matches was 8,041.

3.4.4 The Exeter Chiefs also hosted two premierships games on a Sunday. The kick-off times were split as follows

2.00pm - 1 match
3.00pm - 1 match

3.4.5 The Northampton Saints match was a sell-out with an attendance of 10,744. This match took place on Sunday 22nd April 2012 with a 2.00pm kick-off.

3.4.6 The other Sunday match hosted London Wasps on 25th September 2011 with an attendance of 6,795.

3.4.7 During this season the Exeter Chiefs also played in the Amlin Challenge Cup and the LV Cup hosting three matches on a Saturday and two on a Sunday. The kick-off times were split as follows

Saturday

3.00pm - 2 matches
7.45pm - 1 match

Sunday

5.00pm - 1 match
5.45pm - 1 match

3.4.8 The average attendance for these five cup matches was 6,354.

3.4.9 In addition to the Premiership and cup matches, the Exeter Chiefs hosted three pre-season friendly fixtures in August 2011 all of which took place on a Saturday with kick-off times of 3.00pm, 5.00pm and 5.30pm. There are two further friendly fixtures set for Saturdays in August 2012 hosting Connacht and Cornish Pirates.

4.0 REVIEW OF CURRENT TRANSPORT STRATEGY

4.1 Review of current Transport Strategies

4.1.1 The Sandy Park management team has, in conjunction with the local authorities, implemented a range of effective travel initiatives over the last six years to reduce private car use and overall traffic impact on the local road network.

4.1.2 The management team are fully committed to maintaining, reviewing and where possible improving, the travel options to Sandy Park. The current initiatives are outlined below and considered under four Sandy Park operation scenarios, those being:

- Typical weekday operation
- Weekday evening matches (not Exeter Chiefs 1st XV)
- Average weekend match day
- Sell-out weekend match day

4.1.3 Around 80% of match day tickets are sold online before the game. This means that Exeter Rugby Club can predict how many spectators they can expect with an accuracy between 500 - 1000 spectators.

4.2 Clear Presentation of Travel Options available to Sandy Park

4.2.1 The Sandy Park management team are committed to encouraging spectators and visitors to use sustainable modes of travel to the site.

4.2.2 The various travel options available are clearly set out on both the Exeter Chiefs and Sandy Park website together with links to further information as necessary. Currently around 80% of tickets are sold online, the website is therefore an effective tool for advertising travel options.

Typical weekday operation

4.2.3 Standard information available on the web sites provides all the necessary information. This is reviewed and updated as necessary.

Weekday evening matches (not Exeter Chiefs 1st XV)

4.2.4 Standard information available on the web sites provides all the necessary information. This is reviewed and updated as necessary.

Average weekend match day

- 4.2.5 Standard information available on the web sites provides all the necessary information. This is reviewed and updated as necessary.

Sell-out weekend match day

- 4.2.6 Where necessary any match specific information is posted on the web sites in advance of sell-out games.

4.3 Cars Parked on-site

- 4.3.1 There is provision within Sandy Park for 154 car parking spaces. The car park marshalling is undertaken by an external company, commissioned by Exeter Rugby Club.

Typical weekday operation

- 4.3.2 In a typical weekday the car park will be available for the following:

- Exeter Chiefs players/staff
- Sandy Park staff
- Function delegates
- General deliveries..

- 4.3.3 Exeter Rugby Club have reported no problems or issues in with this operation.

Weekday evening matches (not Exeter Chiefs 1st XV)

Supporters park on site – 154 spaces

Average weekend match day

There is no on-site parking for spectators on major match days. On match days the car park is reserved for players, staff, coach and car drop-offs. There are 20 spaces reserved for wheelchair dependant blue badge holders, which must be booked with the club in advance.

Sell-out weekend match day

The same applies for any match day, see above for details.

4.4 Coaches Parked on-site

- 4.4.1 There is provision within the site on match days for coach drop-offs only.
- 4.4.2 Typical weekday operation
- 4.4.3 Not applicable.
- 4.4.4 Weekday evening matches (not Exeter Chiefs 1st XV)
- 4.4.5 There may be coach parking available, subject to pre booking and sufficient spare capacity in the car park.
- 4.4.6 Average weekend match day
- 4.4.7 There is no coach parking on site during major matches.
- 4.4.8 Sell-out weekend match day
- 4.4.9 There is no coach parking on site during major matches.

