



# Expansion of Anfield Stadium for Liverpool Football Club

Environmental Statement  
Volume 1: Main Report

May 2014

Liverpool Football Club and Athletic Grounds Ltd.



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# Abbreviations

AADF	Annual average daily flow
AADT	Annual average daily traffic
AIR	Air Information Resource
AOD	Above Ordinance Datum
APS	Annual Population Survey
APSH	Annual Probable Sunlight Hours
AQMA	Air Quality Management Area
AQS	Air Quality Strategy
ASHE	Annual Survey of Hours and Earnings
AURN	Automatic Urban and Rural Network
BAP	Biodiversity Action Plan
BCT	Bat Conservation Trust
BGS	British Geological Survey
BRE	Building Research Establishment
CBD	Convention on Biological Diversity
CC	Climate change
CLG	Communities and Local Government
CDM	Construction and Design Management Regulations 1994
CEMP	Construction Environmental Management Plan
CERC	Cambridge Environmental Research Consultants
CIEEM	Chartered Institute of Ecology and Environmental Management
CIRIA	Construction Industry Research and Information Association
COBA	Cost Over Benefit Assessment
COSHH	Control of Substances Hazardous to Health Regulations 2002
CRoW	Countryside and Rights of Way
CRTN	Calculation of Road Traffic Noise
DCLG	Department for Communities and Local Government
DCMS	Department for Culture, Media and Sports
DEFRA	Department for Environment, Food and Rural Affairs
DfT	Department for Transport
DMRB	Design Manual for Roads and Bridges
EA	Environment Agency
EclA	Ecological Impact Assessment
EHO	Environmental Health Officer
EH	English Heritage
EIA	Environmental Impact Assessment
EPA	Environmental Protection Act 1990 (as amended)
EPUK	Environmental Protection UK
ES	Environmental Statement
ESAs	Environmentally Sensitive Areas

ESR	Environmental Scoping Report
FMPZ	Football Match Parking Zone
FRA	Flood Risk Assessment
FTE	Full Time Equivalent
GLVIA	Guidelines for Landscape and Visual Impact Assessment
GVA	Gross Value Added
HAPs	Habitat Action Plans
HER	Historic Environment Record
HGVs	Heavy good vehicles
HMRI	Housing Market Renewal
IAQM	Institute of Air Quality Management
IEEM	Ecology and Environmental Management (IEEM)
IMD	Index of Multiple Deprivation
JNCC	Joint Nature Conservation Committee
JSA	Job Seeker Allowance
LCC	Liverpool City Council
LCR	Liverpool City Region
LDVs	Light Duty Vehicles
LEP	Local Enterprise Partnership
LFC	Liverpool Football Club
LGVs	Light Goods Vehicles
LMDC	Liverpool Mayoral Development Corporation
LNR	Local Nature Reserves
LPA	Local Planning Authority
LPP	Liverpool Local Plan
LTP3	Merseyside Local Transport Plan 3
LWS	Local Wildlife Sites
MAGIC	Multi Agency Geographical Information for the Countryside
MDZ	Mayoral Development Zones
MEWP	Mobile Elevating Working Platform
NE	Natural England
NERC	Natural Environment and Rural Communities
NPPG	National Planning Practice Guide
NPPF	National Planning Policy Framework
NPSE	Noise Policy Statement for England
NTS	Non-Technical Summary
NVQ	National Vocational Qualification
NWDA	North West Development Agency
OB	Outside Broadcast Compound
Ofcom	Office of Communications
ONS	Office for National Statistics

OS	Ordnance Survey
PAVA	Public Announcement and Voice Alarm
PFRA	Preliminary Flood Risk Assessment
POS	Public open space
PPE	Personal protective equipment
PPG	Planning Practice Guidance
PPS	Planning Policy Statement
PPV	Peak particle velocity
RF	Radio-frequency
RIGS	Regionally Important Geological/Geomorphological Site
SA	Sustainability Appraisal
SAC	Special Areas of Conservation
SEA	Strategic Environmental Assessment
SEMP	Site Environmental Management Plan
SHF	Super High Frequency
SNCV	Sites of Nature Conservation Value
SPA	Special Protected Areas
SPD	Supplementary Planning Document
SPL	Significant Pollutant Linkages
SPOSH	Significant Possibility of Significant Harm
SPZ	Source Protection Zone
SRF	Spatial Regeneration Framework
SSSI	Sites of Special Scientific Interest
SuDS	Sustainable Drainage Systems
SWMP	Site Waste Management Plan
SWMP	Surface Water Management Plan (in Flood Risk context)
TA	Transport Assessment
TP	Travel Plan
TPO	Tree preservation order
TRL	Transport Research Laboratory
TRO	Traffic Regulation Order
TV	Television
TVIA	Townscape and Visual Impact Assessment
UDP	Unitary Development Plan
UHF	Ultra-High Frequency
UU	United Utilities
VER	Valued Ecological Receptors
VSC	Vertical Sky Component
VVM	Visually Verified Montages
W-APSH	Winter Annual Probable Sunlight Hours
WRA 1991	Water Resources Act 1991

ZoI	Zone of influence

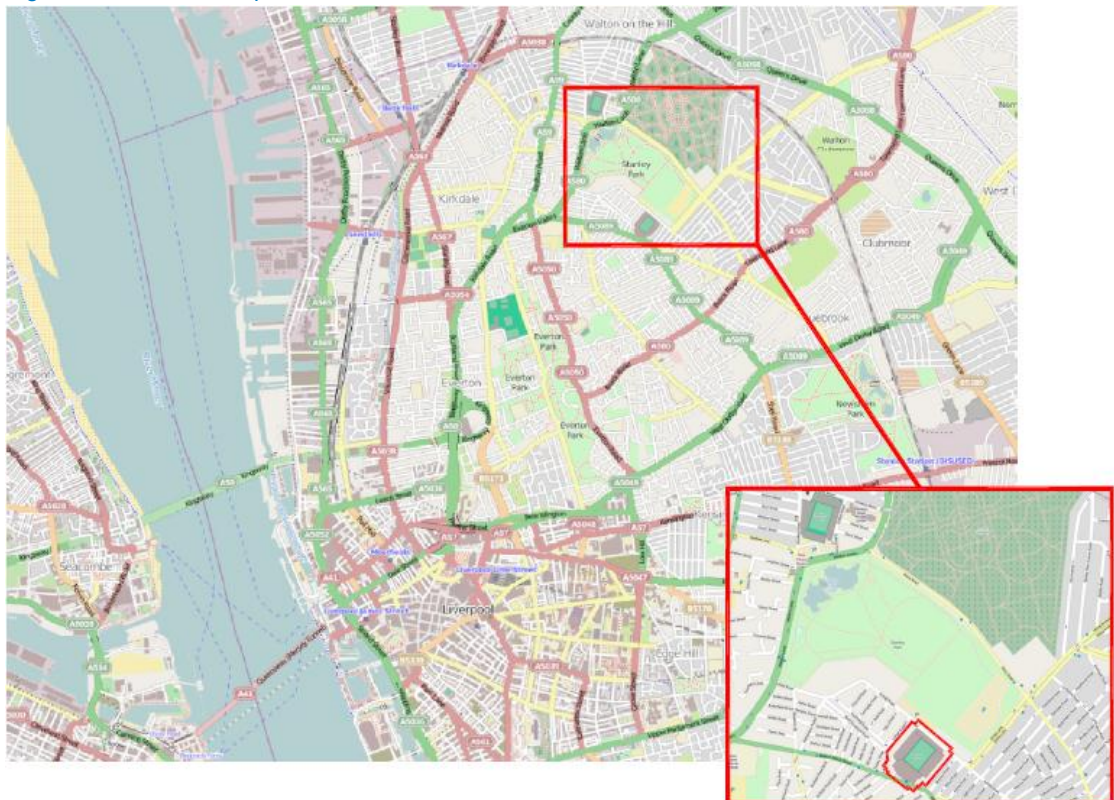


# 1 Introduction

## 1.1 The proposed development

- 1.1.1 The proposals to develop the Liverpool Football Club (LFC) Anfield Stadium are based around a long term vision to expand the Main Stand and Anfield Road Stand to give an increase in the total seated capacity to circa 58,500 spectators.
- 1.1.2 Along with increasing the capacity of the stadium, the aspirations of LFC are to enhance both the spectator experience at the Anfield Stadium and provide a catalyst to long-term investment benefiting the regeneration of the Anfield/ Breckfield area.
- 1.1.3 The development comprises two consecutive phases; the first phase is to erect a new Main Stand to the rear of the current Stand and lay out areas of open space around the stadium; the second phase is to redevelop the Anfield Road Stand.
- 1.1.4 The location of the development is shown in Figure 1.1.

Figure 1.1: Location plan



Source: Mott MacDonald, 2014

- 1.1.5 The Anfield Stadium Expansion is recognised as a key project in the wider Anfield Spatial Regeneration Framework (SRF) being developed by Liverpool City Council (LCC) for the purpose of delivering comprehensive and sustainable regeneration of the Anfield area. The SRF aims to bring together current and new proposals in a coordinated and comprehensive manner as a means to deliver lasting social, economic, and environmental regeneration. The SRF will be adopted as a Supplementary Planning Document (SPD) in accordance with guidance in the National Planning Policy Framework (NPPF) and Planning Practice Guidance (PPG).
- 1.1.6 In accordance with the Planning and Compulsory Purchase Act 2004 and the Planning Act 2008, the SPD has been subject to a Sustainability Appraisal (SA). The SPD has also been subject to Strategic Environmental Assessment (SEA) under the European Directive 2001/42/EC (known as the SEA Directive).
- 1.1.7 As recommended in the Anfield SRF Sustainability Appraisal Report, the Anfield Stadium Expansion has been subject to a project Environmental Impact Assessment (EIA) for which this Environmental Statement (ES) reports the findings.

## **1.2 The applicant**

- 1.2.1 Mott MacDonald Ltd has been commissioned by Liverpool Football Club and Athletics Grounds Ltd. (LFC) to undertake the EIA for the proposed Anfield Stadium Expansion. This ES has been produced following the EIA process and is submitted to LCC as the Local Planning Authority (LPA) in support of the planning application for the development.

## **1.3 The planning application**

- 1.3.1 A hybrid planning application for the development has been submitted to LCC; this comprises the phased expansion and redevelopment of the existing Anfield Stadium and includes:
- i. Phase 1 – An application for full planning permission for expansion of the Main Stand adding a further 8,300 seats, with associated conferencing and banqueting facilities, club shop (in addition to the retained shop in the Kop Stand), car park for c. 60 vehicles and team coach access beneath a podium, and the provision of high quality public realm, comprising concourse and ‘community garden’ area lying between the Main Stand and retained properties on Alroy Road, a ‘Fan Zone’ between the extended Main Stand, existing Kop Stand and Walton Breck Road and a memorial garden for the relocated Hillsborough Memorial.
  - ii. Phase 2 – An application for outline planning permission for the expansion of the Anfield Road Stand to provide an additional c. 4,800 seats. Car parking will be provided beneath the expanded stand and the area immediately to the north of it will be landscaped.

- 1.3.2 The expansion proposals aim to increase the overall capacity of the stadium to c. 58,500 seats.
- 1.3.3 This ES assesses both Phase 1 and Phase 2 to take full account of the aspects under the hybrid planning application for the development.
- 1.3.4 The planning application is also accompanied by the following documents which are referred to throughout this ES:
- Planning Statement;
  - Application Plans;
  - Draft S106 Agreement;
  - Transport Strategy;
  - Transport Assessment;
  - Interim Staff Travel Plan;
  - Design and Access Statement;
  - Sustainability Appraisal;
  - Economic Impact Assessment;
  - Heritage Statement; and
  - Statement of Community Engagement.

## 1.4 The project team

- 1.4.1 The project team for the development is as follows:
- |  |                                   |
|--|-----------------------------------|
| ■ Project Management                               | – Christal Management             |
| ■ Cost Consultancy                                 | – Aecom                           |
| ■ Architecture                                     | – KSS                             |
| ■ Public Realm Design                              | – Planit IE                       |
| ■ Civil and Structural Engineering                 | – SKM                             |
| ■ Building Services Engineering                    | – SKM                             |
| ■ Vertical Transportation                          | – SKM                             |
| ■ Fire Safety                                      | – JGA Fire Engineering            |
| ■ Transportation and Access                        | – Mott MacDonald                  |
| ■ Environmental Impact Assessment                  | – Mott MacDonald                  |
| ■ Catering Strategy                                | – KCCJ Ltd                        |
| ■ Acoustics and Public Address Systems             | – Sandy Brown Associates          |
| ■ Daylight, Sunlight & Rights to Light Consultancy | – GVA Schatunowski & Brooks       |
| ■ CDM (Health and Safety) Coordination             | – Aecom                           |
| ■ Planning   | – Turley                          |
| ■ Sustainability                                   | – Turley                          |
| ■ Engagement                                       | – Turley with Rachel Flood Assoc. |

## 1.5 The structure of the Environmental Statement

- 1.5.1 The structure for the ES has been set out in accordance with Schedule 4 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2011 and other relevant guidance.
- 1.5.2 The ES contains three main parts:
- Volume 1: Environmental Statement – Main Report;
  - Volume 2: Environmental Statement – Technical Appendices; and
  - Volume 3: Non-Technical Summary (NTS).
- 1.5.3 This ES document presents the main statement which provides a description of the development, outline construction methodology, the development need and alternatives considered, general EIA approach and methodology, technical impact assessments and a discussion on cumulative impacts. The document is structured as outlined in Table 1.1 below:

**Table 1.1: ES Volume 1 Structure**

Chapter	Chapter Description
1	Introduction: comprising the proposed development, the applicant, the planning application, consultation requirements and contact details, and the ES availability.
2	The proposed development: describes the stadium site location and surrounding area in terms of the existing physical and social characteristics and land uses.
3	Construction methodology: presents an outline methodology on which the construction impact assessment is based upon.
4	Policy context: presents a high level summary of key overarching policy relevant to the development.
5	Alternatives: this chapter presents information on the alternatives that have previously been assessed and the reasons for their rejection.
6	EIA methodology: this chapter provides an overview of the approach undertaken to ensure the requirements of the EIA Regulations are fulfilled. It indicates how key issues have been identified and addressed within the ES and the approach that has been taken for the EIA process.
7 - 19	Impact assessments: details the assessment of significant residual effects from built heritage, townscape, landscape and visual, sunlight and shading, light pollution, microclimate, TV reception, transport, air quality, noise and vibration, ecology, geology and soils, flood risk and water resources and socio-economics during construction and operation.
20	Cumulative impact assessment: this chapter presents both the combined and cumulative impacts resulting from the accumulation of impacts generated by the development on the same receptors and the impacts potentially arising from adjacent or nearby developments together with those predicted for the development.
21	Conclusions: summarises the significant residual impacts.

## **1.6 Environmental Statement availability**

1.6.1 This ES is available for viewing by the public during normal office hours at the Planning Department of LCC. Comments on the planning application should be forwarded to LCC at the address below or posted on the LCC planning portal website:

1.6.2 <http://liverpool.gov.uk/planning-and-building-control> :

Liverpool City Council  
Municipal Buildings  
Dale Street  
Liverpool  
L2 2DH

1.6.3 Additional copies of the Non-Technical Summary are available free of charge and copies of the full ES can be purchased from the address below or downloaded free of charge from <http://liverpool.gov.uk/planning-and-building-control> :

Mott MacDonald Limited  
9th Floor  
Royal Liver Building  
Pier Head  
Liverpool  
L3 1JH

1.6.4 Hard copies of the ES and associated appendices are priced at £ 350. CD copies of the ES (Volumes 1, 2, 3) and the NTS are priced at £10 and can be purchased from the above address.

## 2 The proposed development

### 2.1 Background

- 2.1.1 Anfield has been the home of LFC since the Club was formed in 1892. In the intervening years the Club has grown and several permissions granted to enable the stadium to expand to meet its changing needs.
- 2.1.2 In 2006, LFC obtained full planning permission to construct a new 60,000 capacity football stadium with ancillary development including integral community facilities on part of Stanley Park, Anfield, Liverpool (LPA ref: 03F/3214).
- 2.1.3 Having discharged all of the pre-commencement conditions, a material start on site was made prior to the application expiring in 2011.

### 2.2 Application site location and context

- 2.2.1 Anfield is home to LFC, one of the most successful football clubs in the UK and a major tourist attraction in the city. Anfield, situated approximately 3km to the north of the city centre, is an inner city Victorian community characterised predominantly by neighbourhoods of terraced properties. It is one of the most disadvantaged neighbourhoods in Liverpool in terms of income, employment, health deprivation, and disability.
- 2.2.2 The Anfield Stadium currently attracts around 45,000 visitors to the area on match-days; it is the second highest tourist attraction in the city also attracting significant visitor numbers on non-match days.
- 2.2.3 Anfield is one of the highest points in the city, and the north-west corner / west end of Anfield Road is the highest point of the ground, some 3-4m higher than Walton Breck Road boundaries to the south and 2m higher than the east end of Anfield Road.
- 2.2.4 Immediately north of the Anfield Stadium is Stanley Park and Anfield Cemetery which comprise a significant area of open space (c. 101ha in total). They were both laid out towards the end of the 19th Century and are included on the English Heritage Register of Historic Parks and Gardens (Grade II\* listed). Everton Football Club's ground at Goodison Park is located on the west side of Stanley Park less than 1km from the Anfield ground.
- 2.2.5 The part of Stanley Park to the east of Mill Lane is characterised by open grassland which rises gently from north to south. A significant part of the far south eastern end of the park is occupied by a large tarmac car park, constructed in c. 1964 to serve the 1966 World Cup matches played at nearby Goodison Park.
- 2.2.6 The remainder of Stanley Park (i.e. the area of the park to the west of Mill Lane) has been successfully restored, funded through Objective 1 funding and the former North West Development Agency (NWDA) (with match funding via LFC), through physical infrastructure



- and public realm improvements and the full restoration of the Isla Gladstone Conservatory and Bandstand.
- 2.2.7 Walton Breck Road to the south of Anfield Stadium provides a number of local shops, commercial businesses and amenities including a large number of hot-food takeaways predominantly catering for football supporters on a match day.
- 2.2.8 The two predominant residential neighbourhoods within the area, Rockfield and Anfield Village, are characterised predominantly by pre-1919 terraced housing which have suffered from low housing demand resulting in low house prices. These neighbourhoods have high proportions of vacant, private-rented and social housing compared to the city average. Comprehensive intervention is proposed in these neighbourhoods by LCC and its partners comprising selective clearance and redevelopment, refurbishment of dwellings and general environmental improvements.
- 2.2.9 In July 2005 Renewal Area status under the Housing Market Renewal Initiative (HMRI) was granted for the Anfield / Breckfield area leading to the preparation of a Regeneration Plan for a comprehensive programme of demolition, rebuild and refurbishment of houses in the Rockfield area and south of Walton Breck Road. The first phases of the Regeneration Plan have been completed, and while HMRI funding has subsequently been withdrawn by Government, LCC has committed to prioritise delivery of the plan. This currently proposes demolition of dwellings lying immediately to the west of the stadium (Lothair Road, east side of Alroy Road) with works commencing in April 2014. A further area for housing clearance has been identified to the west of the existing open space (former clearance area) of Lake Street/Tinsley Street.
- 2.3 History of the stadium site**
- 2.3.1 Liverpool FC was established at the Anfield Road ground in 1892. Prior to that the site had been home to Everton Football Club.
- 2.3.2 The original football ground comprised a local facility with small stands at the Anfield Road and Walton Breck Road ends. It was constructed in an area of, already, high-density terraced 'workers' housing; the proximity of that housing has been a key factor affecting the on-going growth and development of the Club over many years.
- 2.3.3 In common with other large football stadia established over a century ago Anfield was originally designed to accommodate standing spectators. With only a relatively small proportion of seated accommodation this gave football grounds a large capacity for a relatively small area. In its heyday, in the late 1950s/early 1960s, the capacity of Anfield was c.58,000. By 1976, following a major rebuilding programme to improve spectator comfort and meet safety standards, the capacity of the ground had been reduced to c.56,000; although average gates at that time are reported to be c.46, 000.

2.3.4 In the early 1980s the Club embarked upon a further series of planning applications designed to up-grade facilities at the ground, including the provision of additional seated accommodation. That programme was accelerated following the Taylor Report in the aftermath of the Hillsborough Stadium tragedy, which recommended the provision of all-seated stadia. Subsequent to those improvements, including the redevelopment of an entire street of terraced properties (Kemlyn Road) to create the Centenary Stand, the current capacity of Anfield is c.45,000.

2.3.5 A timeline summarising the history of the application site is given in Figure 2.1, while Figure 2.2 illustrates the Anfield Stadium design progression.

Figure 2.1: A timeline summarising the Anfield Stadium site history

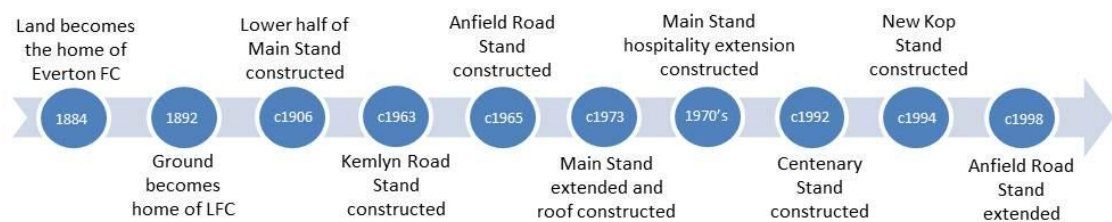




Figure 2.2: Design Progression of Anfield Stadium



Source: KSS – Design and Access Statement (Document D1/1)

## **2.4 Anfield Stadium**

- 2.4.1 The existing stadium at Anfield comprises a four-stand structure with cantilevered roof. While the stadium is a large and dominant structure in the street scene, it also creates a focal point and helps to define Anfield as a place distinct from other predominantly residential areas of the city.
- 2.4.2 The primary business of the stadium is as a Premiership football club, home to 26-28 matches (including cup ties) per annum. However, the stadium also contains other ancillary functions that broaden the range of activity at the ground.
- 2.4.3 The Kop Stand on Walton Breck Road houses the LFC museum and megastore, both of which generate visitors throughout the year; although their busiest days coincide with football matches at the ground. Overall, this stand has capacity for 12,409 spectators.
- 2.4.4 The Centenary Stand, which is also accessed off Walton Breck Road, contains the function and conference facilities of the Club. At 24m this is currently the tallest stand of the existing stadium. The conference facilities in the Centenary Stand are used for corporate and other entertaining on match days, and are available for private hire and events at other times. The Centenary Stand has a seating capacity of 11,762.
- 2.4.5 The existing Main Stand to the west of the Stadium, contains the players' facilities (changing rooms, lounges), a small number of offices and kitchens. The Main Stand capacity is a total of 12,237.
- 2.4.6 The Anfield Road Stand has no additional facilities that are related to match day activities. The Anfield Road Stand capacity is for 9,074 spectators.
- 2.4.7 The overall area of the existing stadium site is approximately 4.5 hectares, with the total floor area of the existing stadium 30,019sqm. (c. 323,000sqft.), excluding spectator seating.
- 2.4.8 The area behind the Main Stand is secured by gates, with the Shankly Gates and Hillsborough Memorial fronting Anfield Road. The area behind the Centenary Stand is also gated off and remains so on match days to provide secure car parking for players and premium seat hospitality members. The external area behind the Kop Stand fronting Walton Breck Road is also separated from Walton Breck Road by fencing and the Paisley Gateway, with "The Albert" public house at its west end.

### **Parking and Servicing**

- 2.4.9 Parking and delivery/operational areas for the stadium are limited to enclosed yards adjacent to the Centenary and Main Stands. On match days these areas provide parking for match officials, players and a limited number (c. 30) of corporate hospitality spaces. On non-match

days the larger Centenary Stand car park offers 130 spaces and is publicly available for visitors to the stadium and general visitors/shoppers to the Anfield area.

- 2.4.10 Land to the north of Anfield Road is currently used for match day premium seat parking, emergency vehicle parking, pitch light parking and a fan zone area to the north-east corner. Match day car parking is currently provided in Stanley Park, with access from Arkles Lane to the east. Away team coach parking is also provided on Arkles Lane.

#### Hillsborough Memorial

- 2.4.11 The Shankly Gates and the Hillsborough Memorial are located on the Anfield Road boundary of the stadium site; these are an important focus for visitors to the stadium, although the facilities for viewing or quiet contemplation are limited by the narrow pavement and adjacent highway.

#### Employment

- 2.4.12 The Club is the largest employer in the Anfield area. It currently provides employment for 271 Full Time Equivalent (FTE) permanent staff comprising office personnel, ticketing, retail and museum staff, ground maintenance, and playing and coaching staff. On a match day, a further 1790 part time workers are employed in the capacity of stewards, catering and marshalling staff.

## 2.5 Description of the development

- 2.5.1 The tightly constrained nature of the surrounding residential area has long been a significant constraint to further development and growth of the stadium prompting the Club to make an application and obtain planning permission for a new stadium in Stanley Park. The Club has since re-appraised its options and determined that it prefers to remain in the existing stadium.
- 2.5.2 This decision to remain on the Club's current stadium site requires the expansion of the stadium, both to enable LFC to compete effectively with other Premiership clubs, and to meet existing deficiencies in operating and spectator facilities. Likewise, in order for the Club to remain in the top-flight in the domestic and European game a larger stadium is necessary to generate additional revenue, leading to investment in players and greater success on the field. That success is important to both the City of Liverpool and the Club.
- 2.5.3 The current application proposes an alternative solution to meeting the requirements of the Club through expansion of the existing stadium. It combines with the wider aspirations of LCC to bring about the comprehensive regeneration of the Anfield area. The additional land required for the Main Stand expansion is created by demolition of existing dwellings in Lothair Road and the east side of Alroy Road. Those properties have been acquired by LCC and their demolition is being pursued under a separate planning application. The enlarged stadium site is 6.9ha in area.

### **Phasing**

- 2.5.4 The development will have two separate phases, with the Main Stand and associated public realm comprising Phase 1 and the expansion of the Anfield Road Stand and associated external landscaped concourse encompassing Phase 2.
- 2.5.5 A Phase 1 and Phase 2 Aerial Plan is shown in Figure 2.3 and detailed in Section 2.4 and Section 2.5 respectively.



Figure 2.3: Phase 1 and Phase 2 Aerial Plan



Phase 1 Aerial Plan



Phase 2 Aerial Plan

Source: KSS – Design and Access Statement (Document D1/1) [Ref 01]

## 2.6 Phase 1 Main Stand - Full Planning Permission

2.6.1 The overall master plan for Phase 1 Main Stand is shown in Figure 2.4 and described in detail below.

Figure 2.4: Master Plan of Phase 1



Source: Planit-IE – Liverpool Football Club Phase 1 Expansion Illustration Wider Masterplan, April 2014 [Ref 02]

### Main Stand

2.6.2 As part of Phase 1, full planning permission is sought for an expansion of the western Main Stand with increased corporate and general spectator facilities, associated corporate banqueting, conference and entertaining facilities; an additional club shop and café beneath the podium; changing/player facilities; new media facilities; and associated club administration, offices and 'back of house' facilities.



- 2.6.3 The Main Stand will provide an additional c. 8,300 seats to bring total capacity of the stand to c. 20,500 and the overall capacity of the whole stadium to c. 53,800.
- 2.6.4 The Main Stand expansion will be constructed to the rear of the existing stand, to be extended to 140m in length, 65m wide and up to 45m tall at its highest point. The expanded Main Stand will comprise 37,800sqm of internal floorspace, excluding the seating bowl.
- 2.6.5 A visual of the Main Stand is shown in Figure 2.5.

Figure 2.5: Main Stand visual



Source: KSS - Design and Access Statement (Document D1/1)

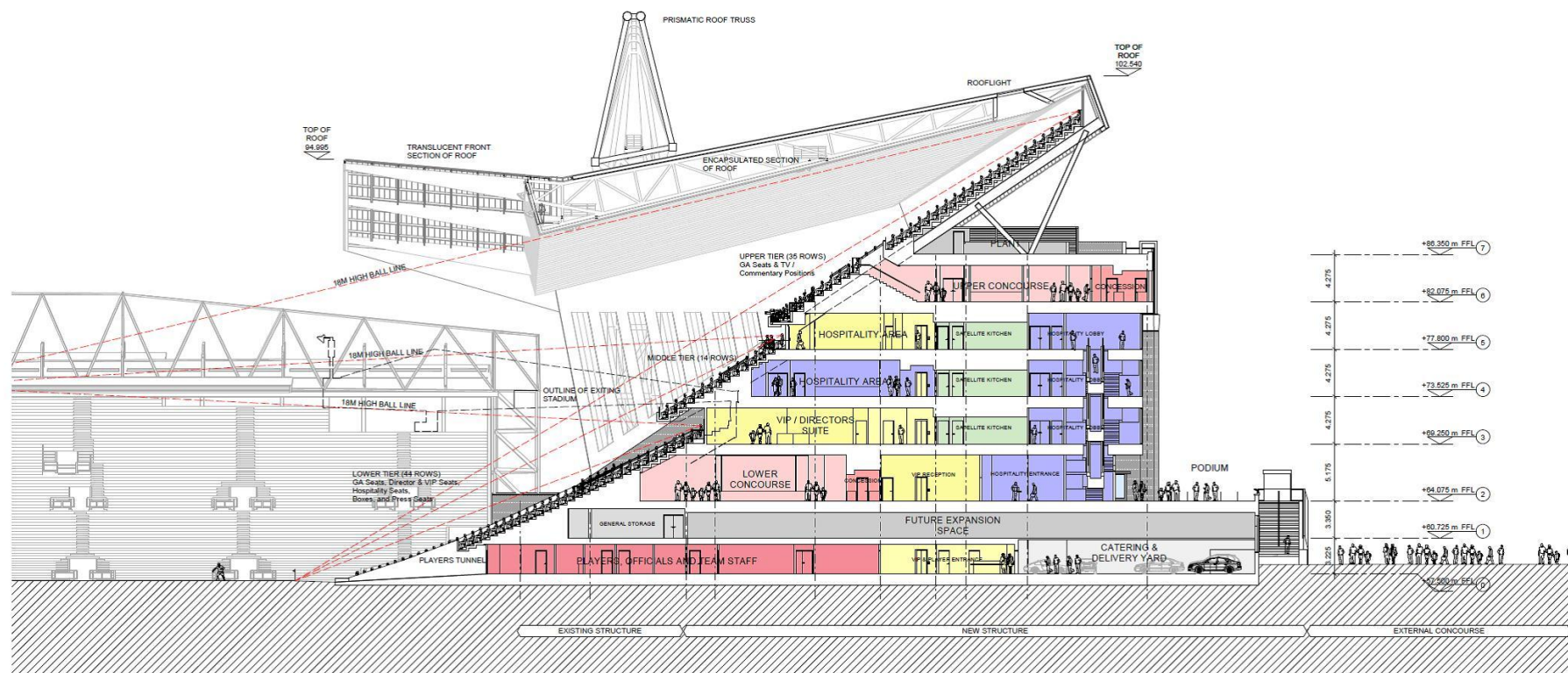
- 2.6.6 The Main Stand would be expanded from a single tier configuration to three tiers with the existing lower tier kept operational during construction. The Main Stand expansion will include the following:
- A new 14 row middle tier would provide new premium seats including wheelchair user positions and amenity standard seats;
  - A new 35 row upper tier would provide new general admission seats including TV cameras and desks for TV and radio commentators, new wheelchair user positions and further amenity standard seats;

- Back of house accommodation would be expanded behind the existing 3 storey stand, and comprise 6 back of house levels plus an open roof plant area at Level 7. The existing hospitality accommodation to Level 1 would be removed completely;
- Within Level 0 there will be the reconfigured and upgraded players, officials and team staff facilities, new media centre, match day staff and stewards' changing and welfare facilities and central production kitchen, together with a secure team coach drop off, 60 VIP parking spaces, service yard and waste recycling area;
- New general admission concourses with supporting toilets and concession accommodation would be provided for the lower tier on Level 2 and the upper tier on Level 6; and
- New hospitality restaurants, lounges, and bars for VIPs and premium seat holders would be provided at Levels 3, 4 and 5, with 14 hospitality boxes also provided at Level 3. Facilities on Levels 3 and 5 would have glass frontage views into the ground, and all levels would have views to the outside.

2.6.7 The cross sections of the Main Stand, with an outline of position and size of the exiting Main Stand, are shown in Figure 2.6.



Figure 2.6: Cross Sections of the Main Stand, outlining the position and size of the existing Main Stand



#### Main Stand Section

##### Key

Players, officials and team staff	Hospitality lounges and boxes	Plant
Catering facilities	GA concourse	Car park
Hospitality VIP	GA WCs, concessions and circulation	
Hospitality VIP WCs and circulation	Venue staff facilities, servicing and storage	

Source: KSS - Design and Access Statement (Document D1/1)

### Materials

- 2.6.8 The development will be constructed predominately of red brick with a central glazed section and red enamelled panel coating used to highlight areas of interest. Polycarbonate cladding bearing the Liver-bird icon will be used to enclose the gable ends of the seating terraces and provide weather protection for the Stands.
- 2.6.9 The profiled metal cladding roof structure will be supported by an exposed tubular steel truss that over-sails the roof.

### Podium

- 2.6.10 There will be a double-storey height podium running along the length of the Main Stand. The podium will be accessed predominately via wide staircases at either end.
- 2.6.11 Beneath the podium there will be a new club shop of 1300m<sup>2</sup> floor space with display windows and entrance at ground level. Hospitality ticket collection windows, public toilets (including accessible facilities), prayer room and podium lift would be located adjacent.
- 2.6.12 The Hillsborough Memorial would be relocated behind a covered brick colonnade beneath the north end edge of the podium. The public realm design immediately in front would reinforce the notion of a semi-private space for reflection and contemplation to one side of the main external crowd flows.

### Drainage

- 2.6.13 The drainage strategy will utilise the existing drainage network, and capacities have been confirmed with United Utilities as generally appropriate.
- 2.6.14 For the proposed accommodation, foul water connection will be an indirect connection to the water authority adopted sewer, via the private drainage network on site.
- 2.6.15 It is proposed that the connection for the foul water from the accommodation will be made into the existing combined sewer. Where the existing combined sewer conflicts with the proposed stand, this will be diverted around the line of the stand.
- 2.6.16 The foul water drainage allows for a connection on either side of the proposed stand with a sewer running from Northeast to Southwest which will pick up any connections from the back of the stand.
- 2.6.17 The surface water connection will be a new connection to the adopted sewer, a Section 106 (Water Industry Act 1991) agreement will need to be made with the water authority to approve this.

## Heritage and Public Realm

### *External landscape and public realm*

- 2.6.18 The external landscape development includes the creation of a new public realm, improved circulation space and gathering space around the Main Stand including a new ‘fan zone’ to the south-west corner adjacent to Walton Breck Road. This will include the provision of a 12m to 15m wide concourse and open space around the extended ground lying between the Main Stand and retained properties on Alroy Road. The open space design is described in detail in the Design and Access Statement [Ref 01] and summarised below:
- 2.6.19 The visualisation for the Main Stand post phase 1 is shown in Figure 2.7, while an annotation of the landscape proposals for phase 1 is shown in Figure 2.8.

Figure 2.7: Concept image post Phase 1



Source: KSS - Design and Access Statement (Document D1/1)



Figure 2.8: Landscape proposals for Phase 1

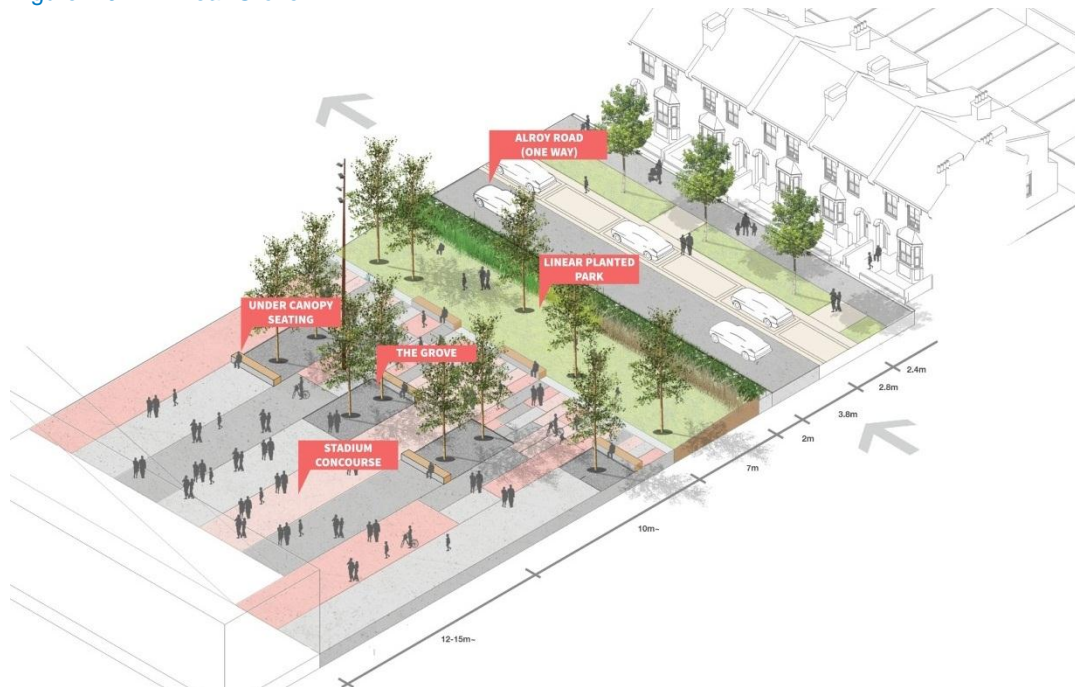


Source: KSS - Design and Access Statement (Document D1/1)

### *The Grove*

- 2.6.20 The Grove will be a landscaped concourse running between Stanley Park, the podium and Alroy Road. It is designed to reflect an urban park, creating an interface between the Park and urban landscape. Between the podium and Alroy Road, the Grove will provide soft landscaping with the application of terraced lawns, groups of trees and clusters of seating. The lower concourse of the Stadium is outlined with a tree lined edge.
- 2.6.21 The Grove and its associated features are illustrated in Figure 2.9.

Figure 2.9: Linear Grove

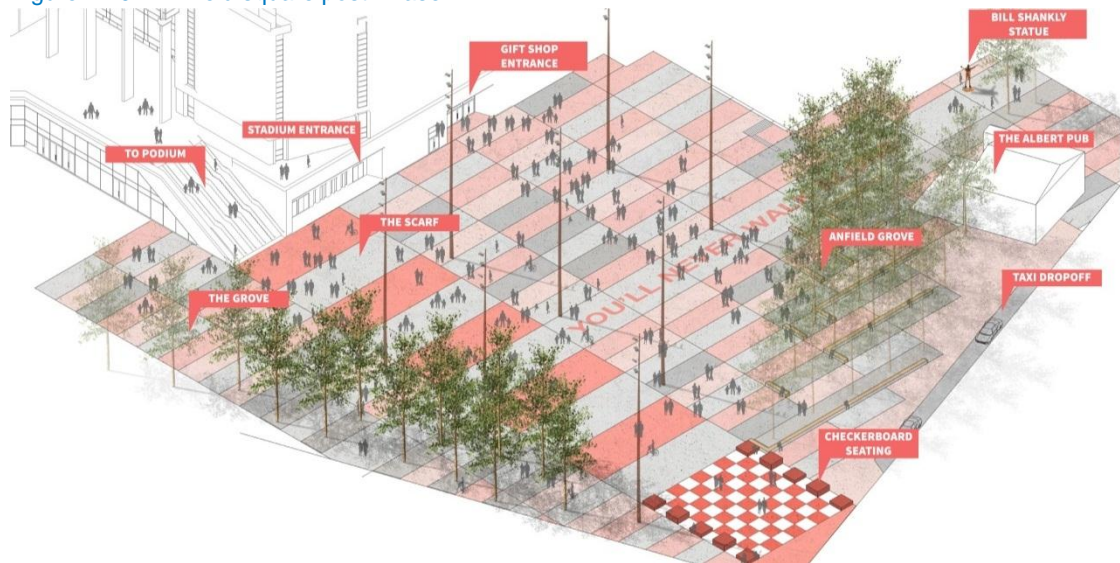


Source: KSS - Design and Access Statement (Document D1/1) [Ref 01]

### *Fan Zones*

- 2.6.22 There will be the provision of two Fan Zones, one located at the eastern end of Anfield Road, which will be redevelopment of the existing Family Zone, and one to the South adjacent to Walton Breck Road and the Kop Stand corner (to be known as Anfield Square). The Anfield Square would be the larger Fan Zone.
- 2.6.23 Anfield Square and its associated features are illustrated in Figure 2.10.