4.5 Cars Parked off-site

- 4.5.1 Due to the radius and enforcement of the CPZ there is unlikely to be any significant parking off site within the local roads.
- 4.5.2 Digby Park and Ride car park costs £3 per car to park for the match, the proceeds of which currently go to the Exeter Foundation. This car park is situated around a 10 minute walk from the stadium with pedestrian access via Apple Lane / Baker Bridge.
- 4.5.3 Typical weekday operation
- 4.5.4 Not applicable
- 4.5.5 Weekday evening matches (not Exeter Chiefs 1st XV)
- 4.5.6 Additional off-site parking services are not required on a weekday evening, unless it is a Exeter Chiefs fixture.
- 4.5.7 Average weekend match day
- 4.5.8 Westpoint is used on match days for spectators to park, at a cost of £5 per car. There is then a free shuttle bus service to transport the spectators from Westpoint to the stadium. There are currently 10 buses which operate this route in a constant loop, which run from 3 hours before kick off to 3 hours after the game has finished.

- 4.5.9 Non-wheelchair dependant blue badge holders can park at Westpoint free of charge, and use the shuttle service. Again, blue badge holders only who are required to pre-book their request for parking in advance of a match day.
- 4.5.10 VIP parking is available at the Friends Life car park in Clyst St Mary, this is available for VIPs and Press who pre-book with the club. Coaches are then used to transport the VIPs to the stadium.
- 4.5.11 Sell-out weekend match day
- 4.5.12 As detailed above.

4.6 Coaches Parked off-site

- 4.6.1 Due to the radius and enforcement of the CPZ there is unlikely to be any unauthorised coach parking off site within the local roads.
- 4.6.2 Coaches are free to drop off at the stadium before the match, then park at Westpoint. Private hire coaches are not allowed to return to the stadium to pick up spectators until 1 hour after the match has finished, as a measure to ease the profile of leaving spectators.
- 4.6.3 Typical weekday operation
- 4.6.4 Not applicable.
- 4.6.5 Weekday evening matches (not Exeter Chiefs 1st XV)
- 4.6.6 Not Applicable.
- 4.6.7 Average weekend match day
- 4.6.8 Coaches are free to drop off at the stadium before the match, then park at Westpoint. Private hire coaches are not allowed to return to the stadium to pick up spectators until 1 hour after the match has finished, as a measure to ease the profile of leaving spectators.
- 4.6.9 Sell-out weekend match day
- 4.6.10 As detailed above.

4.7 Event Day Controlled Parking Zone

- 4.7.1 The existing CPZ covers broadly a 1.5km radius of the stadium and includes all the local adopted roads and residential areas where parking may have taken place.

4.7.2 Typical weekday operation

4.7.3 Not applicable.

4.7.4 Weekday evening matches (not Exeter Chiefs 1st XV)

4.7.5 In full operation.

4.7.6 Average weekend match day

4.7.7 In full operation.

4.7.8 Sell-out weekend match day

4.7.9 In full operation.

4.8 Walk

4.8.1 The new infrastructure provided as Part of the Sandy Park complex provides safe and convenient access routes for pedestrians from the adjoining residential areas and from the Digby & Sowton rail station. Apple Lane was improved to provide a surfaced footway/cycleway together with the new Baker Bridge providing a direct route into the stadium.

4.8.2 A previous study by Parsons Brinkerhoff in 2007 has shown that 5% of people who were travelling to a match day walked.

4.8.3 Typical weekday operation

4.8.4 Not applicable.

4.8.5 Weekday evening matches

4.8.6 It is understood that the Parsons Brinkerhoff study, which showed 5% of people walking, is reflective for weekday evening matches.

4.8.7 Average weekend match day

4.8.8 It is understood that the Parsons Brinkerhoff study, which showed 5% of people walking, is reflective for average weekend matches.

4.8.9 Sell-out weekend match day

4.8.10 It is understood that the Parsons Brinkerhoff study, which showed 5% of people walking, is reflective for sell-out weekend matches.