Figure 2.10: Anfield square post Phase 1



Source: KSS - Design and Access Statement (Document D1/1)

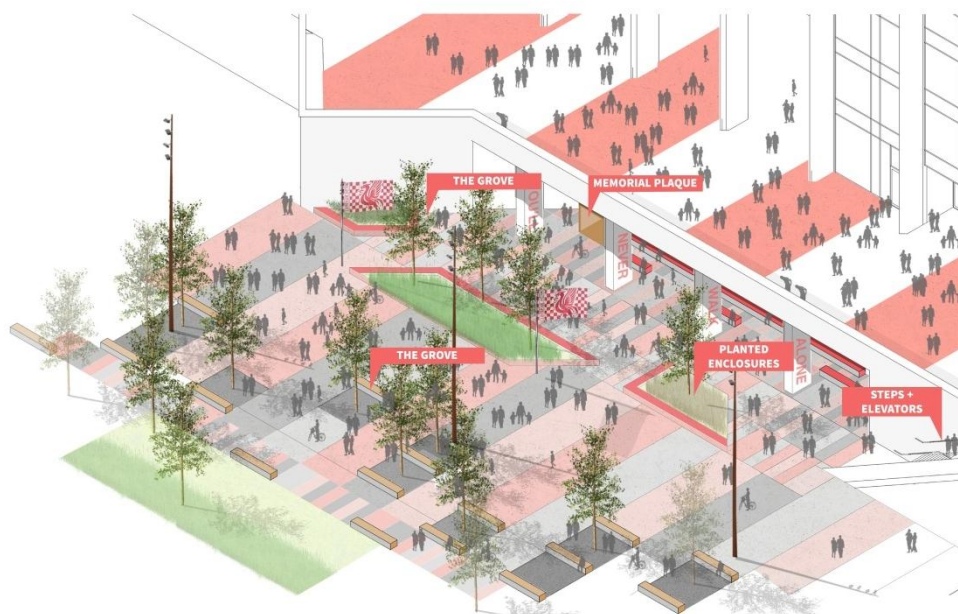
### *Furniture*

- 2.6.24 The integration of street furniture, signage and lighting has been carefully considered and designed alongside the expanded stand. Where possible, plinths and trees would be located to minimise the use of bollards in providing a secure line to the stadium. Benches would be designed in concrete and a number of these would also have timber seats, with arm and backrests.

### *Hillsborough Memorial*

- 2.6.25 The Hillsborough Memorial will be reallocated to a permanent location below the podium of the Main Stand, which will be set within a smaller garden, designed to provide a more intimate scale away from the main concourse routes.
- 2.6.26 The new location of the Hillsborough Memorial is shown in Figure 2.11.

Figure 2.11: Hillsborough memorial



Source: KSS - Design and Access Statement (Document D1/1)

### *Shankly Statue*

- 2.6.27 As a consequence of the removal of the existing wall and railings around the Kop Stand, the setting of the Shankly Statue will change, creating an opportunity for this important piece to become a focal point for the new Fan Zone within the proposed Anfield Square.

### *Shankly and Paisley Gates*

- 2.6.28 The proposal is to incorporate both the Shankly Gates and the Paisley Gates into the existing secure enclosure to the Centenary Stand onto Anfield Road, replacing the existing single gate and forming an entrance to the Centenary Stand from the Anfield Road Fan Zone.

### *Outside broadcast area*

- 2.6.29 A new permanent location for the Outside Broadcast compound (OB) to meet Premier League size obligations is proposed at the north-western corner of the development. To allow for the heavy loading requirements of the OB vehicles, an asphalt / concrete surface is proposed to a colour that complements the adjacent public realm finishes. The size, levels and finish to the outside broadcast areas also makes it suitable for informal recreation on a non-match day.



### Car parking

- 2.6.30 The amount of on-site car parking that will be provided as part of the development will not change significantly as a result of the development. An additional 60 car parking spaces will be provided beneath the podium of the expanded Main Stand with access from Anfield Road. Of those spaces, on match days 38 (including 3 disabled blue badge spaces) would be available for VIP ticket holders, with the remainder reserved for match officials. On non-match days the car park will be used by staff at the stadium. Provision would also be made for secure motorcycle / scooter parking spaces and bicycle stands for stadium staff beneath the podium. The Centenary Stand car park will continue to provide c. 130 spaces that will be generally available for visitors to the stadium and area on a non-match day. On match days the car park provides c. 33 hospitality parking spaces, the balance being reserved for players and pedestrian circulation.
- 2.6.31 The majority of car parking to serve the expanded stadium will be located in Stanley Park and other existing off-site facilities in the locality. Those car parks will be managed by LFC and available only to those with pre-booked tickets. 3% of spaces in closest proximity to the ground will be available to blue-badge holders.
- 2.6.32 The Club currently operates a car park on Anfield Road, adjacent to the existing family zone/food court. That car park is currently used predominantly by staff with some limited hospitality parking. As part of the Phase 1 development the car park will be laid out for 162 vehicles, including 25 blue-badge spaces. That car park will be accessed from the Stanley Park car park under the control of LFC marshals.
- 2.6.33 Other off-site car parking will be provided in close proximity to the site under licence agreements with LCC and other local land-owners including the Anfield and Pinehurst Primary Schools, former Anfield Comprehensive School and St Domingo Road. In total, the Club will be able to offer c.2,200 parking spaces in Phase 1 (c. 2,100 post Phase 2) for hospitality ticket holders, with 3% of those spaces in closest proximity to the stadium laid out for blue badge holders.

### Access

- 2.6.34 There will be limited vehicular access to the expanded stadium. Anfield Road will be used to provide access into the car park beneath the podium; that route will also be used by the team coaches that will then be able to turn and manoeuvre safely within the site. Emergency and maintenance vehicles will also access the stadium beneath the podium from Anfield Road.
- 2.6.35 Access to the Centenary Stand car park will be from Walton Breck Road as existing.

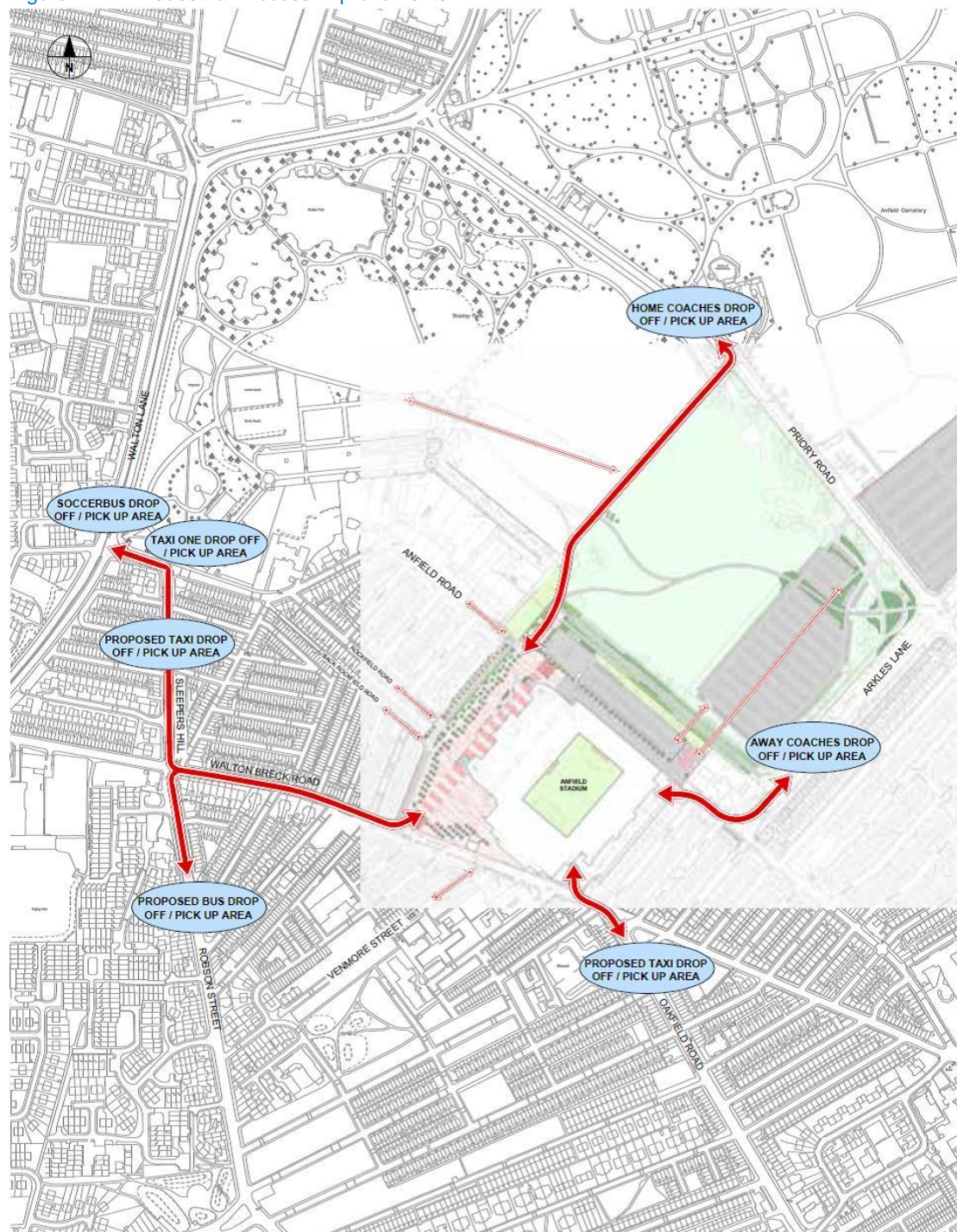


### Transport Strategy

- 2.6.36 A Transport Strategy (**Document C1/3**) [Ref 03] has been devised that aims to limit the number of private vehicles being used by people attending matches at the stadium.
- 2.6.37 Recent surveys confirm that the proportion of match-goers using private cars as their main mode of travel to games has decreased over recent years. This is likely to be as a result of the expansion and effective operation of the Football Match Parking Zone (FMPZ) paid for by the Club as part of their earlier planning permission for a new stadium in Stanley Park. In contrast, the proportion of persons travelling to the stadium by taxi has significantly increased, linked to Liverpool city centre as a key transport hub (bus and rail) and overnight stays in the city.
- 2.6.38 The Transport Strategy assumes that the effectiveness of the FMPZ will continue to discourage travel to the stadium by car, except for those that have a pre-booked ticket in one of the car parks operated by the Club. While the absolute number of car journeys is predicted to increase as a result of the development, the majority of match-goers will be diverted to parking locations outside the FMPZ.
- 2.6.39 In tandem with the control and management of the majority of car parking within the Anfield area, the Club has been in discussion with public transport and taxi operators. They have indicated both a willingness and ability to increase services to/from the area pre and post-match in order to at least maintain the proportion (increase the absolute number) of persons approaching the stadium by bus and taxi. This will be facilitated by carrying out match-day road closures in the area and identifying areas for holding buses and facilitating taxi pick-up post-match.
- 2.6.40 The use of public transport as a main mode of travel to the stadium will be widely publicised by the Club through their website, ticketing and programmes; and they will explore opportunities for providing integrated bus/public transport ticketing for all general admission and season ticket holders.
- 2.6.41 A signage strategy is proposed to direct supporters to key walking routes to public transport facilities post-match (express and scheduled bus services, Soccerbus, rail stations and taxi pick-up areas), as well as a safe walking route towards the city centre.
- 2.6.42 Some fans will continue to arrive at the stadium by organised coach. In order to facilitate maximum segregation for safety and security, coaches for away fans will be parked on Arkles Lane and the away fans seating area relocated to that end of the Anfield Road Stand. Home fans coaches will continue to be accommodated on Priory Road. The lay-by for home coaches will be extended to accommodate additional coaches that are anticipated as a result of the increased stadium capacity and LFC's publicity for sustainable travel modes.

- 2.6.43 The Transport Strategy (**Document C/1/3**) provides detail on the proposed transport operations.
- 2.6.44 The proposed pedestrian access improvements are illustrated in Figure 2.12.

Figure 2.12: Pedestrian Access Improvements



Source: KSS - Design and Access Statement (Document D1/1)

## **2.7 Phase 2 Anfield Road - Outline Planning Permission**

- 2.7.1 Phase 2 will involve outline planning permission to be sought for the redevelopment of the Anfield Road stand. The proposed expansion is to increase the capacity of the stand by a further c. 4,800 seats for general admission bringing the total capacity of the stand to 13,800 and the whole stadium to c. 58,500.
- 2.7.2 The expansion of the Anfield Road Stand and its external concourse area in Phase 2 will be on the land to the north of Anfield Road currently used by the Club as a fan zone and car park.
- 2.7.3 As with the Main Stand expansion, the extension of the Anfield Road Stand will take the form of a new structure erected to the rear of the existing stand with reconfiguration of seating and internal spaces to integrate the development. The expanded Anfield Road Stand will be approximately 108m in length, 46m wide and over 39m tall at its highest point.
- 2.7.4 Away fans will continue to be accommodated in the Anfield Road Stand, although they will be relocated to the eastern end of that stand where they have closest access to away coach parking on Arkles Lane.
- 2.7.5 An overall c. 102 car parking will be provided beneath the expanded stand, with c. 76 spaces for stadium parking and 20 spaces for commercial and residential parking.
- 2.7.6 The application proposes the stopping up of Anfield Road to create a widened concourse around the northern end of the stadium and enhanced security without the requirement for significant anti-terrorism bollards and infrastructure.
- 2.7.7 It is likely that the detailed architectural design and materials for the Anfield Road Stand expansion will reflect that of the Main Stand comprising a solid form clad in brick and red panels with an over-sailing roof supported by an external prismatic roof truss.
- 2.7.8 As part of the Phase 2 works, the temporary development set out in Phase 1 to the Anfield Road car park and fan zone would be replaced with an extended concourse that would provide level access to and circulation around the proposed Anfield Road Stand. Temporary Phase 1 planting in this area would be lifted and relocated in Phase 2.
- 2.7.9 The Family/Fan Zone to the eastern end of Anfield Road would be redesigned in response to the new stand but its function would remain as a key arrival point for visitors to the Stadium from both Stanley Park and Anfield Road.
- 2.7.10 The master plan for Phase 2 Anfield Stadium of the development is shown in Figure 2.13.



Figure 2.13: Master Plan of Phase 2



Source: KSS - Design and Access Statement (Document D1/1)

2.7.11 The cross section of the Anfield Road Stand is shown in Figure 2.14.

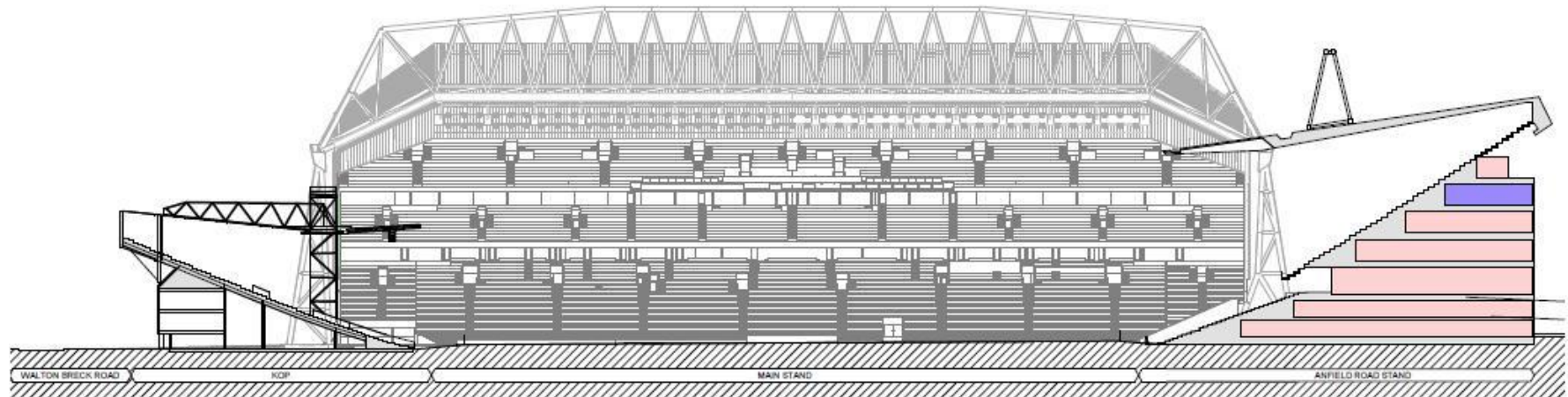
## 2.8 References

[Ref 01] - Design and Access Statement, KSS, 23 April 2014, document no D1/1

[Ref 02] - Liverpool Football Club Phase 1 Expansion Illustration Wider Masterplan, Planit-IE, April 2014,

[Ref 03] - Transport Strategy, Mott MacDonald, 2014, document no C1/3

Figure 2.14: Anfield Road Stand Section



Source: KSS - Design and Access Statement (Document D1/1)

## 3 Construction Methodology

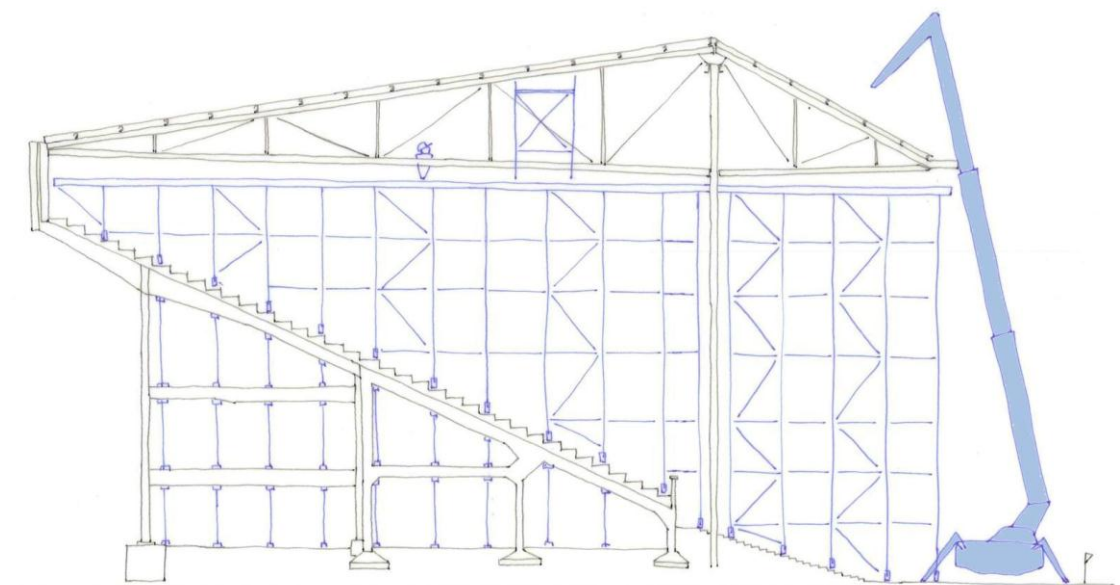
### 3.1 Outline construction strategy

- 3.1.1 The overall strategy is to construct the new stands to the rear of the existing enabling them to remain fully functional throughout the majority of the works, in particular during the football season. The more disruptive works will be carried out during the close season (mid-May to mid-July).
- 3.1.2 The precise method of construction and programme will be developed by the appointed Contractor responsible for delivering the works. The text that follows represents an outline scenario which has been used as the basis for the construction impact assessment. This text has been summarised from the Civil and Structural Stage C Report produced by SKM [Ref 01].

#### Demolition

- 3.1.3 The existing roof and upper 6 rows of the Main Stand need to be demolished. A lightweight crane (potentially a spider crane) would be required on the pitch side to assist with supporting and lowering dismantled elements. Components would be lowered by a crane onto a working platform, and then cut up into smaller sections before being lowered to the ground. The small sections would then be transported out of the stadium through access routes in the corners.
- 3.1.4 The roof demolition and means of access are detailed in Figure 3.1.

Figure 3.1: Roof Demolition: Means of Access and Spider Crane



Source: SKM – Civil and Structural Stage C Report (2013) [Ref 01]

### **Foundations and substructure**

- 3.1.5 Foundations for the new construction will be shallow concrete pads supported on the rock formation just below ground level. A pad foundation solution is proposed under the two towers that support the Main Stand roof truss as well as under the three principle vertical bracing positions. These pads are likely to be around 1.5m-2m deep.
- 3.1.6 A steel framed structure will support composite concrete floors in the stand, whilst steel raker beams will support precast concrete terracing.

### **Works to the Main Stand**

- 3.1.7 The new Main Stand would be constructed behind the existing stand to its full height, initially retaining an access strip between the two buildings in order to allow access for stadium operations and match day spectators. The new roof would include a long span truss over the existing stand which would be lifted into position by large cranes to sit on tall steel towers built at each end of the Main Stand adjacent to the Kop and Anfield Road Stands. Following this the remaining steelwork of the roof would be lifted into position and the roof cladding fixed to the structure.
- 3.1.8 Towards the end of the construction programme the access strip between the existing and new buildings would be in-filled with new floors and terracing, and the uppermost few terrace rows of the existing stand would be demolished. The existing roof structure would be demolished once the new roof is complete and facilities/equipment supported by the roof replicated in the new works. Internal and external works to the existing building would be completed during the construction programme to suit ongoing stadium operation requirements.