4.9 Cycle

- 4.9.1 The new infrastructure provided as part of the Sandy Park complex also provides safe and convenient access routes for cyclists from the adjoining residential areas and from the Digby & Sowton rail station.
- 4.9.2 A previous study by Parsons Brinkerhoff in 2007 has shown that 1% of people who were travelling to a match day cycled.
- 4.9.3 Typical weekday operation
- 4.9.4 Not applicable.
- 4.9.5 Weekday evening matches
- 4.9.6 It is understood that the Parsons Brinkerhoff study, which showed 1% of people walking, is reflective for weekday evening matches.
- 4.9.7 Average weekend match day
- 4.9.8 It is understood that the Parsons Brinkerhoff study, which showed 1% of people walking, is reflective for average weekend matches.
- 4.9.9 Sell-out weekend match day
- 4.9.10 It is understood that the Parsons Brinkerhoff study, which showed 1% of people walking, is reflective for sell-out weekend matches.

4.10 Rail

- 4.10.1 Digby & Sowton station is the nearest railway station to the stadium. There is good footway infrastructure providing a direct link from the station along Apple Lane and Baker Bridge over the A379, a walk time of around 10 minutes.
- 4.10.2 Digby & Sowton is on the Exmouth to Exeter branch line, and typically has 2 services per hour in each direction.
- 4.10.3 Typical weekday operation
- 4.10.4 Weekday trains are regular between Exmouth, Digby & Sowton and Exeter, with a typical daily frequency of 2 per hour in each direction.
- 4.10.5 Weekday evening matches
- 4.10.6 In the evening the frequency of the trains from Digby & Sowton reduces to 1 per hour in each direction. The last train to Exeter is at 23:59, and the last train to Exmouth it at 23:19.
- 4.10.7 Average weekend match day
- 4.10.8 Trains still run 2 per hour to and from Digby & Sowton station on match day afternoons, in each direction.
- 4.10.9 Sell-out weekend match day
- 4.10.10 As detailed above.

4.11 Local scheduled bus services

- 4.11.1 There are scheduled bus services operating within the local network. The nearest stops to Sandy Park are in clyst vale, typically a 10 - 15 minute walk, where a regular service is provided by the H and D Buses. In addition to these, services PR4/ SR4 and H2 stop on Sidmouth Road.
- 4.11.2 Typical weekday operation
- 4.11.3 Services not connected with Rugby Club operation - See timetable.
- 4.11.4 Weekday evening matches (not Exeter Chiefs 1st XV)
- 4.11.5 Services not connected with Rugby Club operation - See timetable.

- 4.11.6 Average weekend match day
- 4.11.7 Services not connected with Rugby Club operation - See timetable.
- 4.11.8 Sell-out weekend match day
- 4.11.9 Services not connected with Rugby Club operation - See timetable.

4.12 Match Day Shuttle Bus Services

- 4.12.1 The Rugby Club provides three match day bus services which run in addition to the scheduled local bus services. These services run for every Exeter Chiefs game.
- 4.12.2 The current match day services are:
- 4.12.3 The No 77, which is run by Dartline Coaches, starts in Alphington at Chantry Meadows and picks up at Cowick Lane, Cowick Street (First & Last), Fore Street (BHS), Topsham Road (County Hall) to Sandy Park. Buses run every 20 minutes.
- 4.12.4 The No 78, also run by Dartline coaches, starts at Exeter St Davids Station and picks up at the following destinations en route to Sandy Park: City Centre, Blackboy Road, Pinhoe Road, Sainsbury's Pinhoe, Monkerton Link Road and Sowton Industrial Estate before arriving at Sandy Park.
- 4.12.5 The C bus, which is run by Stagecoach, starts at Exeter St Davids Station and picks up at Exeter Bus Station, Heavitree (Co-Op) to Sandy Park and will run every 15 minutes.
- 4.12.6 In addition to the above there is a free shuttle bus to the stadium for those using the Westpoint car park.
- 4.12.7 Typical weekday operation
- 4.12.8 Not applicable
- 4.12.9 Weekday evening matches (not Exeter Chiefs 1st XV)
- 4.12.10 Not Applicable
- 4.12.11 Average weekend match day
- 4.12.12 Each of the bus services will run for 3 hours before kick off and for 3 hours after the game has ended.
- 4.12.13 Sell-out weekend match day
- 4.12.14 Each of the bus services will run for 3 hours before kick off and for 3 hours after the game has ended.