### **Roof construction**

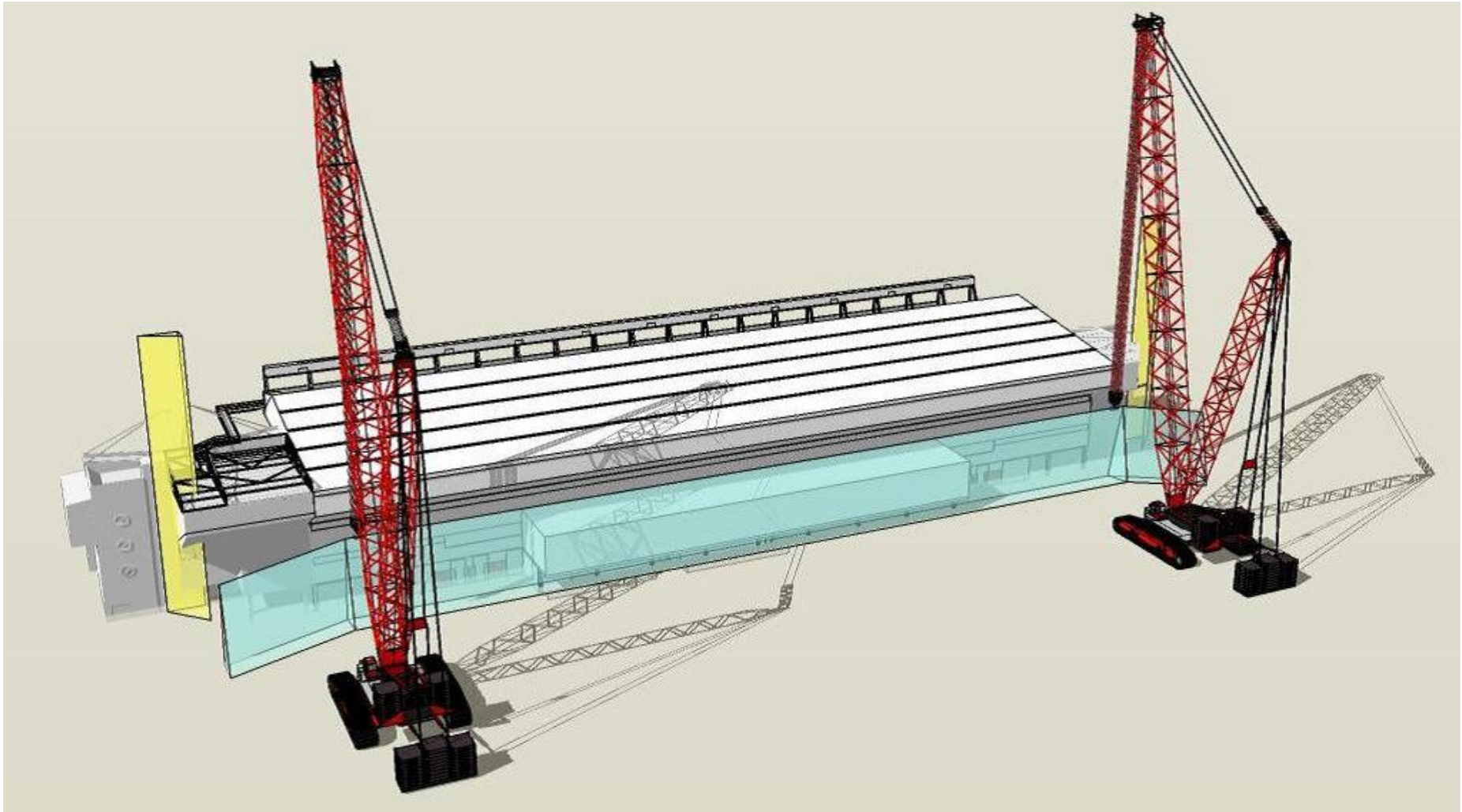
- 3.1.9 It is envisaged that the primary and secondary trusses will be prefabricated in welded sections which can be assembled using bolted connections on site. The prefabricated elements of the truss will be brought to site on standard low loader vehicles. In order to minimise the number of bolted connections on site, lengths of up to 20m may be required to be delivered to site, with load widths of up to 2.5m and heights of 4.5m. Layout and assembly areas will be required such that the individual elements can be laid out and assembled on the ground into components that are lifted into position. These layout and assembly areas will be located between the new stand and Alroy Road, and potentially on the Club's car park site on the other side of Anfield Road.
- 3.1.10 New steel tower structures supporting the roof will first be assembled on the ground and lifted into position by cranes. It is envisaged that the primary truss will be assembled to its full length in front of the new building, parallel to Alroy Road, using Mobile Elevating Working



Platforms (MEWP), mobile cranes and temporary towers to support it. Additional elements such as secondary truss stubs and gantries, as well as safety netting, will be fixed to the truss whilst it is at ground level. Once fully assembled the truss will be lifted onto the steel towers by two large crawler cranes at each end, one located on Anfield Road and another at the Anfield Plaza end of the site. A road closure is likely to be required for this operation.

- 3.1.11 The secondary trusses will be assembled on the ground and then paired up with bracing and ties, either on the site between the new stand and Alroy Road, or in the Club's car park across Anfield Road. Each pair of trusses, complete with safety netting, will be lifted into position in a planned sequence by a crane positioned in front of the new building. Members between each secondary truss pair will be lifted and fitted on an individual basis.
- 3.1.12 Roof construction is illustrated in Figure 3.2, depicting the primary truss erection.

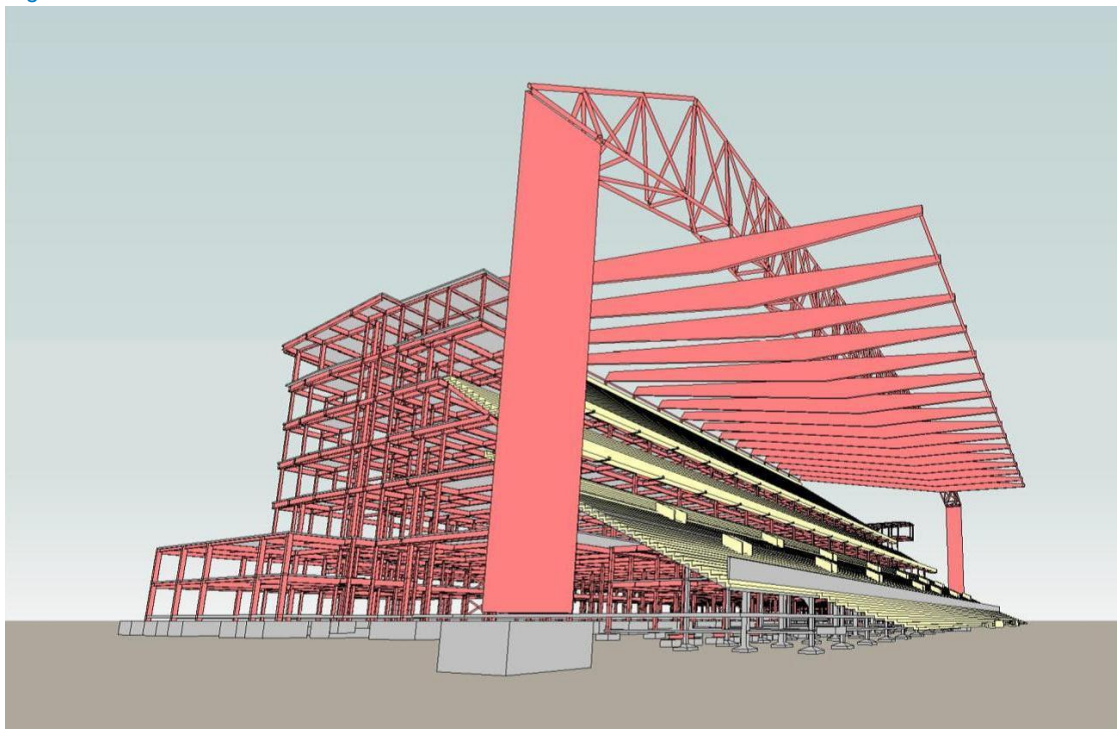
Figure 3.2: Primary Truss Erection



Source: SKM – Civil and Structural Stage C Report (2013) [Ref 01]

3.1.13 The Main Stand Construction is illustrated in Figure 3.3.

Figure 3.3: Main Stand construction



Source: SKM – Civil and Structural Stage C Report (2013) [Ref 01]

## 3.2 Construction programme

- 3.2.1 The development programme is based on a 20-month construction programme for the Main Stand. The construction programme is proposed to commence in January 2015 with completion aimed for August 2016.
- 3.2.2 The Main Contractor will produce a detailed Construction Programme that identifies activity dates and durations, dependencies, constraints, float and the critical path for pre-construction and construction phases.
- 3.2.3 The objective is to maintain operation and seating capacity of the existing Main Stand throughout most of the construction programme.
- 3.2.4 Table 3.1 summarises the activities that may be carried out in Close Season and Mid-Season.

**Table 3.1:** Key construction activities (subject to review by appointed Contractor)

Activity	Programme
Foundations and substructure	Mid-season to Close of Season 1*
Roof construction	Primary truss erection Close of Season 1* Secondary elements erected mid-season
Seating tier demolition	Mid-season to Close of Season 2*
Works to the Main Stand	Mid-season to Close of Season 2*
Existing roof demolition	Close of Season 2*

\* period between approximately mid-May until mid-July

Source: SKM – Civil and Structural Stage C Report (2013)

### 3.3 Construction of Anfield Road Stand

- 3.3.1 Outline proposals for the building and structure is envisaged to be similar to the Main Stand. The stand will feature a steel frame with composite slabs, supported on pad foundations. The roof will share a similar design to the Main Stand, with a long span truss supported on steel towers. At present it is expected that the Anfield Road Stand will be a separate structure to the Main Stand.
- 3.3.2 The design and construction of the Anfield Road Stand will have similar challenges to that of the Main Stand. The new structure will be built immediately behind and around the existing stand, which will need to remain in operation throughout construction. These challenges will be explored in detail in the development of the design.
- 3.3.3 The construction programme for the Anfield Road Stand is currently unknown however it is anticipated to follow a similar or slightly shorter duration to that of the Main Stand.

### 3.4 References

[Ref 01] - Civil and Structural Stage C Report, SKM, January 2014, document no. UN12544 R02

## 4 Policy Context

### 4.1 Planning Policy

- 4.1.1 Planning policy context comprises statutory and non-statutory policies and strategies. Planning policy is contained in the NPPF and the associated PPG.
- 4.1.2 The relevant documents of the adopted development plan comprise the Liverpool Unitary Development Plan (UDP) and the Merseyside and Halton Waste Management Local Plan. Emerging development plan documents are also relevant, comprising the Liverpool Local Plan (LLP) and its supporting documents.
- 4.1.3 There are several other reports, strategies and guidance that are relevant to the development, including the Anfield SRF.
- 4.1.4 These relevant policy documents and other sources have been considered and have informed the ES for the expanded stadium and associated works.
- 4.1.5 A summary of the key documents considered in the ES is set out below.
- 4.1.6 Further detail on the relevant policy context for the development is contained in the Planning Statement.

#### **National Planning Policy Framework**

- 4.1.7 The Framework sets out the Government's planning policies for England and how these are expected to be applied. It sets out the requirements for the planning system to the extent that it is relevant, proportionate and necessary to do so. The Framework provides guidance for the local people and the associated local authorities to produce their own distinctive local and neighbourhood plans that reflect the needs and priorities of their communities, in line with the Government's planning system aspirations.
- 4.1.8 The purpose of the planning system is to contribute to the achievement of sustainable development. The framework sets out three dimensions to sustainable development, economic, social and environmental.
- 4.1.9 In Paragraph 17, the Framework sets out twelve core land-use planning principles that should underpin both plan-making and decision-taking. The relevant principles are that planning should:
- Be genuinely 'plan-led'; development plans should be kept up-to-date and provide a practical framework within which decisions can be made;
  - Be a creative exercise in finding ways to enhance and improve the places in which people live their lives;
  - Pro-actively drive and support sustainable economic development

- Always seek to secure high quality design and good standards of amenity for existing and future occupiers of land and buildings;
- Support the transition to a low carbon future;
- Encourage the effective use of land by re-using previously developed land that is not of high environmental value;
- Promote mixed-use developments;
- Conserve heritage assets in a manner appropriate to their significance;
- Actively manage patterns of growth to make the fullest use of public transport, walking and cycling and focus significant development in sustainable locations; and
- Take account of local strategies to improve health, social and cultural well-being.

- 4.1.10 The Framework outlines the status of development plans, whereby application for planning permission must be determined in accordance with the development plans. Development plans should be the starting point for decision making unless material considerations indicate otherwise. Emerging development plans may also be afforded weight in the decision making process according to their stage in preparation, and the extent of unresolved objections to them.
- 4.1.11 Specific advice within the Framework relevant to particular issues addressed within this ES is addressed within each of the relevant ES chapters.

### **National Planning Practice Guidance**

- 4.1.12 NPPG sets out the Government guidance which underpins the policies within the Framework. The NPPG was published in March 2014 and it replaces the plethora of existing planning practice guidance which existed previously.
- 4.1.13 The guidance deals with a wide range of planning matters and principles including definitions, links to related policies and legislation, and 'how to' guidance for dealing with specific issues. It provides guidance, inter alia, in respect of the following issues that are of relevance to this application proposal:
- Conserving and enhancing the historic environment;
  - The importance of good design;
  - Environmental impact assessment;
  - Climate change;
  - Noise; and
  - Air Quality.

### **Development Plan**

- 4.1.14 The development plan comprises the adopted Liverpool UDP and the Joint Merseyside and Halton Waste Local Plan.

#### Liverpool UDP (November 2002)

- 4.1.15 Liverpool UDP contains general policies and objectives and site specific policies that are relevant to consideration of the development proposals. The plan was adopted in November 2002. Policies contained will continue to provide the local planning framework within the city until such time as they are replaced by the emerging local plan.
- 4.1.16 The entire application site is identified on the proposals map as part of a 'primarily residential area' where general development control considerations apply. There are no site-specific allocations relevant to the application site. The land immediately to the north (Stanley Park) is a designated open space (Policy OE11).
- 4.1.17 The strategic objectives and policies of the UDP have been set within the context of the economic, social and environmental conditions that effect Liverpool and the corporate programmes designed to address issues arising from them. This is set out in the Corporate Policy Context chapter of the plan, which refers to other (non-planning) policy strategies and initiatives across the city, and how the UDP will contribute to the holistic approach for addressing key issues such as population loss, high unemployment and declining environmental quality.
- 4.1.18 The overriding objective of the UDP which is for urban regeneration, are refined into 3 key themes: economic regeneration, environmental improvement and reduction of inequality.
- 4.1.19 The relevant policies within the UDP comprise the following:
- Leisure development (policy E9);
  - Football Clubs and Tourism (policy C7);
  - Residential Amenity (policy H4);
  - Design quality (policies HD18, 20, 22 and 28);
  - Preserving the setting of the historic environment (policies HD1, 2 and 5);
  - Historic landscape protection and enhancement (policy HD15);
  - Ecology and protection of habitats (policies OE5 and 7);
  - Traffic and parking (policies T7, 8 and 16); and
  - Green space (policies OE11 and OE12).

#### **Joint Merseyside and Halton Waste Local Plan**

- 4.1.20 The Waste Local Plan was adopted in July 2013. It contains a number of general policies that are relevant to most forms of development including: ensuring that construction and demolition implements measures to achieve the efficient use of resources (Policy WM8); and development incorporates sustainable waste management principles into proposals (Policy WM9).



## Other local planning policy documents

### Emerging local plan

- 4.1.21 LCC is in the process of preparing a new Local Plan for the city based on a draft Core Strategy produced in 2012.
- 4.1.22 The draft Core Strategy placed considerable emphasis on North Liverpool as a focus for new development and regeneration on a transformational scale. The overall Vision statement set out an aim to fully exploit opportunities for economic development in North Liverpool and improve the employment prospects for residents living within the urban core. More specifically, draft Strategic Policy 3, which refers to delivering economic growth states:
- 4.1.23 *‘The football clubs of Everton and Liverpool contribute significantly to the City’s economy and proposals for the sustainable development or redevelopment of these clubs will be supported where they are of appropriate scale, and subject to other relevant planning policies.’*
- 4.1.24 The Core Strategy sets out other draft policies, including:
- Sustainable Development Principles (SP1);
  - Place Making and Design Principles (SP23);
  - Historic Environment (SP24);
  - Protecting and Enhancing Green Infrastructure (SP26);
  - Sustainable Growth (SP31);
  - Accessibility and Managing Travel Demand (SP34); and
  - Maximising Social Inclusion and Equal Opportunities (SP35).

## Anfield Spatial Regeneration Framework

- 4.1.25 In April 2014 LCC adopted a SRF Plan for the Anfield area. The plan, which has been adopted as a SPD, sets out guidance and proposals for the comprehensive, coordinated and planned approach to secure regeneration of the Anfield area.
- 4.1.26 The Anfield SRF sets out a number of general parameters and guidance for development within the SRF area relating to its key principles and specific matters including: design quality, amenity and community safety, improvements to the public realm and sustainable transport [SRF1 – SRF 9]. It provides in principle support for expansion of the Anfield stadium and includes specific parameters for that development [SRF14].

## 5 Alternatives

- 5.1.1 Paragraph 4 to Part II of Schedule 4 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2011 (the EIA Regulations) requires ‘an outline of the main alternatives studied by the applicant or appellant and an indication of the main reasons for the choice made, taking into account the environmental effects.’

### 5.2 Local alternatives

- 5.2.1 Since 2003, LFC has submitted two separate planning applications [Ref 01] for the development of a new Anfield Stadium. Consent was granted on both occasions and a material start was made on site for the earlier development.
- 5.2.2 Prior to preparing and submitting the planning applications for a new stadium, the Club undertook a comprehensive alternatives sites assessment. That assessment confirmed that retaining LFC in Anfield would offer the greatest regeneration benefits to the city; conversely, relocating from Anfield would have a seriously detrimental impact on the local area. At that time, there was no scope to extend the existing stadium and the analysis led to the formal identification of Stanley Park as the optimum location to accommodate the enlarged ground. The worldwide economic recession has significantly reduced the availability of finance to fund large development projects leading to reappraisal of the financial viability of many. In 2010, LFC changed ownership and the new owners commenced a detailed review of the options for providing increased spectator capacity in light of the universal limitations on the availability of finance for the construction of a new stadium.
- 5.2.3 The Club’s review coincided with LCC’s own review of its proposals for regeneration of the Anfield area following the Government’s decision to remove funding for the Housing Market Renewal (HMRI) programme. This culminated in an announcement in October 2012 that LCC had formed a partnership with LFC and Your Housing Group to deliver a regeneration programme for Anfield based on the potential arising from the Club’s preference to remain at and expand the existing stadium.
- 5.2.4 LCC subsequently carried out a public consultation on the Anfield Project, before proceeding to prepare the Anfield SRF, which supports, in principle, the expansion of the stadium and the assembly of land to facilitate the development, recognising that this will have wider regenerative benefits for the Anfield area.
- 5.2.5 While the construction of a new stadium in Stanley Park remains a potential option for the Club, this has not been considered in this ES as an alternative that is likely to be delivered in the short term; certainly within the timescale for delivering the stadium expansion.
- 5.2.6 The two approaches that have been considered as part of this ES process are:
- Do-nothing (i.e. no expansion or works to the stadium); and
  - Stadium expansion (the subject of this ES).

### 5.3 Do Nothing

- 5.3.1 The do-nothing approach would mean no works would be carried out to the Anfield Stadium, and as a result the environmental effects associated with the proposed development (and assessed in this ES) would be avoided. However, a consequence of there being no works to the stadium, could limit the growth of the football club, and its sustained overall competitiveness. This, in turn, is likely to have an adverse impact on the timescale for delivery of wider regeneration of the Anfield area and reduce the positive economic benefits that the success of the Club brings to the City. 'Do-nothing' is not a feasible option for the Club.
- 5.3.2 The 'do-nothing' scenario would prevent the socio-economic benefits associated with the proposed stadium development from happening, including job creation, reduction in unemployment and the change in value and volume of the visitor economy. Such socio-economic benefits are important for the regeneration of the area.
- 5.3.3 The deficiencies of the stadium impact upon the ability, and hence the potential revenue of the Club from hosting major international and European games. However, it is also a lost opportunity for the City in terms that a major international sporting event will attract visitors, and spending, into the Liverpool economy.
- 5.3.4 There are a number of constraints to the operational efficiency of the existing stadium, largely as a result of lack of space and the age of parts of the ground particularly the Main Stand. Key issues are set out below:
- Inadequate corporate and hospitality accommodation in stands.
  - Failure to meet minimum ground size (50,000 capacity for a 5\* venue) and minimum hospitality requirements.
  - Lack of first rate media facilities in terms of camera positions, working places and TV studios. The stadium falls considerably below the standards expected and the provision of ad hoc facilities to meet requirements as best as the Club is able puts increased pressure on the existing constrained space within the stands.
  - Advertising space is inadequate.
  - Pitch dimensions and 'run-off' area are too small in all dimensions (up to 4m deficiency).
  - Cramped and reduced quality changing rooms for players and match officials. Additional facilities required to meet minimum standard of accommodation.
  - Ancillary facilities such as doctors' room, physiotherapy and drug testing do not meet minimum dimensions required by UEFA or the Premier League.
  - Pitch-side team accommodation and players tunnel entrance are inadequate and do not provide direct, private and protected access for team and referees to the pitch and into the stadium. The narrow and stepped (up and down) access to the pitch creates significant difficulties for stretcher bearers.
  - Lack of office accommodation including: UEFA working space, female match officials' room, a private room for match officials, ball boys/girls room, mess room, technical club working room and staff meeting room.

- 5.3.5 The developments over the years have expanded the stadium almost to the furthest site extents and any future expansion has been limited by the adjacent properties and boundaries which constrain the site. The opportunity opened up by the partnership of LCC, the Club and Your Housing, resulting in land assembly and localised demolition has paved the way for an expansion of the ground that not only has increased capacity and provision of hospitality spaces but also a significantly enhanced public realm and setting of the stadium offering improved environment for local residents and visitors to the area.

## **5.4 Design evolution**

- 5.4.1 The proposed Anfield Stadium design development has been driven chiefly by the target stadium capacity of 60,000, whilst maintaining existing capacity during construction. This has involved establishing the optimum designs for new seating tiers, determining the necessary levels of front and back of house space for general admission concourses and premium seat hospitality facilities and back of house operation facilities in the right locations and at the most appropriate floor levels to maximise operational efficiencies.
- 5.4.2 Alongside this, a key influence to the evolution of the stadium design has been through on-going dialogue with LFC's in house team, consultation with LCC Planning, Heritage, and Transport Teams, the Places Matter! Design Panel review and the Hillsborough Families Support Group.

## **5.5 References**

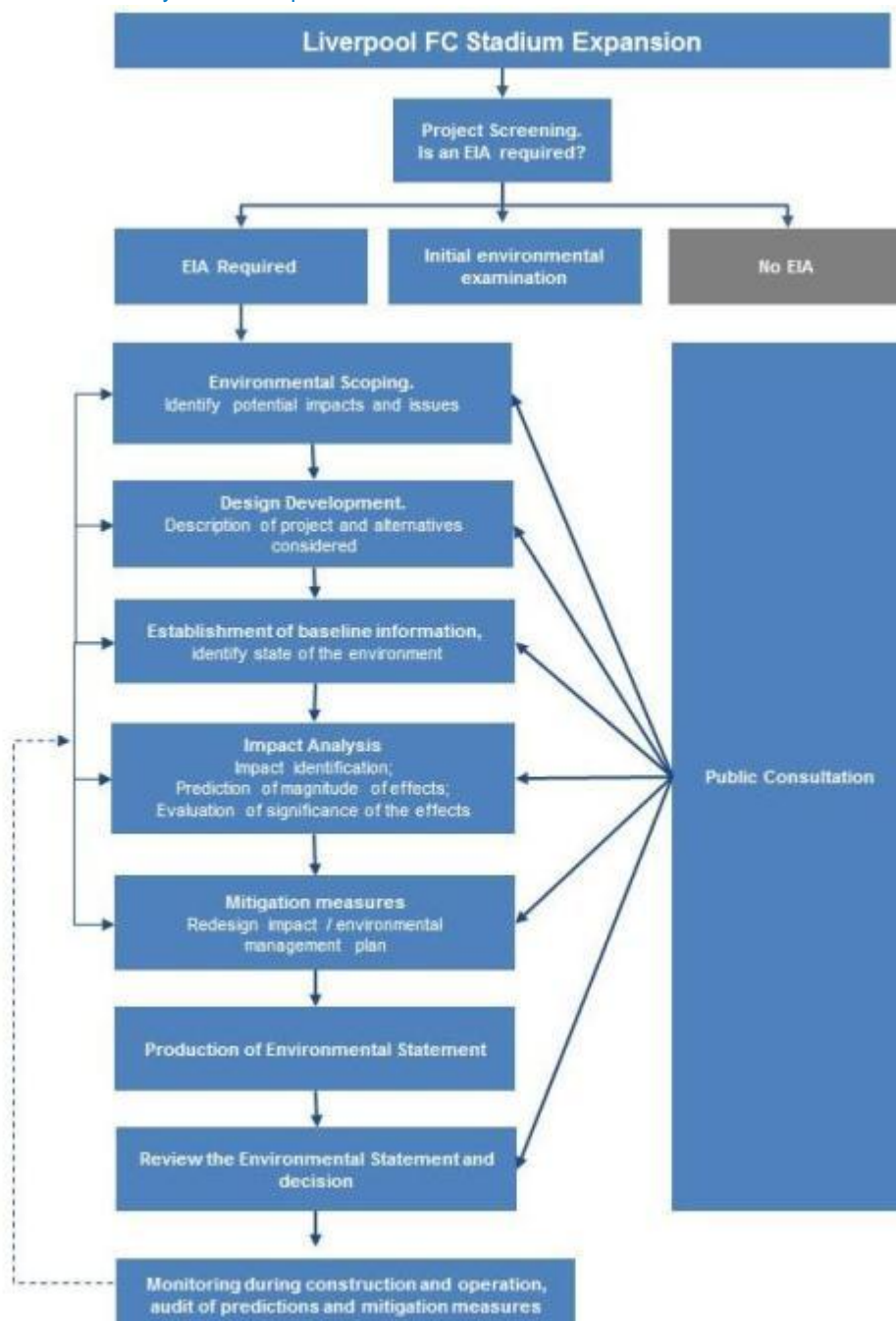
[Ref 01] - Planning Statement, Turley, 2014

## 6 EIA Methodology

### 6.1 The EIA process

- 6.1.1 This ES has been produced in line with the EIA Regulations. The Regulations implement European Directive 85/337/EEC [Ref 01] as amended by Directive 97/11/EC, Directive 2003/35/EC and Directive 2009/31/EC and set out the procedures to determine the significance of impacts of certain projects on the environment.
- 6.1.2 EIA is a structured process to identify the potential impacts of a development proposal and the likely residual impacts that are predicted to be significant post mitigation. These are then reported in the ES which is submitted in support of the planning application. The ES also provides stakeholders and the public with a basis on which to make representations to the local planning authority on the environmental impacts associated with the proposed development.
- 6.1.3 A summary of the EIA process is shown in Figure 6.1.

Figure 6.1: Summary of the EIA process



## 6.2 The EIA requirements

- 6.2.1 The process of EIA effectively starts at the screening stage, when it is decided whether a project requires an EIA under Schedules to the EIA Regulations. These Regulations implemented the requirements of EC Directive 85/337/EEC on the Assessment of the Effects of Certain Public and Private Projects on the Environment, as amended by Directive 97/11/EC (“the EIA Directive”).
- 6.2.2 Following discussions with the Development Control team at LCC, it has been agreed that the proposed development falls within the scope of Schedule 2 10(b) of the Town and Country Planning (EIA) Regulations 2011 for urban development projects, including sports stadiums, and that an EIA is required in respect of the proposal. Following this agreement, it was requested that LCC give a formal scoping option for the EIA.
- 6.2.3 An ES has been prepared in conjunction with transportation and economic studies and is informed by them. The ES and the studies support the planning application.
- 6.2.4 Regulation 2(1) of the EIA Regulations defines an ES as a statement that includes such information “referred to in Part I of Schedule 4 as is reasonably required to assess the environmental effects of the development which an applicant can, having regard to current knowledge and methods of assessment, reasonably be required to compile, but that includes at least the information in Part II of Schedule 4” to the Regulations. Schedule 4 Part II lists the following information:
- “A description of the project comprising information on the site, design and size of the development;
  - A description of the measures envisaged in order to avoid, reduce, and if possible, remedy significant adverse effects;
  - The data required to identify and assess the main effects which the development is likely to have on the environment;
  - An outline of the main alternatives studied by the applicant and an indication of the main reasons for his choice, taking into account the environmental effects; and
  - A non-technical summary of the information provided under the above headings.”
- 6.2.5 The ES for Anfield Stadium Expansion has been prepared in accordance with the Regulations and includes all of the information required by the Regulations, as set out above.

## 6.3 Scoping and consultation

### Determination of scope

- 6.3.1 The definition of the scope of the EIA is one of the most important parts of the process in that it sets out the context for the detailed approach that follows. A scoping exercise was carried



out for each of the Anfield Stadium Expansion environmental topics in December 2013 [Ref 02]

- 6.3.2 Scoping comprises three main elements: spatial, temporal and technical scope as described below:

#### Spatial scope

- 6.3.3 The spatial scope of the assessment is defined as the physical area over which changes to the environment are likely to occur as a result of the development i.e. the study area. The study area will vary spatially and from topic to topic such as impacts of noise or visual intrusion may be experienced at some distance from the source of impact. The spatial scope is a function of:
- The physical extent of the development taking into account temporary and permanent land requirements; and
  - The nature of the baseline environment and the manner in which impacts are propagated.

- 6.3.4 The spatial scope for each environmental topic is described in the individual specialist technical chapters (see Volume I Chapters 7-19 and Volume II, Part 1, 2 and Part 3).

#### Temporal scope

- 6.3.5 The latest programme of works expects construction on the Main Stand to commence in January 2015, to be completed by August 2016. The Main Stand will remain in operation through construction, with critical construction activities during the two Close Seasons within this period. Further details relating to an indicative construction programme are contained within Section 3.2.

#### Technical scope

- 6.3.6 The range of environmental topics that is addressed as part of the EIA is referred to as its technical scope.
- 6.3.7 Schedule 4 of the EIA Regulations identifies aspects of the environment which should be considered, namely population (human beings), fauna, flora, soil, water, air, climatic factors, material assets (including architectural and archaeological heritage), landscape and the interactions between these factors. This list was refined and adapted with reference to good EIA practice, relative to sports stadia developments. The refined list took full account of the matters identified in Schedule 4 of the EIA Regulations and considered:
- Air quality;
  - Noise and vibration;
  - Archaeology and Heritage;
  - Townscape, Landscape and Visual;
  - Ecology;

- Geology and Soils;
- Microclimate (Wind);
- Light Pollution;
- Sunlight and Shading;
- Socio-economic;
- Transport;
- TV Reception and Telecommunications;
- Utilities;
- Waste and resources; and
- Flood risk and water resources.

6.3.8 As part of the scoping exercise, consideration was given to which of the above environmental aspects would be included in the scope of the assessment ('scoped in'). At the same time consideration was given to whether any might be wholly or partially omitted from the assessment ('scoped out') on the grounds that they would not give rise to, or experience, significant impacts. Table 6.1 presents the recommendations from the scoping exercise:

Table 6.1: EIA topic categories – scoping recommendations

Topics 'scoped in'	Topics 'scoped out'
Archaeology and Heritage	Utilities
Noise and vibration	Waste and resources
Air quality	
Townscape and visual	
Microclimate (wind)	
Flood risk and water resources	
Ecology	
Geology and Soils	
Socio-economic	
TV reception and telecoms	
Light pollution	
Sunlight/shading	
Transport	

6.3.9 No significant impacts are anticipated to utilities and waste and resources. These aspects have therefore been scoped out for further assessment. The reasons for scoping these out of the EIA are summarised below:

- **Utilities:** Effect on television reception is covered elsewhere in Chapter 12 of this report, and it is considered that all other impacts on utilities would be sufficiently minor. The utilities strategy is fully considered within the utilities statement which confirms that there will not be any significant effects in relation to utilities. As such, a full EIA chapter on utilities is not required and has been scoped out of the ES with the agreement of LCC.

- **Waste and Resources** – The Anfield Stadium Expansion contractor will be required to compile a construction phase Site Waste Management Plan (SWMP) as required under the SWMP Regulations 2008. As of the 1st December 2013 these Regulations have been revoked however as the proposed development commenced development before the repeal date (i.e. design), it is deemed that the Regulations still apply. In terms of construction policy, the contractor will be required to demonstrate an environmental materials policy used for sourcing of construction materials to be utilised on site, that the amount of non-hazardous construction waste generated on site by the development is the same as or better than good or best practice levels, and that a significant majority of non-hazardous construction waste generated by the development will be diverted from landfill and reused or recycled. Given the management strategies described above relating to both construction and operational waste streams it is considered that a full EIA chapter on waste and resources is not required and thus it is scoped out of the ES. Issues relating to excavated ground and elements of the demolition are covered in Chapter 17 on Geology and Soils.

## 6.4 Assessment Methodology

### Assessment criteria

- 6.4.1 For the purposes of this report, the term "significant effect" is an effect that (either in isolation or combination with others) would, in the opinion of the EIA team, having regard to relevant criteria, be taken into account in the decision-making process.
- 6.4.2 Environmental topic assessments have been carried out according to the Matrix for Assessment of Effects, shown in Table 6.2.

Table 6.2: Matrix for Assessment of Significance of Effects

Magnitude of Effect	Sensitivity of Receptors			
	Negligible	Low	Medium	High
Neutral	Insignificant	Insignificant	Insignificant	Insignificant
Minor	Insignificant	Insignificant	Minor	Minor
Moderate	Insignificant	Minor	Moderate	Moderate
Major	Insignificant	Minor	Moderate	Major

- 6.4.3 The potential impact of an environmental topic identified has been assessed in terms of its individual magnitude and combined with an evaluation of the sensitivity of the receiving environment to that potential impact. The definitions of magnitude is provided in Table 6.3:

Table 6.3: Assessment of Magnitude

Significance Criteria	Definition
Major Adverse / Beneficial Effect	Substantial deterioration / improvement compared to the current scenario e.g. high impact on a regionally or nationally importance resource.
Moderate Adverse / Beneficial Effect	Noticeable deterioration / improvement compared to the current scenario e.g. moderate to high impact on a locally important resources or low impact on a regionally or nationally important resource.
Minor Adverse / Beneficial Effect	Slight deterioration / improvement compared to the current scenario e.g. low impact on a locally important resource.
Neutral	No noticeable alterations to the current scenario and impacts are negligible.

- 6.4.4 It should be noted that there are certain environmental disciplines where predetermined thresholds for identifying the significance of effects already exist (e.g. air quality). Such predetermined thresholds are predominantly for impacts that can be measured quantitatively and have generally been developed through the adoption of recognised industry standards, EIA best practice and professional judgement. Where these environmental disciplines deviate from using the assessment of magnitude shown in the table above this is made clear within the specific assessment chapters.

### Baseline context

- 6.4.5 Baseline information, that is to say the conditions that would prevail in the absence of the construction and operation of the development, have been used in accordance with the EIA Regulations, the baseline is updated to 'recognise changes to conditions at the site and conditions projected forward to take account of all committed development' and 'taking place over time without specific intervention'.
- 6.4.6 The baseline for each environmental topic is described in the individual specialist technical chapter (see chapters 7 – 19 of this report).

### Mitigation

#### Incorporated Mitigation

- 6.4.7 An ES should also include a description of the measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment. The identification of such measures is an iterative process which has been undertaken in parallel with the design to aid the incorporation of measures into the design during project development. This early adoption of appropriate mitigation will help reduce significant environmental effects to a practicable minimum.
- 6.4.8 Where significant effects are identified as part of the EIA, mitigation measures will be proposed to avoid or reduce these effects. Where measures are integral to the design,

mitigation will be termed “incorporated mitigation”. Where significant effects still remain after application of incorporated mitigation, they are termed significant residual effects and such effects will be reported within the ES.

- 6.4.9 In addition to the mitigation identified as part of this ES, the selected Construction Contractor will be obliged to follow best practice construction techniques. This includes the production of a Construction Environmental Management Plan (CEMP) and Site Waste Management Plan (SWMP).
- 6.4.10 These documents will present mitigation measures adopted to address environmental aspects affecting the interests of residents, businesses, all road users and the general public in the vicinity of the works.

#### Supplementary Mitigation

- 6.4.11 Any further mitigation measures suggested which are not incorporated into the design of the project for which permission is being sought, are termed “supplementary mitigation”. Supplementary mitigation can also take the form of enhancement measures which aim to improve existing baseline environmental conditions. These further supplementary mitigation measures may be discussed in the ES as activities which could be potentially undertaken but does not commit the developer to undertaking them. They will not form part of the assessment process (therefore do not reduce the level of an effect in terms of the assessment), and should not be considered as part of the application.

#### Residual significant effects

- 6.4.12 Residual significant effects (i.e. the effects of the development once mitigation has been applied, if indeed it can be applied) are classified as not significant or still significant (albeit reduced), as appropriate for each environmental aspect. In line with the EIA Regulations these effects are reported within this ES to assist in the decision making process.

### 6.5 Assumptions and limitations

- 6.5.1 A key assumption that is made in this ES is that residential terraced housing located on both sides of Lothair Road, the east side of Alroy Road and some properties at the end of Rockfield Road falling within the red line boundary of the project will be demolished under a separate planning process being pursued by LCC; it is likely that a number of those dwellings will be demolished before the planning application for the stadium expansion is determined. Any environmental impacts associated with the demolition of the terraced housing have not been accounted for under this ES and the baseline conditions assume that all of those houses have been demolished.

- 6.5.2 Assuming that the terraced houses to be demolished are part of the wider Anfield SRF, any environmental impacts associated with the demolition will be accounted as part of the associated cumulative effects for the proposed projects under the Anfield SRF, as discussed in the cumulative assessment for the relevant ES chapters under this ES.
- 6.5.3 Any other assumptions that are specific to a technical environmental aspect are outlined in the associated chapter.

## **6.6 Combined and cumulative effects**

- 6.6.1 Cumulative effects are those that may result from the combination of past, present or future actions of existing or planned activities in a project's zone of influence (Zol). While a single activity may itself result in an insignificant impact, it may, when combined with other impacts (significant or insignificant) in the same geographical area and occurring at the same time, result in a cumulative effect that is significant.
- 6.6.2 The Anfield SRF considers the redevelopment of the Anfield stadium as part of a vision for regeneration in the area. The SRF also includes Anfield Village & Rockfield housing refurbishment; new build housing-led regeneration south of Walton Breck Road; the Walton Breck Road 'High Street' corridor improvements; new public space and Village Square development (training hotel and offices); and completion of the restoration of Stanley Park east of Mill Lane.
- 6.6.3 The main components and principles of the SRF include:
- New housing and refurbishment of existing housing stock in the Anfield Village and Rockfield neighbourhood with varied size, type, quality and tenure;
  - The proposed expanded Anfield Stadium to maximise the economic benefits of Liverpool FC (the proposed development for this ES);
  - Sustain and enhance Stanley Park and Anfield Cemetery with the integration of the adjoining areas, providing pedestrian links from Stanley Park and Walton Breck Road;
  - The improvement and reinterpretation of historic routes through the park, such as Dahlia Walk, Mill Lane and the Serpentine Walk;
  - The potential to provide some appropriate uses east of Mill Lane to increase activity in Stanley Park;
  - A revitalised Walton Breck Road 'high street' led by the development of land to deliver new commercial, community, leisure and residential uses on referred to as 'Anfield Square' to the south –east of the stadium and land south of Walton Breck Road;
  - Recognition of the redevelopment potential of the former Anfield Comprehensive School for education or housing purposes, and the value of that site for match day car parking;
  - The development of land at the southern end of Mill Lane to provide residential or community uses ensuring further activity and surveillance in the Park;
  - Consolidation and rationalisation of Stanley Park car park;
  - New and enhanced public realm and green infrastructure;



- Commercial investment and job opportunities for local people; and
- Management of match day and non-match day traffic and people movement through a highway network arrangement.

6.6.4 As detailed in the SRF Plan adopted in April 2014 [Ref 03], the proposed development sites for the regeneration strategy are as follows:

#### Anfield Square Development Site

6.6.5 Anfield Square Development Site is the land north of Walton Breck Road and west of the stadium. The site is currently occupied by vacant land and terraced housing that the LCC is in the process of acquiring for clearance following the launch of community approved plans for Anfield Village in 2012.

#### Land South of Walton Breck Road

6.6.6 This site is located to the south of the stadium and comprises shops and terrace houses along the frontage of Walton Breck Road. This is recognised as a key opportunity site for transformation of the High Street which has potential to accommodate new commercial development within the vicinity of the stadium.

#### Former Anfield Comprehensive Site

6.6.7 The former school site is at the northern edge of Stanley Park and is currently a vacant site. At present, the site provides additional match day car-parking. It has been identified that the site and the adjacent petrol filling station (should it become available) offers the opportunity for potential development.

#### Mill Lane/Anfield

6.6.8 Located on the southern edge of Stanley Park and northerly edge of the stadium, the site comprises unused brownfield land. The site offers the potential to link the developments between the formal Rose Walk Terraces and the eastern side of Stanley Park.

6.6.9 A plan for the proposed opportunity sites within the SRF is shown in Figure 6.2.

Figure 6.2: Opportunity Sites Plan within the SRF



Source: Anfield Spatial Regeneration Framework (2014)

6.6.10 Chapter 20 Cumulative Effects provides concise descriptions of potential uses for the opportunity sites listed above.

## 6.7 Consultation

6.7.1 Consultation on the technical methodology behind the assessment of significant effects is an important part of the EIA process. The objectives of the stakeholder consultation process is to

ensure a responsible and transparent approach to the development, that gives consideration of stakeholder input in the decision making process as early as possible. Ultimately this leads to an understanding where there are areas of disagreement or discrepancy for early review and resolution to reduce the likelihood of valid technical or other objections being raised.

6.7.2 Consultation has been carried out with a range of both statutory and non-statutory bodies, including (the following):

- LCC, (various departments);
- Environment Agency;
- English Heritage;
- Natural England;
- Wildlife Trust;
- Places Matter;
- United Utilities; and
- Community Groups.

6.7.3 Under the UK Environmental Information Regulations (2004), public bodies must make environmental information available to any person who requests it. In cases where a developer is preparing an ES, further regulations detail their provision. Once a developer has informed the LPA of the intention to submit an ES, the authority must inform the consultation bodies, and remind them of their obligation to make available, if requested, any relevant information in their possession. The LPA must also notify the developer of the names and addresses of the bodies to which they have sent the notice.