4.13 Arrival and Departure Profiles

- 4.13.1 The transport strategy actively encourages spectators of a match to arrive early and to leave the stadium later than directly after the game.
- 4.13.2 This is in line with a commitment to seek to spread spectator arrival and departure to further reduce pressure on the local roads and travel infrastructure immediately prior to, and immediately following a match.
- 4.13.3 The Exeter Chiefs have arranged a range of entertainment to encourage supporters to arrive early and leave later. Details are made available in advance via the club's ezine, local press and website.
- 4.13.4 The shuttle buses to and from Westpoint allow Exeter Rugby Club to manage the speed people leave to return to their cars. The result of this is a smother flow of cars getting back on the local road network.

- 4.13.5 Typical weekday operation
- 4.13.6 Not applicable

- 4.13.7 Weekday evening matches (not Exeter Chiefs 1st XV)
- 4.13.8 Not applicable

- 4.13.9 Average weekend match day
- 4.13.10 The Exeter Chiefs have arranged a range of entertainment to encourage supporters to arrive early and leave later. Details are made available in advance via the club's ezine, local press and website.

- 4.13.11 Sell-out weekend match day
- 4.13.12 The Exeter Chiefs have arranged a range of entertainment to encourage supporters to arrive early and leave later. Details are made available in advance via the club's ezine, local press and website.

5.0 DEVELOPMENT PROPOSALS

5.1 Overview

- 5.1.1 The proposed expansion of the stadium proposes the following:
- 5.1.2 Expansion to the west grandstand to cover the full length of the pitch to house a further 1600 seats. The western face of the building is to be extended outwards to increase the conference facilities.
- 5.1.3 The car park is to be extended over the existing training pitches, increasing the parking capacity from 154 to 391 spaces on non match days; and to 322 spaces with 17 coach bays on match days.
- 5.1.4 A new grandstand is to be constructed at the southern end of the stadium, with an infill of seats in the southwest corner, connecting the south and west grandstand.
- 5.1.5 An The South Conference Centre is to be constructed on the back of the south grandstand leading towards the car park. The South Conference Centre will have circa 1000 seating capacity.
- 5.1.6 4 key worker flats are to be built in the south grandstand for the on-site duty manager and security staff, to accommodate night shifts.
- 5.1.7 A new grandstand is to be constructed at the northern end of the stadium, including 14 corporate boxes. Infill seats connecting the north and west grandstands.
- 5.1.8 A new grandstand is to be constructed on the eastern side of the stadium, housing seats and standing spaces.
- 5.1.9 For details of the development proposals refer to Kensington Taylor drawing 1032.PL05.02.
- 5.1.10 In summary, the proposals are for the expansion of the stadium from its current **10,744** capacity to **20,600**, with the construction of 3 new permanent grandstands. A new The South Conference Centre is to be constructed off the back of the south grandstand with **1000** seating capacity.

5.2 Highway Access

- 5.2.1 The existing junction with the A379 remains unchanged. Access from Old Rydon Lane remains no entry to vehicles.

5.3 Parking Layout

- 5.3.1 The proposals include extending the car park over the southern training pitches. There will be two parking options available to the Rugby Club:

- 5.3.2 Scenario 1: The car park is set aside entirely for car spaces, a total of 391 spaces, including 20 disabled spaces. This scenario will be used for any non-match day event.
- 5.3.3 Scenario 2: The northern half of the car park will be used as a bus/ coach drop-off area, totalling in 17 coach drop-off spaces and 322 car parking spaces, including 20 disabled spaces. The bus/ coach parking bay markings are to be a different colour so to differentiate them from the scenario 1 parking areas.

6.0 REVISED TRANSPORT STRATEGY INITIATIVES

6.1 Introduction

6.1.1 This section of the report builds on the success of the current transport strategy and considers the experiences learned over the recent years at Sandy Park together with changes or new actions which could be made to accommodate the expansion proposals.

6.1.2 The transport strategy going forward has been considered based on three scenarios of attendance for future Exeter Chiefs matches, those being:

Scenario 1 - 8,500 attendance based on 2011/2012 season average

Scenario 2 - 15,000 average prediction for coming years

Scenario 3 - 20,600 sell-out capacity match

6.1.3 The transport strategy initiatives are set out below for the various scenarios being considered.

6.2 Clear Presentation of Travel Option available to Sandy Park

6.2.1 The Sandy Park management team are committed to encouraging spectators and visitors to use sustainable modes of travel to the site.

6.2.2 The various travel options available are clearly set out on both the Exeter Chiefs and Sandy Park website together with links to further information as necessary.

6.2.3 Scenario 1 – 8,500 stadium attendance

Standard information available on the web sites provides all the necessary information. This is reviewed and updated as necessary.

6.2.4 Scenario 2 – 15,000 stadium attendance

Where necessary any match specific information is posted on the web sites in advance of sell-out games.

6.2.5 Scenario 3 – 20,600 stadium attendance

Where necessary any match specific information is posted on the web sites in advance of sell-out games.

Other media sources radio, local TV etc..

6.3 Cars Parked on-site

6.3.1 Scenario 1 – 8,500 stadium attendance

6.3.2 On-site parking on match days is reserved for wheelchair dependant blue badge holders only who are required to pre-book their request for parking in advance of a match day.

6.3.3 The car park marshalling is undertaken by an external company, appointed by the rugby club.

6.3.4 Scenario 2 – 15,000 stadium attendance

6.3.5 As detailed above

6.3.6 Scenario 3 – 20,600 stadium attendance

6.3.7 As detailed above

6.4 Coaches Parked on-site

6.4.1 Scenario 1 – 8,500 stadium attendance

6.4.2 No coach parking on-site - drop off only.

6.4.3 Scenario 2 – 15,000 stadium attendance

6.4.4 No coach parking on-site - drop off only.

6.4.5 Scenario 3 – 20,600 stadium attendance

6.4.6 No coach parking on-site - drop off only.

6.5 Cars Parked off-site

6.5.1 Scenario 1 – 8,500 stadium attendance

6.5.2 The existing parking facilities at Westpoint and Digby Park & Ride site will be used.

6.5.3 Scenario 2 – 15,000 stadium attendance

6.5.4 The additional cars can be accommodated at Westpoint.

6.5.5 Scenario 3 – 20,600 stadium attendance

6.5.6 The higher level of attendance suggests a higher percentage of away supporters will be coming to Exeter. If a majority of the away fans are using private car, it is likely that they will arrive via the M5 junction 30. All of these vehicles can be sent to Westpoint by temporary signs, which not only has ample spare capacity, but also allows easy access from the M5.

6.5.7 Blue badge holders can park for free at Westpoint, which needs to be booked in advance with the Rugby Club.

6.6 Coaches Parked off-site

6.6.1 Scenario 1 – 8,500 stadium attendance

6.6.2 The existing parking facilities at Westpoint will be used.

6.6.3 Scenario 2 – 15,000 stadium attendance

6.6.4 The additional coaches can be accommodated at Westpoint.

6.6.5 Scenario 3 – 20,600 stadium attendance

6.6.6 The higher level of attendance suggests a higher percentage of away fans will be coming to Exeter. If supporters are using private hire coaches, these coaches can drop off at the stadium before parking at Westpoint.

6.7 Event Day Controlled Parking Zone

6.7.1 Scenario 1 – 8,500 stadium attendance

6.7.2 The controlled parking zone will be in full affect

6.7.3 Scenario 2 – 15,000 stadium attendance

6.7.4 The controlled parking zone will be in full affect

6.7.5 Scenario 3 – 20,600 stadium attendance

6.7.6 The controlled parking zone will be in full affect

6.8 Walk

6.8.1 Scenario 1 – 8,500 stadium attendance

6.8.2 The 5% modal split of people who were walking when surveyed by Parsons Brinkerhoff in 2007 is likely to stay the same.

6.8.3 Scenario 2 – 15,000 stadium attendance

6.8.4 With the addition of away fans making up a substantial amount of the additional crowd, the modal split of walkers is likely to reduce as so many can be accommodated by the Westpoint facility.