6.7.4 In the process of preparing the Anfield SRF LCC carried out an extensive public consultation exercise was carried out under the banner of 'The Anfield Project'. Consultation included the following stakeholders:

- The local community and businesses;
- Your Housing Group;
- Liverpool Football Club;
- Merseytravel;
- English Heritage;
- Natural England;
- Environment Agency; and
- Places Matter.

6.7.5 The information from the SRF public consultation was used to inform elements of the design for the stadium expansion.

6.7.6 A Statement of Community Engagement (**Document H1/1**) has been prepared as part of the planning application [Ref 04].

## 6.8 Summary of Scoping Opinion

- 6.8.1 In formulating their Scoping Opinion, the following organisations were consulted by LCC:
- Highways, Environmental Health and Design departments of Liverpool City Council (LCC);
  - English Heritage (EH);
  - Environment Agency (EA); and
  - Natural England (NE).
- 6.8.2 A summary of scoping responses and issues raised by the consultees during the formal Scoping Opinion is presented in Table 6.4.

Table 6.4: Summary of scoping response

Source	Environmental topic	Scoping Response	Comment addressed
English Heritage	Built Heritage	The potential impacts seem to relate only to potential archaeological impacts rather than wider impacts on the setting of non-archaeological heritage assets and it will be important that the document acknowledges the need to consider all potential impacts on the significance of heritage assets.  Recommends that any archaeological impacts are considered with the Merseyside Historic Environment Team and in relation to the Historic Environment Record.  The baseline should clearly describe the significance of the heritage assets to be considered. In this respect the assessment methodology should describe the way in which significance will be attributed.	ES Chapter 7
	Townscape, Landscape and Visual	Anfield Cemetery should also be referred to as a key receptor.  The key issue from an historic environment perspective will be the impact on 'significance' as opposed to the general impact on townscape character.  In considering the visual impacts on significance our guide Seeing The History In The View could offer a helpful approach. It also provides technical advice regarding verified photomontages and in this respect 35mm is likely to be considered too wide and 50mm would be recommended.	ES Chapters 7 & 8
Natural England	General	At present the project is not a priority for Natural England to advise on the detail of this EIA. They do, however, draw attention to some key points of advice, and would expect the final Environmental Statement (ES) to include all necessary information as outlined in Schedule 4 of the Town & Country Planning (Environmental Impact Assessment) Regulations 2011.	Addressed in all ES Chapters
Environment Agency	Flood Risk	We can confirm that the site lies within Flood Zone 1 and as the development proposals will be greater than 1ha in size a Flood Risk Assessment will be required to be submitted with any planning application. We agree with the Proposed Assessment Methodology given in Section 5.6.3 for flood risk.	ES Chapter 18

Source	Environmental topic	Scoping Response	Comment addressed
	Geology and Soils	We agree with the Proposed Assessment Methodology given in section 5.8.3 with regards to the investigation and assessment of potentially contaminated land within the development area.	ES Chapter 17
LCC Urban Design and Heritage Officer – Samantha Campbell	Built Heritage	<p>The scope covers the necessary baseline studies, provided that the applicant works maintain close liaison with English Heritage and LCC Heritage Team.</p> <p>We are satisfied that the exact/any further work can be identified/ picked up during the pre-application stage.</p> <p>It is important to note that in tackling this topic the NPPF required the applicant to describe the significance of all heritage assets (including their setting) in order to address any impact the development may have on them. The application/ assessment will also need to deal with the significance of the non-designated heritage assets.</p> <p>This will not only need to address the significance of any impact on the built urban form and Stanley Park but also Anfield Cemetery.</p>	ES Chapter 7
	Townscape, Landscape and Visual	<p>Another key stakeholder is LCC Urban Design.</p> <p>To ensure consistency of approach, this section should examine local, regional and national planning policies, at the very least there should be cross-referencing with the planning statement.</p> <p>Whilst it is accepted that some principle viewpoints will be common to the 'Stadium in the Park' development, it should be acknowledged that this development is very different in terms of its setting and relationship with surrounding townscape, therefore a number of new key viewpoints will be required.</p> <p>Another issue to raise is the importance of historic landscape character assessment. This should pick up the importance of local character and identity.</p> <p>This will not only need to address the significance of any impact on the built urban form and Stanley Park but also Anfield Cemetery.</p>	ES Chapters 7 & 8
LCC Nature Conservation Officer – Kevin Curran	Ecology	All relevant information and proposes a completely acceptable way forward that would not lead to any unforeseen issues coming up at the application stage. A bat roost is still present in a part of the building to be developed and it is likely that Natural England European Protected Species License and Method Statement submission would be required, as detailed in the report.	ES Chapter 16
LCC – Karen Stevens	Cycling/ sustainable transport	<p>Development extent: Provide an integrated transportation strategy including in particular, the encouragement of the use of public transport and sustainable travel mode for users of the Anfield Stadium.</p> <p>Detail of access for cyclists should be included at a later stage, including how the development will link to the surrounding cycle network. Section 1.2. proposed development should include cycle parking for staff and fans.</p>	ES Chapter 13

Source	Environmental topic	Scoping Response	Comment addressed
		Transport: A transport assessment and staff travel plan will be produced for the proposed Anfield Stadium expansion. This should include a travel plan for staff and fans. Impacts will need to be identified, quantified and, if necessary, mitigated.	
LCC – Paul Farrell	Air quality	Proposed methodology for assessing impact on air quality by the proposed development has been covered adequately.	ES Chapter 14
LCC – Ian Rushforth	Noise/ Vibration and Lighting	No adverse comments.	ES Chapter 15 & 10

## 6.9 References

[Ref 01] – European Directive 85/337/EEC, 1985, as amended 97/11/EC and 2003/35/EC

[Ref 02] – Environmental Scoping Report, Mott Macdonald, December 2013, document no. 317415/WTD/BTL/1

[Ref 03] – ANFIELD SPATIAL REGENERATION FRAMEWORK, Liverpool City Council, April 2014, document no 140414

[Ref 04] – Statement of Community Engagement, Turley with Rachel Flood Associate, 2014, document no H1/1



## 7 Built Heritage

### 7.1 Introduction

- 7.1.1 This chapter has been prepared by Turley Heritage with support from Mott MacDonald. It assesses the impacts and effects of the proposed development on the above ground historic built environment of the application site and the surrounding area.
- 7.1.2 Following the baseline assessment of below-ground archaeological, assets Mott MacDonald has concluded that there is low potential for archaeological remains to have existed on the site and this is not, therefore, considered further in this chapter.
- 7.1.3 A hybrid planning application is submitted for the phased expansion of the existing LFC stadium. Phase 1 of the development involves the expansion of the Main Stand to create additional capacity, together with new front of house facilities, back of house operational facilities, reconfigured players, officials and team staff facilities, a media centre, retail store, secure VIP parking and extensive public realm and associated landscape works. A full planning application is submitted for this phase of the development. Phase 2 of the proposed development involves expansion of the Anfield Road Stand to provide additional capacity, sufficient floorspace for associated front of house facilities, back of house/operational facilities and secure car parking, together with additional floorspace for LFC commercial or residential use at Level 5. Phases 1 and Phase 2 of the development are collectively referred to in this chapter as the 'proposed development'.
- 7.1.4 A Heritage Statement which provides an analysis of the setting and significance of the heritage assets within approximately 1km of the application site and assesses the impact of the proposed development is provided in **Document G1/1** of the Planning Application.

### 7.2 Assessment Approach

#### Methodology

- 7.2.1 All designated and non-designated above ground heritage assets, both within site and within approximately 1km of the site have been identified and the effect of the proposed development on these assets has been assessed for both the construction and operation phases of development. The aim of the assessment is to:
- Identify known designated and non-designated heritage assets that may be affected by the proposed development and evaluate their significance;
  - Outline any likely environmental effects of the proposed development and the heritage asset receptors, likely to be affected, assessing the magnitude of impacts;
  - Assess the effects of the proposed development upon those heritage asset receptors, categorising the scale of effect against significance;
  - Identify, where relevant, any mitigation measures and assess the likely residual impact after such mitigation on the identified heritage asset receptors; and

- Carry out an overall assessment of the cumulative impact of the proposed development in association with other developments, on the overall heritage significance of the heritage assets.

- 7.2.2 There are no direct impacts on designated heritage assets; the focus of this assessment is therefore the impact of the development upon the setting of the identified heritage assets. Therefore, in assessing heritage significance, the contribution of setting, or elements thereof, with respect to each heritage asset, has been taken into account, whilst noting that heritage setting is not itself a heritage asset or designation.
- 7.2.3 This assessment has been carried out in light of the statutory duty of The Planning (Listed Buildings and Conservation Areas) Act 1990, relevant policies of the National Planning Policy Framework (NPPF) and national planning guidance for the historic environment (PPS5: Planning Practice Guidance and National Planning Policy Guidance). The assessment of construction and operational effects is based upon the methodology set out in English Heritage's Guidance: Seeing the History in the View: A Method for Assessing Heritage Significance within Views (2011).
- 7.2.4 The baseline assessment has been undertaken using a combination of desk-based study, research and fieldwork to identify and assess the heritage significance of the designated and non-designated heritage asset receptors. This has also established the way in which their settings and the application site contribute to the heritage significance of these assets.

### **Study Area**

- 7.2.5 Baseline information has been obtained for the application site and the surrounding area within a 1km radius. The Study Area and identified heritage assets are shown on the Heritage Asset Plan included in Volume 2, Part 2, Appendix 1.1 and a full Gazetteer of records and assets compiled from the Merseyside Historic Environment Record and the National Monument Record within the study area is included at Volume 2, Part 2, Appendix 1.2.

### **Survey and Data Sources**

- 7.2.6 Baseline information has been compiled from the following sources:
- National Monuments Record (English Heritage);
  - National Heritage List for England (English Heritage);
  - Merseyside Historic Environment Record;
  - Historic Ordnance Survey Mapping.
  - Liverpool City Council;
  - Detailed visual site inspection; and
  - Other published sources of information are referred to where relevant.

## Planning Policy Framework

### Legislation: Statutory Duty (1990 Act)

- 7.2.7 Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 states that:

*"In considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses."*

- 7.2.8 The concept of 'preserve' has been interpreted through case law to mean 'to cause no harm'.

### National Planning Policy: The National Planning Policy Framework, 2012

- 7.2.9 The National Planning Policy Framework (NPPF) was introduced in March 2012 as the full statement of Government planning policies covering all aspects of the planning process. Chapter 12 outlines the Government's guidance regarding the conservation and enhancement of the historic environment.
- 7.2.10 Paragraph 128 of the NPPF outlines the information required to support planning applications affecting heritage assets, stating that applicants should provide a description of the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the asset's importance and no more than is sufficient to understand the potential impact of the proposal on their significance.
- 7.2.11 Paragraph 129 sets out the principles guiding the determination of applications affecting designated and non-designated heritage assets, and states that:
- 7.2.12 *'Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal . . . They should take this assessment into account when considering the impact of a proposal on a heritage asset, to avoid or minimise conflict between the heritage asset's conservation and any aspect of the proposal.'*
- 7.2.13 Paragraph 131 elaborates that local planning authorities should take account of the desirability of sustaining and enhancing the significance of heritage assets, putting them into viable uses consistent with their conservation, as well as the desirability of new development making a positive contribution to local character and distinctiveness.
- 7.2.14 Paragraph 132 requires when considering the impact of a proposed development on the significance of a designated heritage asset, that great weight should be given to the asset's conservation and the more important the asset, the greater that weight should be. Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. As heritage assets are irreplaceable, any harm or loss requires

clear and convincing justification. It is noted that substantial harm to or loss of a grade II listed building should be exceptional and substantial harm to or loss of designated heritage assets of the highest significance should be wholly exceptional.

- 7.2.15 Paragraph 133 states that where a proposed development will lead to substantial harm to or total loss of significance of a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm and or loss is necessary to achieve substantial benefits that outweigh that harm or loss, or all of the following apply:

*“the nature of the heritage asset prevents all reasonable uses of the site; and*

*no viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation; and*

*conservation by grant-funding or some form of charitable or public ownership is demonstrably not possible; and*

*the harm or loss is outweighed by the benefit of bringing the site back into use”*

- 7.2.16 Paragraph 134 requires that where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal, including securing its optimum viable use.

- 7.2.17 Paragraph 135 confirms that the effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. It also states the following:

- 7.2.18 *“In weighing applications that affect directly or indirectly non designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.”*

## **Setting**

- 7.2.19 Paragraph 137 requires local planning authorities look for opportunities for new development within the setting of heritage assets to better reveal their significance. With respect to setting, the policy notes that proposals that preserve those elements of setting that make a positive contribution to or better reveal the significance of the asset should be treated favourably. The setting of a heritage asset is defined by the NPPF as:

- 7.2.20 *“The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of setting may make a positive or*

*negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral”.<sup>1</sup>*

- 7.2.21 Paragraph 138 highlights that not all elements of a World Heritage Site or Conservation Area will necessarily contribute to its significance. Loss of a building (or other element) which makes a positive contribution to the significance of the Conservation Area or World Heritage Site should be treated either as substantial harm under paragraph 133 or less than substantial harm under paragraph 134, as appropriate, taking into account the relative significance of the element affected and its contribution to the significance of the Conservation Area or World Heritage Site as a whole.

#### **Consideration of ‘Harm’**

- 7.2.22 The statutory duty to have special regard to the desirability of preserving the special interest and setting of a listed building is a matter which should be accorded considerable importance and weight.
- 7.2.23 In the event that harm is perceived to arise from proposals, the NPPF provides a policy framework at paragraphs 133 and 134 within which such harm can then be weighed against public benefits bearing in mind the considerable weight to be attached to the statutory duty.
- 7.2.24 The National Planning Practice Guide (NPPG), published 6th March 2014, provides guidance on how to assess if there is substantial harm. This states:
- 7.2.25 *“What matters in assessing if a proposal causes substantial harm is the impact on the significance of the asset. As the National Planning Policy Framework makes clear, significance derives not only from a heritage asset’s physical presence, but also from its setting.*
- 7.2.26 *Whether a proposal causes substantial harm will be a judgement for the decision taker, having regard to the circumstances of the case and the policy in the National Planning Policy Framework. In general terms, substantial harm is a high test, so it may not arise in many cases. For example, in determining whether works to a listed building constitute substantial harm, an important consideration would be whether the adverse impact seriously affects a key element of its special architectural or historic interest. It is the degree of harm to the asset’s significance rather than the scale of the development that is to be addressed. The harm may arise from works to the asset or from development within its setting.”*

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<sup>1</sup> NPPF Annex 2: Glossary

**Local Planning Policy: Liverpool City Council Unitary Development Plan , 2002**

- 7.2.27 The Unitary Development Plan (UDP) (2002) is the existing planning policy document, which will eventually be replaced by the Liverpool Local Plan, currently under production. The relevant sections of policies are listed below:
- 7.2.28 With regards to development affecting the setting of a listed building, Policy HD5 states that:
- 7.2.29 *“Planning permission will only be granted for development affecting the setting of a listed building, which preserves the setting and important views of the building. This will include, where appropriate:*
- i. control over the design and siting of new development;*
  - ii. control over the use of adjacent land; and*
  - iii. the preservation of trees and landscape features.”*
- 7.2.30 With regards to historic parks, gardens and cemeteries, Policy HD15 states that:
- 7.2.31 *“The City Council will not grant planning permission for development in or adjacent to a Historic Park, Garden or Cemetery which would adversely affect their character and setting and in particular will:*
- 7.2.32 *“i. resist the removal of features such as buildings, walls and planting which are an integral part of their character and setting;*
- 7.2.33 *ii. resist development or landscape change which would adversely affect their character and setting;*
- 7.2.34 *iii. resist development for uses not related to their original function; and*
- 7.2.35 *iv. ensure that any new development in or adjacent to the site, is of the highest standard of design and materials appropriate to their historic character and setting.”*

**Local Planning Policy: Liverpool City Council Local Plan (draft), June 2012**

- 7.2.36 LCC prepared a Core Strategy to replace the strategic policies of the adopted Unitary Development Plan. While the plan reached an advanced stage of preparation, it was not submitted for examination. The draft strategic policies of the Core Strategy are to be used to inform the emerging Local Plan. The current draft policy of relevance is Policy 24 – Historic Environment. This states that:



- 7.2.37 *“Designated and non-designated heritage assets will be protected from inappropriate development by requiring development proposals within or adjacent to them to demonstrate that it will preserve and enhance them and the special features for which they are designated. These features include both the buildings and landscaping that are integral to their character, important views within and to them, and their settings.”*

### **Guidance**

#### [Principles of Selection for Listing Buildings, DCMS \(2011\)](#)

- 7.2.38 This guidance sets out the general principles applied when deciding whether a building is of special architectural or historic interest and provides a useful framework for assessing and understanding significance of such designated heritage assets.

#### [English Heritage Conservation Principles: Policies and Guidance \(2008\)](#)

- 7.2.39 This guidance document sets out English Heritage’s approach to making decisions and offering guidance about all aspects of England’s historic environment. The contribution of elements of a heritage asset or within its setting to its significance may be assessed in terms of its “heritage values”.

#### [The Setting of Heritage Assets, English Heritage Guidance \(2011\)](#)

- 7.2.40 This document sets out English Heritage’s guidance on managing change within the settings of heritage assets. Section 2 of the guidance provides advice on the definition of setting and general principles. Section 3 deals with setting in the context of strategic planning and in subsequent sections deals with assessing the implications of change.

#### [Seeing the History in the View, English Heritage \(2011\)](#)

- 7.2.41 This guidance was issued in May 2011 and explains how English Heritage intends to systematically and consistently assess the historical significance of views. It is the most recent English Heritage guidance to include advice and details on a methodology for assessing significance and impact within views analysis.
- 7.2.42 A series of tables or matrices are set out in section 4 of the document to assist in; the identification of the importance of the assets and the view; assessing the magnitude of the impact on the assets; and, determining the overall impact.

### **7.3 Assessment Criteria**

- 7.3.1 In the absence of specific prescribed criteria for establishing the relative value or importance of designated heritage asset receptors, guidance on assessing the value and importance of

heritage significance in views is taken from English Heritage's guidance. Our approach is informed by an understanding of the significance of the identified heritage assets and the contribution of elements of their setting to that significance.

7.3.2 The following table is taken from that guidance:

**Table 7.1: Value/Importance of Individual Heritage Assets**

Value/Importance	Definition
High	The asset will normally be a World Heritage Site, grade I or II* listed building, scheduled monument, grade I or II* historic park and garden or historic battlefield which is a central focus of the view and whose significance is well represented in the view. The Viewing Place (and/or Assessment Point) is a good place to view the asset or the only place from which to view that particular asset.
Medium	The asset will normally be a grade II listed building, grade II historic park and garden, conservation area, locally listed building or other locally identified heritage resource which is a central focus of the view and whose significance is well represented in the view. The Viewing Place (and/or Assessment Point) is a good place to view the asset and may be the only place from which to view that particular asset. The asset may also be a World Heritage Site, grade I or II* listed building, scheduled monument, grade I or II* historic park and garden or historic battlefield which does not form a main focus of the view but whose significance is still well represented in the view. In this case the Viewing Place (and/or Assessment Point) may be a good, but not the best or only place to view the heritage asset.
Low	The asset may be a grade II listed building, grade II historic park and garden, conservation area, locally listed building or other locally identified heritage resource which does not form a main focus of the view but whose significance is still well represented in the view. In this case the Viewing Place (and/or Assessment Point) may not be the best or only place to view the heritage asset.

7.3.3 The sensitivity of the designated heritage asset is defined on the basis of the above table, informed by an understanding of the significance, in terms of the special architectural and historic interest of the identified designated heritage assets and the contribution of setting to that significance. This assessment of significance and setting is set out in the Heritage Statement – **Document G1/1**.

7.3.4 The magnitude of cumulative impact in terms of scale, position in a view or design is described in accordance with the table below, taken from English Heritage's guidance: Seeing the History in the View.

**Table 7.2: The Magnitude of the Impact of Proposals on Heritage**

Magnitude of Cumulative Impact	Definition
High beneficial	The development, in conjunction with other changes, considerably enhances the heritage values of the heritage assets or the ability to appreciate those values.
Medium beneficial	The development in conjunction with other changes, enhances to a

Magnitude of Cumulative Impact	Definition
	clearly discernible extent the heritage values of the heritage assets or the ability to appreciate those values.
Low beneficial	The development in conjunction with other changes, enhances to a minor extent the heritage values of the heritage assets or the ability to appreciate those values.
Imperceptible/None	The development in conjunction with other changes, does not change the heritage assets or the ability to appreciate those values.
Low adverse	The development in conjunction with other changes, erodes to a minor extent the heritage values of the heritage assets or the ability to appreciate those values.
Medium adverse	The development in conjunction with other changes, erodes to a clearly discernible extent the heritage values of the heritage assets or the ability to appreciate those values.
High adverse	The development in conjunction with other changes, substantially affects the heritage values of the heritage assets or the ability to appreciate those values.