6.8.5 Scenario 3 – 20,600 stadium attendance

6.8.6 As detailed above

6.9 Cycle

6.9.1 Scenario 1 – 8,500 stadium attendance

6.9.2 The 1% modal split of people who were walking when surveyed by Parsons Brinkerhoff in 2007 is likely to stay the same.

6.9.3 Scenario 2 – 15,000 stadium attendance

6.9.4 With the addition of away fans making up a substantial amount of the additional crowd, the modal split of cyclists is likely to reduce as so many can be accommodated by the Westpoint facility.

6.9.5 **Scenario 3 – 20,600 stadium attendance**

6.9.6 As detailed above

6.10 Rail

6.10.1 **Scenario 1 – 8,500 stadium attendance**

6.10.2 The use of the train services is likely to stay the same as it is currently operating on a match day.

6.10.3 **Scenario 2 – 15,000 stadium attendance**

6.10.4 As detailed below.

6.10.5 **Scenario 3 – 20,600 stadium attendance**

6.10.6 It is proposed that bus services, operated by First Great Western, will run from Exeter St. David's station to the stadium to accommodate the away fans who will be arriving in Exeter by train. The bus services will be put on to relieve pressure on trains which operate the Exmouth to Exeter line.

6.11 Match Day Bus services

6.11.1 **Scenario 1 – 8,500 stadium attendance**

6.11.2 The three additional match day bus services and the Westpoint shuttle service will remain operating at the same.

6.11.3 **Scenario 2 – 15,000 stadium attendance**

6.11.4 The three additional match day bus services and the Westpoint shuttle service will remain operating at the same. The Westpoint facility has sufficient capacity to accommodate the additional spectator volume.

6.11.5 **Scenario 3 – 20,600 stadium attendance**

6.11.6 As detailed above.

6.12 Incentives for early arrival / late departure from the Stadium

- 6.12.1 The Transport Strategy actively encourages spectators of a match to arrive early and to leave the stadium later than directly after the game.
- 6.12.2 This is in line with a commitment to seek to spread spectator arrival and departure to further reduce pressure on the local roads and travel infrastructure immediately prior to, and immediately following a match.
- 6.12.3 The Exeter Chiefs have arranged a range of entertainment to encourage supporters to arrive early and leave later. Details are made available in advance via the club's ezine, local press and website.
- 6.12.4 The shuttle buses to and from Westpoint allow Exeter Rugby Club to manage the speed people leave to return to their cars. The result of this is a smoother flow of cars getting back on the local road network.

7.0 SUMMARY AND CONCLUSION

- 7.1.1 Exeter Rugby Club were granted planning permission in November 2009, to increase the capacity of the stadium to 13,956. This application is looking to increase the permitted capacity by 6,644, from 13,956 to 20,600.
- 7.1.2 The past operation at the Exeter Rugby Club ground has seen a major increase in attending spectators.
- 7.1.3 Exeter Rugby Club fund additional public transport services to and from the site, and supply shuttle buses to the Westpoint parking facility.
- 7.1.4 Exeter Rugby Club have historically been managing the travel to and from the stadium well, and have put relevant measures in place to ensure that their good travel record continues.
- 7.1.5 It is proposed that additional bus services are to be provided to accommodate higher volumes of passengers between Exeter St. David's station and the stadium.
- 7.1.6 The proposed increase of capacity from 10,744 to 20,600 would attract a higher proportion of away fans, the majority of which can be accommodated using the Westpoint park and shuttle bus facility. This facility is easily accessible for away spectators, and the shuttle service ensures that the arrival and departure profiles of spectators is kept smooth.
- 7.1.7 There is therefore no reason to believe that this proposed extension will be detrimental to the highway network.

APPENDIX 1

Approval and Revision Record Sheet

Approval and Revision Record Sheet

Rev	Date	Comment	Originator	Approved
P01	26/06/2012	Initial issue for TR/KN input	JG	JG
P02	10/07/2012	2nd Draft for TR/KN comment	TRJB	TRJB
P03	12/07/2012	Issue to Kensington Taylor for planning submission	TRJB	TRJB

Note: The originator and approval boxes should be hand signed for the current issue and only typed when superseded

APPENDIX 2

Notes on Limitation

Notes on Limitation

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