7.3.5 The magnitude of impact is assessed against the value and importance of the heritage asset based on the matrix below from English Heritage's guidance: Seeing the History in the View.

Table 7.3: Magnitude of Impact against Value

Value / Importance of Asset	Magnitude of Impact			
	High	Medium	Low	Negligible/Neutral
High	Major effect	Major effect	Moderate effect	Negligible effect
Medium	Major effect	Moderate effect	Minor effect	Negligible effect
Low	Moderate effect	Minor effect	Negligible effect	Negligible effect

### Scoping Correspondence

7.3.6 A scoping exercise was carried out for each of the Anfield Stadium Expansion topics in December 2013. The following table sets out the responses that were received from English Heritage and LCC in connection with the Scoping Report, together with our response to the issues raised:

Table 7.4: Scoping Correspondence for Built Heritage

Name of Organisation	Key Concerns	Response
English Heritage	The potential impacts seem to relate only to potential archaeological impacts rather than wider impacts on the setting of non-archaeological heritage assets and it will be important that the document acknowledges the need to consider all potential impacts on the significance of heritage assets.	The impact of the proposed development on all designated and non-designated heritage assets within the 1km study area has been assessed in this chapter and the Heritage Statement ( <b>Document G1/1</b> ).  The significance and setting of the heritage assets within the study area is described in

Name of Organisation	Key Concerns	Response
	The baseline should clearly describe the significance of the heritage assets to be considered. In this respect the assessment methodology should describe the way in which significance will be attributed.	the Heritage Statement ( <b>Document G1/1</b> ) and Table 2.1 of this chapter explains the way in which significance is attributed, supported by professional judgement.
LCC	<p>The scope covers the necessary baseline studies and provided that the applicant works in close liaison with English Heritage and LCC Heritage Team they are satisfied that any further work can be identified during the pre-application stage.</p> <p>It is important to note that in tackling this topic the NPPF requires the applicant to describe the significance of all heritage assets (including their setting) in order to address any impact the development may have on them. The application/assessment will also need to deal with the significance of the non-designated heritage assets.</p> <p>This will not only need to address the significance of any impact on the built urban form and Stanley Park but also Anfield Cemetery.</p>	<p>Meetings were held on the 30th Jan and 27th Feb during which the scope of the Heritage Statement was discussed.</p> <p>The significance and setting of the heritage assets within the study area is described in the Heritage Statement (<b>Document G1/1</b>).</p> <p>The impact of the proposed development on listed buildings, Stanley Park, Anfield Cemetery and non-designated heritage assets is addressed in this chapter and the Heritage Statement (<b>Document G1/1</b>).</p>

## Limitations to the Assessment

- 7.3.7 A hybrid planning application has been submitted for the proposed development. Phase 2 of the development has not yet been designed in detail and will be subject of a subsequent reserved matters application. Assessment of the effect of Phase 2 of the development is therefore based on the drawings submitted with the planning application, information contained within the Design and Access Statement (**Document D1/1**) and the Viewpoints that have been prepared.

## 7.4 Baseline Conditions

### General History and Development

- 7.4.1 The 1851 Ordnance Survey (OS) Map shows the former rural nature of the area around the application site prior to the development of Stanley Park. The triangular area of land created by the route of Walton Breck Road and Annfield Lane (now Anfield Road) is clearly visible, together with the former Annfield House and associated lane. To the north west is St Ann's Hill House, beyond which is Mill Bank House and Mill Bank sandstone Quarry, with Belle Vue House further west. The area is seen within the wider context of the expanding city on the 1863 Dower Map.

Figure 7.1: Ordnance Survey Map of 1851 and 1890-93

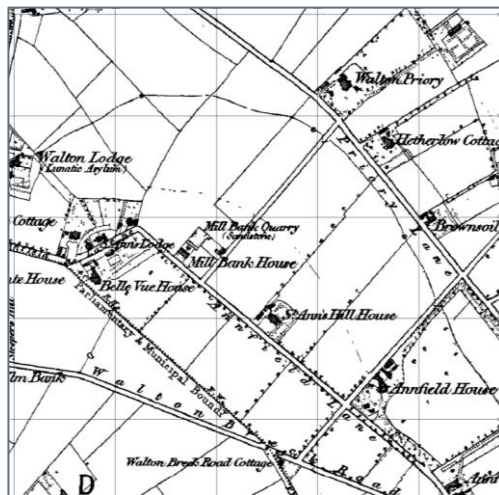
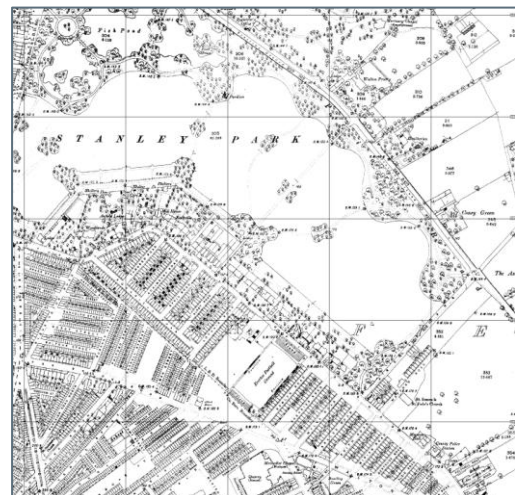


Figure 7.2: Ordnance Survey Map of 1851 and 1890-93



- 7.4.2 By the time of publication of the 1890-1893 OS Map Stanley Park has been established with the decorative Kemp designs most evident in the north western portion of the landscaped area. To the north of the park the cemetery has also been established, beyond which the area is still dominated by fields and open countryside.
- 7.4.3 The name 'Anfield' has now been adopted and to the south of Anfield Road a dense network of terraced housing has encroached into the area and the football ground has been established, originally the home of Everton Football Club. More affluent detached and semi-detached properties with large front and rear gardens have been developed to the north of Anfield Road, adjacent to Stanley Park.
- 7.4.4 By 1908 there is evidence of alterations and additions to Stanley Park including bowling greens, a bandstand and a more formal network of paths through/across the Park. Elsewhere within the area there has been further development of terraced housing and the football ground has now been renamed Liverpool Football Ground. To the north of Priory Road, the area still retains its rural quality.



Figure 7.3: Ordnance Survey Map of 1908 and 1927



Figure 7.4: Ordnance Survey Map of 1908 and 1927



7.4.5 Very little change is discernible between 1908 and 1927, with the exception of the modernisation of the football ground.

Figure 7.5: Ordnance Survey Map of 1951 and 1977

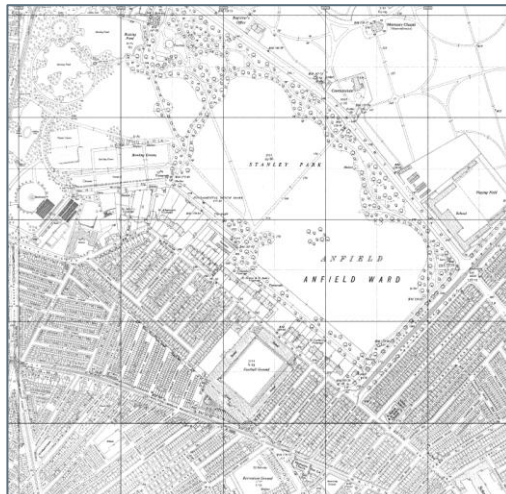


Figure 7.6: Ordnance Survey Map of 1951 and 1977



7.4.6 By the 1950s there is further evidence of expansion of the football ground and partial demolition is evident to the north of Anfield Road. Notably, the south eastern portion of Stanley Park has been simplified and by 1977 this area accommodated a sports centre and a car park (developed in the 1960s).

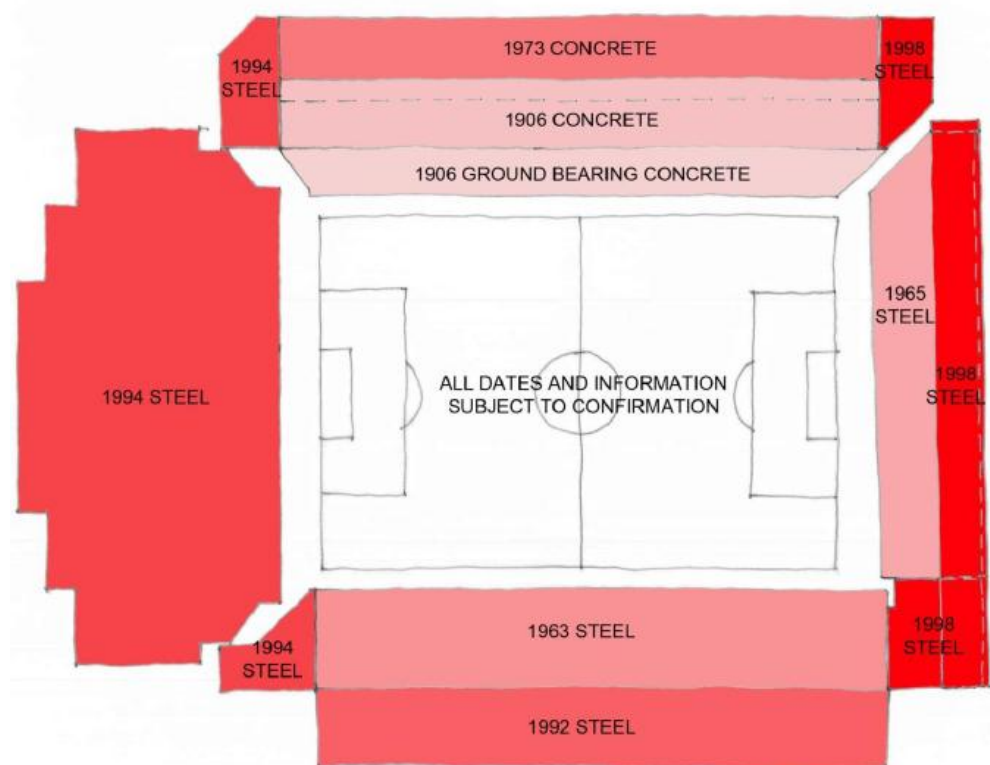


- 7.4.7 This follows the arrangement today and a row of the former properties lining Anfield Road have been demolished, together with terraced properties along Kemlyn Road to facilitate expansion of Anfield Stadium.

### **Overview of the History and Development of Liverpool Football Ground**

- 7.4.8 There has been a football ground on the site of the current Anfield Stadium since circa 1884 and the 1890-1893 Ordnance Survey Map shows the original ground as a rectangular pitch flanked by a small south stand and a larger north stand, with two pavilions to the east and west. The ground was originally used by Everton Football Club, prior to becoming the home of Liverpool Football Club in 1892.
- 7.4.9 The various stands of Anfield Stadium have been re-built and modified throughout the history of the ground. The following provides a broad overview of the major developments:
- In 1894, a new main stand was constructed on the west of the ground to hold 3,000 spectators;
  - In 1903, the Anfield Road stand was covered with timber and corrugated iron;
  - In 1906, the whole ground was rebuilt. The main stand was dismantled and the pitch moved 55ft to the west. A new main stand was built to the designs of Archibald Leitch (1865-1939); the stand employed the Hennibique technique of reinforced concrete. The stand had two tiers, with criss crossed steel balustrades at the front of the upper tiers; the central roof span of the roof was larger incorporating a mock Tudor pediment, surmounted by a decorative weathervane;
  - The Spion Kop stand was subsequently built along Walton Breck Road in tribute to the many men from Liverpool who lost their lives in the Boer War and a new stand along Kemlyn Road followed;
  - The Kop was re-designed and extended in 1928 by Crosby architect, J Watson Cabre in the art deco style;
  - In order to allow for evening games throughout the season, floodlights were installed in 1957;
  - In 1963 the Kemlyn Road stand was replaced by a cantilevered stand and two years later, alterations were made at the Anfield Road end, turning it into a large covered standing area;
  - The biggest development came in 1973 when the old main stand was extensively remodelled, including an extension and removal of the roof;
  - A second tier was added to the Kemlyn Stand in 1992 and it was renamed the Centenary Stand;
  - The Kop was rebuilt after the recommendation of the Taylor report in 1994. The Anfield Road stand was extended in 1998; and
  - As is common with football stadia, the current Anfield Stadium is the culmination of successive phases and layers of development and change in response to the changing fortunes of the football team, the findings of the Taylor Report, general advances in stadia design and the need for facilities.

Figure 7.7: Liverpool Football Ground, Phases of Development



- 7.4.10 The above summary of the stages of development of the stadium and the explanatory plan prepared by SKM (Figure 7.7) indicate the date of the various component parts of the stadium as found today.
- 7.4.11 The stadium does not have any heritage protection and has not been recognised for its heritage value through statutory or local listing. This is presumably due to the extent of redevelopment that has taken place and the fact that there are only fragmentary and concealed remains of the more historic sub-structure. The history of the stadium is however of local interest, in particular its early origins and association with architect Archibald Leitch and key local figures, together with its significant role and prominence in the local community.

## Baseline Survey Information

### Designated Heritage Assets within a 1km Distance from the application site<sup>2</sup>

7.4.12 There are no designated heritage assets within the boundary of the application site and there are no scheduled ancient monuments or registered battlefields within the application site or the study area. The following designated heritage assets have been identified within the study area:

- Stanley Park Registered Park & Garden (grade II\* listed);
- Anfield Cemetery Registered Park & Garden (grade II\* listed);
- The Arkles Public House (grade II listed);
- 35 and 37, Anfield Road (grade II listed);
- 39 and 41, Anfield Road (grade II listed);
- 43 and 45, Anfield Road (grade II listed);
- 9 and 11, Anfield Road (grade II listed);
- Roseneath Cottage (grade II listed);
- Anfield County Girls Secondary School (grade II listed);
- Bridge to north west of pavilion to east of lake (grade II listed);
- Pavilion at east end of main section of screen wall (grade II listed);
- Lodge on Anfield Road lodge to Stanley Park (grade II listed);
- Bridge to north of east end of lake (grade II listed);
- Bridge to east of pavilion (grade II listed);
- Pavilion at west end of main section of screen wall (grade II listed);
- Terrace to north of screen wall (grade II listed);
- Shelter to south east of lake (grade II listed);
- Pavilion to east of lake (grade II listed);
- Bandstand in front of conservatory (grade II listed);
- Bridge at east end of lake (grade II listed);
- Screen wall (grade II listed);
- Conservatory (grade II listed);
- Bridge over lake (grade II listed);
- Main entrance to Anfield cemetery priory road entrance (grade II listed);
- Lodge to Anfield cemetery (grade II listed);
- Lodge to Anfield cemetery priory road lodge (grade II listed);
- Entrance to Anfield cemetery (grade II listed);
- South chapel (grade II listed);
- Lansdowne house (grade II listed);
- North catacomb (grade II listed);
- South catacomb (grade II listed);
- Crematorium at Anfield cemetery (grade II listed);
- McLennan monument to north west of crossing of main paths (grade II listed);

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<sup>2</sup> The 1km study area is measured from the centre of the existing Anfield Stadium.

- Church of Saint Columba (grade II listed);
- Church of Holy Trinity (grade II listed);
- Richmond Baptist Church (grade II listed);
- Everton Library (grade II listed);
- Mere Bank Public House (grade II listed);
- Church of St George (grade I listed);
- 63 Walton Road (grade II listed);
- Lamp standard at junction of Mere Lane (grade II listed); and
- Milepost on corner of Tetlow Street (grade II listed).

### **Non-Designated Heritage Assets within a 1km Distance from the Assessment Sites**

- 7.4.13 The NPPF<sup>3</sup> identifies that the term ‘heritage asset’ includes designated heritage assets and assets identified by the local planning authority (including local listing). LCC does not currently maintain a list of locally listed buildings or Non-Designated Heritage Assets and there are therefore no formally identified non-designated heritage assets proximate to the application site. Stanley House (73 Anfield Road), which although not formally identified by LCC as a non-designated heritage asset, is included on the Merseyside Historic Environment Record and has been considered in this report due to its close proximity to the application site.
- 7.4.14 All heritage assets are identified on the Heritage Asset Plan attached at Volume 2, Part 2, Appendix 1.1.
- 7.4.15 There is a lack of archaeological evidence within the study area with the majority of monuments recorded within the Merseyside HER relating to buildings recorded on the first edition Ordnance Survey map. This lack of evidence may partly be due to the lack of archaeological investigation in the area, however the lack of find spots and documentary evidence would suggest there is a low potential for archaeological remains to have existed on the site. The construction of terraced houses, the stadium and stands, and ground reduction around the stadium is likely to have resulted in considerable ground truncation across the proposed development site which will have removed any archaeological remains which may have been present.

## **7.5 Key Impacts and Likely Significant Effects**

### **Assessment of Value/Importance of Heritage Assets (Summary)**

- 7.5.1 A full assessment of the likely impact on the identified heritage assets as a result of the proposed development is set out in the Heritage Statement (**Document G1/1**) and should be

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<sup>3</sup> DCLG, National Planning Policy Framework (NPPF) 2012 - Annex 2: Glossary

referred to alongside this chapter. The below table provides a summary of the value/importance of the relevant heritage assets.

**Table 7.5: Summary of Value/Importance of Heritage Assets**

Heritage Assets	Value/Importance
Stanley Park Registered Park & Garden	High
Anfield Cemetery Registered Park & Garden	High
The Arkles Public House	Medium
35 and 37, Anfield Road	Medium
39 and 41, Anfield Road	Medium
43 and 45, Anfield Road	Medium
9 and 11, Anfield Road	Medium
Roseneath Cottage	Medium
Anfield County Girls Secondary School	Medium
Bridge to north west of pavilion to east of lake	Medium
Pavilion at east end of main section of screen wall	Medium
Lodge on Anfield Road lodge to Stanley Park	Medium
Bridge to north of east end of lake	Medium
Bridge to east of pavilion	Medium
Pavilion at west end of main section of screen wall	Medium
Terrace to north of screen wall	Medium
Shelter to south east of lake	Medium
Pavilion to east of lake	Medium
Bandstand in front of conservatory	Medium
Bridge at east end of lake	Medium
Screen wall	Medium
Conservatory	Medium
Bridge over lake	Medium
Main entrance to Anfield cemetery priory road entrance	Medium
Lodge to Anfield cemetery	Medium
Lodge to Anfield cemetery priory road lodge	Medium
Entrance to Anfield cemetery	Medium
South chapel	Medium
Lansdowne house	Medium
North catacomb	Medium
South catacomb	Medium
Crematorium at Anfield cemetery	Medium
McLennan monument to north west of crossing of main paths	Medium
Church of Saint Columba	Medium
Church of Holy Trinity	Medium

Heritage Assets	Value/Importance
Richmond Baptist Church	Medium
Everton Library	Medium
Mere Bank Public House	Medium
63 Walton Road	Medium
Lamp standard at junction of Mere Lane	Medium
Church of St George	High
Milepost on corner of Tetlow Street	Medium
Stanley House, 73 Anfield Road	Low

## Key Impacts and Likely Significant Effects

### Construction Phase

- 7.5.2 The effects of the construction phase will be temporary. A phased construction programme will minimise the scale and duration of effect and standard good practice construction management will be applied. This section focusses on the visual effects of the construction phase and any direct or indirect effects this may have.
- 7.5.3 A 20 month construction programme is envisaged for Phase 1, with a similar period likely for Phase 2 occurring at a later stage. During construction it is intended the operation of the stadium will be maintained at its existing capacity. More disruptive works such as demolition of the existing roof and construction of the link between the old and new parts of the stand will be carried out during the closed summer season.
- 7.5.4 It is concluded that the construction phase of the proposed development will have a low/medium adverse magnitude of impact on Stanley Park and Anfield Cemetery, resulting in a moderate adverse magnitude of impact against value. Taking into consideration the assessment methodology set out in Table 7.2 and Table 7.3, it is not considered that a medium adverse magnitude of impact equates to a high adverse magnitude of impact against value in this case. This is due to the distance between these assets and the application site and the filtering effect of landscaping. It also takes into consideration the nature of the significance and setting of these assets.
- 7.5.5 Due to the proximity of the listed buildings on Anfield Road (Nos 35 to 45) and the expected visual effect of the construction phase of the proposed development, it is concluded that there will be a medium adverse magnitude of impact on these listed buildings, resulting in a moderate adverse magnitude of impact against value. Given the close proximity between Stanley House and the application site, a medium/high adverse magnitude of impact is identified, equating to a minor/moderate adverse magnitude of impact against value. It is concluded that there will be a low adverse magnitude of impact on The Arkles public house due to the distance between the asset and the application site, and taking into consideration the significance and setting of the listed building.



- 7.5.6 In relation to all other heritage assets within the study area, the magnitude of impact will be imperceptible, resulting in a negligible magnitude of impact against value.
- 7.5.7 The assessment set out in Table 7.6 takes into consideration the standard construction mitigation measures set out above. The construction phase and associated effects will be temporary and will only last for the duration of construction activity on the site. These effects can be mitigated through containment and management of the construction process, including implementation of a Construction Environmental Management Plan (CEMP).

**Table 7.6: Summary of Magnitude of Impact against Value – Construction Phase**

Heritage Asset	Value	Magnitude of Impact	Magnitude of Impact against Value
Phase 1 and Phase 2 – Construction Phase			
Stanley Park Registered Park & Garden	High	Low/Medium adverse	Moderate adverse effect
Anfield Cemetery Registered Park & Garden	High	Low/Medium adverse	Moderate adverse effect
The Arkles Public House	Medium	Low adverse	Minor adverse effect
35 and 37, Anfield Road	Medium	Medium adverse	Moderate adverse effect
39 and 41, Anfield Road	Medium	Medium adverse	Moderate adverse effect
43 and 45, Anfield Road	Medium	Medium adverse	Moderate adverse effect
9 and 11, Anfield Road	Medium	Imperceptible	Negligible effect
Roseneath Cottage	Medium	Imperceptible	Negligible effect
Anfield County Girls Secondary School	Medium	Imperceptible	Negligible effect
Lodge on Anfield Road, Lodge to Stanley Park	Medium	Imperceptible	Negligible effect
Bridge to north west of pavilion to east of lake	Medium	Imperceptible	Negligible effect
Pavilion at east end of main section of screen wall	Medium	Imperceptible	Negligible effect
Bridge to north of east end of lake	Medium	Imperceptible	Negligible effect
Bridge to east of pavilion	Medium	Imperceptible	Negligible effect
Pavilion at west end of main section of screen wall	Medium	Imperceptible	Negligible effect
Terrace to north of screen wall	Medium	Imperceptible	Negligible effect
Shelter to south east of lake	Medium	Imperceptible	Negligible effect
Pavilion to east of lake	Medium	Imperceptible	Negligible effect
Bandstand in front of conservatory	Medium	Imperceptible	Negligible effect
Bridge at east end of lake	Medium	Imperceptible	Negligible effect
Screen wall	Medium	Imperceptible	Negligible effect

Heritage Asset	Value	Magnitude of Impact	Magnitude of Impact against Value
Conservatory	Medium	Imperceptible	Negligible effect
Bridge over lake	Medium	Imperceptible	Negligible effect
Main entrance to Anfield cemetery priory road entrance	Medium	Imperceptible	Negligible effect
Lodge to Anfield cemetery	Medium	Imperceptible	Negligible effect
Lodge to Anfield cemetery priory road lodge	Medium	Imperceptible	Negligible effect
Entrance to Anfield cemetery	Medium	Imperceptible	Negligible effect
South chapel	Medium	Imperceptible	Negligible effect
Lansdowne house	Medium	Imperceptible	Negligible effect
North catacomb	Medium	Imperceptible	Negligible effect
South catacomb	Medium	Imperceptible	Negligible effect
Crematorium at Anfield cemetery	Medium	Imperceptible	Negligible effect
McLennan monument to north west of crossing of main paths	Medium	Imperceptible	Negligible effect
Church of Saint Columba	Medium	Imperceptible	Negligible effect
Church of Holy Trinity	Medium	Imperceptible	Negligible effect
Richmond Baptist Church	Medium	Imperceptible	Negligible effect
Everton Library	Medium	Imperceptible	Negligible effect
Mere Bank Public House	Medium	Imperceptible	Negligible effect
63 Walton Road	Medium	Imperceptible	Negligible effect
Lamp standard at junction of Mere Lane	Medium	Imperceptible	Negligible effect
Church of St George	High	Imperceptible	Negligible effect
Milepost on corner of Tetlow Street	Medium	Imperceptible	Negligible effect
Stanley House, 73 Anfield Road	Low	Medium/High adverse	Minor/Moderate adverse effect

## Operation Phase

- 7.5.8 As set out in the appended Heritage Statement (**Document G1/1**), due to the increased visibility of Anfield Stadium from within Stanley Park, it is concluded that there will be some harm to the significance of the Registered Park and Garden. It is therefore concluded that the operation phase of the proposed development will have a low adverse magnitude of impact, resulting in a moderate/minor magnitude of impact against value.

- 7.5.9 A series of Viewpoints have been prepared to illustrate the visual impact of the proposed development (included in ES Volume 2, Part 1, Appendix 1). These Viewpoints illustrate/show that the proposed development will be visible from within Anfield Cemetery and Viewpoint 7 illustrates a clear view of the operation phase of the proposed development, particularly Phase 2, beyond Stanley Park. This will alter the experience within the cemetery and cause a minor degree of harm to the significance of the asset. It is therefore concluded that the operation phase will have a low adverse magnitude of impact on Anfield Cemetery, equating to a moderate/minor magnitude of impact against value.
- 7.5.10 In relation to Nos 35 to 45, the operation phase of the proposed development will not change, alter or harm the key elements of setting that contribute to the significance of the listed properties along Anfield Road. Phase 2 of the proposed development will however alter the way in which these properties are experienced and will result in a change to the traditional route of Anfield Road as a street by its closure at the eastern end. For this reason it is concluded that the operation phase will have a low adverse magnitude of impact on Nos 35 to 45 Anfield Road, resulting in a minor adverse magnitude of impact against value.
- 7.5.11 The operation phase of the proposed development will also harm, to a minor degree the significance of Stanley House. Due to the scale and extent of the proposed development, particularly the expansion of the Anfield Road Stand, a medium adverse magnitude of impact has been identified, equating to a minor adverse magnitude of impact against value.
- 7.5.12 The level of impact identified in relation to Stanley Park, Anfield Cemetery, Nos 35 to 45 Anfield Road and Stanley House accurately reflects the conclusion of 'less than substantial harm' (in the context of the NPPF), as set out in the appended Heritage Statement and does not equate to a significant environmental effect in environmental assessment terms.
- 7.5.13 The operation phase of the proposed development will have no impact on 9 and 11 Anfield Road, Roseneath Cottage, Anfield County Girls Secondary School, the Lodge on Anfield Road, Holy Trinity Church, The Church of St Columbia, 63 Walton Road, the Milepost, the Lamp standard, Everton Library or the Church of St George.
- 7.5.14 The operation phase of the proposed development will have no harmful impact on the significance of the Arkles Public House, the Grade II listed buildings and structures within Stanley Park, the Grade II listed buildings and structures within Anfield Cemetery, Richmond Baptist Church or Mere Bank Public House. In relation to these assets the magnitude of impact is identified as 'imperceptible', resulting in a negligible magnitude of impact against value.
- 7.5.15 The assessment of the operation phase of the proposed development set out in Table 7.7 takes into consideration the proposed design, public realm strategy and design mitigation measures that are incorporated into the proposals. These are described in greater detail in Section 5 of the Heritage Statement (**Document G1/1**).

Table 7.7: Summary of Magnitude of Impact against Value – Operation Phase

Heritage Asset	Value	Magnitude of Impact	Magnitude of Impact against Value
Phase 1 and Phase 2 – Operation Phase			
Stanley Park Registered Park & Garden	High	Low adverse	Moderate/Minor adverse effect
Anfield Cemetery Registered Park & Garden	High	Low adverse	Moderate/Minor adverse effect
The Arkles Public House	High	Imperceptible	Negligible effect
35 and 37, Anfield Road	Medium	Low adverse	Minor adverse effect
39 and 41, Anfield Road	Medium	Low adverse	Minor adverse effect
43 and 45, Anfield Road	Medium	Low adverse	Minor adverse effect
9 and 11, Anfield Road	Medium	Imperceptible	Negligible effect
Roseneath Cottage	Medium	Imperceptible	Negligible effect
Anfield County Girls Secondary School	Medium	Imperceptible	Negligible effect
Lodge on Anfield Road, Lodge to Stanley Park	Medium	Imperceptible	Negligible effect
Bridge to north west of pavilion to east of lake	Medium	Imperceptible	Negligible effect
Pavilion at east end of main section of screen wall	Medium	Imperceptible	Negligible effect
Bridge to north of east end of lake	Medium	Imperceptible	Negligible effect
Bridge to east of pavilion	Medium	Imperceptible	Negligible effect
Pavilion at west end of main section of screen wall	Medium	Imperceptible	Negligible effect
Terrace to north of screen wall	Medium	Imperceptible	Negligible effect
Shelter to south east of lake	Medium	Imperceptible	Negligible effect
Pavilion to east of lake	Medium	Imperceptible	Negligible effect
Bandstand in front of conservatory	Medium	Imperceptible	Negligible effect
Bridge at east end of lake	Medium	Imperceptible	Negligible effect
Screen wall	Medium	Imperceptible	Negligible effect
Conservatory	Medium	Imperceptible	Negligible effect
Bridge over lake	Medium	Imperceptible	Negligible effect
Main entrance to Anfield cemetery priory road entrance	Medium	Imperceptible	Negligible effect
Lodge to Anfield cemetery	Medium	Imperceptible	Negligible effect
Lodge to Anfield cemetery	Medium	Imperceptible	Negligible effect

Heritage Asset	Value	Magnitude of Impact	Magnitude of Impact against Value
priory road lodge			
Entrance to Anfield cemetery	Medium	Imperceptible	Negligible effect
South chapel	Medium	Imperceptible	Negligible effect
Lansdowne house	Medium	Imperceptible	Negligible effect
North catacomb	Medium	Imperceptible	Negligible effect
South catacomb	Medium	Imperceptible	Negligible effect
Crematorium at Anfield cemetery	Medium	Imperceptible	Negligible effect
McLennan monument to north west of crossing of main paths	Medium	Imperceptible	Negligible effect
Church of Saint Columba	Medium	Imperceptible	Negligible effect
Church of Holy Trinity	Medium	Imperceptible	Negligible effect
Richmond Baptist Church	Medium	Imperceptible	Negligible effect
Everton Library	Medium	Imperceptible	Negligible effect
Mere Bank Public House	Medium	Imperceptible	Negligible effect
63 Walton Road	Medium	Imperceptible	Negligible effect
Lamp standard at junction of Mere Lane	Medium	Imperceptible	Negligible effect
Church of St George	High	Imperceptible	Negligible effect
Milepost on corner of Tetlow Street	Medium	Imperceptible	Negligible effect
Stanley House, 73 Anfield Road	Low	Medium adverse	Minor adverse effect

## 7.6 Mitigation, Enhancement and Residual Effects

### Construction

- 7.6.1 Construction mitigation measures in the form of the proposed CEMP and standard construction methods have already been taken into consideration in the assessment set out in Table 7.6 and the associated text at paragraphs 7.5.2 to 7.5.7. No further mitigation measures are proposed.

### Operation

- 7.6.2 A series of mitigation measures are in-built, including the proposed design of the proposed development and public realm works that are summarised in the Heritage Statement. These measures have been taken into consideration in the assessment set out at Table 7.7. No further mitigation measures are proposed, therefore the residual effects of the proposed development remain as previously identified.

## **Cumulative Effects**

- 7.6.3 Cumulative effects are those that may result from the combination of past, present or future actions of existing or planned activities in a project's zone of influence (ZoI). While a single activity may itself result in an insignificant impact, it may, when combined with other impacts (significant or insignificant) in the same geographical area and occurring at the same time, result in a cumulative effect that is significant.
- 7.6.4 The current list of planned developments which are included in the cumulative impact assessment, are those identified in the Anfield SRF comprising: -
- Anfield Village & Rockfield housing refurbishment;
  - New build housing led regeneration;
  - The Walton Breck Road (The High Street) Corridor;
  - New public space and Village Square development (training hotel and offices); and
  - Completion of the restoration of Stanley Park east of Mill Lane.
- 7.6.5 Without any evidence of the detailed design of the identified projects within the SRF (aside from the proposed works for the park to the east of Mill Lane), there is no change to the assessment set out in Table 7.6 and Table 7.7. The development of all of the projects identified within the SRF will deliver a holistic approach to the regeneration of the Anfield area over the short, medium and longer term. The stadium expansion project and wider benefits, aligned with the range of projects within the SRF (some which are still subject to further testing and feasibility work) have the potential to deliver positive physical, social and environmental transformational change within the neighbourhood of Anfield over the longer term. Particularly in relation to the relationship between the stadium and its neighbours, the residential district to the east (Anfield Village & Rockfield) will lead to clearer and more desirable walking routes and public spaces. The creation of a Training Hotel on the corner of Walton Breck Road and Alroy Road will further define a very important corner in the urban fabric. In turn, the redevelopment of Walton Breck Road will ensure that the public spaces associated with the stadium expansion are exploited fully and opportunities explored to establish a more pedestrian focused character to this important movement corridor.

## **7.7 Summary**

### **Introduction**

- 7.7.1 This chapter assessed the effect of the proposed development on designated and non-designated built heritage assets, both within the application site and within a 1km study area. The effect of the proposed development on these assets has been assessed for both the construction and operation phases of development.



## Baseline Conditions

- 7.7.2 Initial baseline information collection involved desk based study, research and fieldwork and included consultation of the following sources:
- National Monuments Record (English Heritage).
  - National Heritage List for England (English Heritage).
  - Merseyside Historic Environment Record.
  - Historic Ordnance Survey Mapping.
  - Liverpool City Council.
  - Detailed visual site inspection.
  - Other published sources of information are referred to where relevant.
- 7.7.3 A scoping exercise was carried out for each of the Anfield Stadium Expansion topics in December 2013.
- 7.7.4 There are no designated heritage assets within the boundary of the application site and there are no World Heritage Sites, scheduled ancient monuments or registered battlefields within the application site or the study area. The following designated heritage assets have been identified within the study area:
- Stanley Park Registered Park & Garden (grade II\* listed);
  - Anfield Cemetery Registered Park & Garden (grade II\* listed);
  - The Arkles Public House (grade II listed);
  - 35 and 37, Anfield Road (grade II listed);
  - 39 and 41, Anfield Road (grade II listed);
  - 43 and 45, Anfield Road (grade II listed);
  - 9 and 11, Anfield Road (grade II listed);
  - Roseneath Cottage (grade II listed);
  - Anfield County Girls Secondary School (grade II listed);
  - Lodge on Anfield Road, Lodge to Stanley Park (grade II listed);
  - Bridge to north west of pavilion to east of lake (grade II listed);
  - Pavilion at east end of main section of screen wall (grade II listed);
  - Bridge to north of east end of lake (grade II listed);
  - Bridge to east of pavilion (grade II listed);
  - Pavilion at west end of main section of screen wall (grade II listed);
  - Terrace to north of screen wall (grade II listed);
  - Shelter to south east of lake (grade II listed);
  - Pavilion to east of lake (grade II listed);
  - Bandstand in front of conservatory (grade II listed);
  - Bridge at east end of lake (grade II listed);
  - Screen wall (grade II listed);
  - Conservatory (grade II listed);
  - Bridge over lake (grade II listed);
  - Main entrance to Anfield cemetery priory road entrance (grade II listed);

- Lodge to Anfield cemetery (grade II listed);
- Lodge to Anfield cemetery priory road lodge (grade II listed);
- Entrance to Anfield cemetery (grade II listed);
- South chapel (grade II listed);
- Lansdowne house (grade II listed);
- North catacomb (grade II listed);
- South catacomb (grade II listed);
- Crematorium at Anfield cemetery (grade II listed);
- McLennan monument to north west of crossing of main paths (grade II listed);
- Church of Saint Columba (grade II listed);
- Church of Holy Trinity (grade II listed);
- Richmond Baptist Church (grade II listed);
- Everton Library (grade II listed);
- Mere Bank Public House (grade II listed);
- 63 Walton Road (grade II listed);
- Church of St George (grade I listed);
- Lamp standard at junction of Mere Lane (grade II listed); and
- Milepost on corner of Tetlow Street (grade II listed).

### **Non-Designated Heritage Assets within a 1km Distance from the Assessment Sites**

- 7.7.5 LCC does not currently have a published list of locally listed buildings. The following assets have however been considered in this assessment for completeness:
- Stanley House, 73 Anfield Road (No Status).
- 7.7.6 All heritage assets are identified on the Heritage Assets Plan attached at Volume 2, Part 2, Appendix 1.2 of this chapter.

### **Likely Significant Effects**

- 7.7.7 It is concluded that the construction phase of the proposed development will have a low/medium adverse magnitude of impact on Stanley Park and Anfield Cemetery, resulting in a moderate adverse magnitude of impact against value. Due to the proximity of the listed buildings on Anfield Road (Nos 35 to 45) and the expected visual effect of the construction phase of the proposed development, it is concluded that there will be a medium adverse magnitude of impact on these listed buildings, resulting in a moderate adverse magnitude of impact against value. Given the close proximity between Stanley House and the application site, a medium/high adverse magnitude of impact is identified, equating to a minor/moderate adverse magnitude of impact against value. It is concluded that there will be a low adverse magnitude of impact on The Arkles public house due to the distance between the asset and the application site, and taking into consideration the significance and setting of the listed building.

- 7.7.8 In relation to all other heritage assets within the study area, the magnitude of impact will be imperceptible, resulting in a negligible magnitude of impact against value.
- 7.7.9 It is concluded that the operation phase of the proposed development will cause some harm to the significance of Stanley Park, resulting in a low adverse magnitude of impact, and a moderate/minor magnitude of impact against value. It is concluded in relation to Anfield Cemetery that the proposed development will alter the experience within the cemetery and cause a degree of harm to the significance of the asset. The operation phase will have a low adverse magnitude of impact on Anfield Cemetery, equating to a moderate/minor magnitude of impact against value.
- 7.7.10 In relation to Nos 35 to 45, Phase 2 of the proposed development will alter the way in which these properties are experienced and will result in a change to the traditional route of Anfield Road as a street by its closure at the eastern end. For this reason it is concluded that the operation phase will have a low adverse magnitude of impact on these listed buildings, resulting in a minor adverse magnitude of impact against value.
- 7.7.11 The operation phase of the proposed development will also harm, to a minor degree the significance of Stanley House. A medium adverse magnitude of impact has been identified in relation to the non-designated heritage asset, equating to a minor adverse magnitude of impact against value.
- 7.7.12 The level of impact identified in relation to Stanley Park, Anfield Cemetery, Nos 35 to 45 Anfield Road and Stanley House accurately reflects the conclusion of 'less than substantial harm' (in the context of the NPPF), as set out in the appended Heritage Statement and does not equate to a significant environmental effect in environmental assessment terms.
- 7.7.13 The operation phase of the proposed development will have no impact on 9 and 11 Anfield Road, Roseneath Cottage, Anfield County Girls Secondary School, the Lodge on Anfield Road, Holy Trinity Church, The Church of St Columbia, 63 Walton Road, the Milepost, the Lamp standard, Everton Library or the Church of St George.
- 7.7.14 The operation phase of the proposed development will have no harmful impact on the significance of the Arkles Public House, the Grade II listed buildings and structures within Stanley Park, the Grade II listed buildings and structures within Anfield Cemetery, Richmond Baptist Church or Mere Bank Public House. In relation to these assets the magnitude of impact is identified as 'imperceptible', resulting in a negligible magnitude of impact against value.

### **Mitigation and Enhancement**

- 7.7.15 In-built construction and operation mitigation measures are taken into consideration in the assessment of the likely significant effects of the proposed development. No further mitigation measures are proposed.

## Conclusions

- 7.7.16 The adverse impact of the construction phase of the proposed development on Stanley Park, Anfield Cemetery, Nos 35 to 45 Anfield Road, The Arkles public house and Stanley House will be temporary and reversible. These effects are considered to be acceptable and no further mitigation is proposed.
- 7.7.17 The low adverse magnitude of impact on Stanley Park, Anfield Cemetery, Nos 35 to 45 Anfield Road and Stanley House during the operation phase of the proposed development, is consistent with the conclusion of 'less than substantial harm' set out in the Heritage Statement at Volume 2, Part 2, Appendix 1.1. Where less than substantial harm is identified, Paragraph 134 of the NPPF requires that this should be weighed against the public benefits of the proposal. The magnitude of impact on all other identified heritage assets will be imperceptible (meaning it will not change the heritage assets or the ability to appreciate those values), resulting in a negligible effect.

## 8 Townscape, Landscape and Visual

### 8.1 Introduction

- 8.1.1 This chapter of the ES, prepared by Planit-IE LLP, assesses the likely significant effects of the proposed development with respect to townscape, landscape and visual impact. This chapter also describes the methods used to assess the effects; the baseline conditions currently existing at the site and the surrounding area; the mitigation measures required to prevent, reduce or offset any significant negative (adverse) effects; and any likely residual effects after these measures have been adopted.
- 8.1.2 This chapter of the ES is accompanied by the following figures and appendices that can be found in Volume 2, Part 1, Appendix 1:

#### Figures

- Figure 8.1 Site Location Plan;
- Figure 8.2 Existing Aerial;
- Figure 8.3 Topography;
- Figure 8.4 Environmental designations and Open Space;
- Figure 8.5 Built Heritage;
- Figure 8.6 Townscape Character Area;
- Figure 8.7 Urban Grain;
- Figure 8.8 Scale and Massing;
- Figure 8.9 Movement;
- Figure 8.10 Assessed Viewpoints;
- Figure 8.11a Existing Zone of Visual Influence
- Figure 8.11b Proposed Zone of Visual Influence (composite);
- Figure 8.12 Masterplan Proposals.

#### Appendix

- ES Volume 2, Part 1, Appendix 1.1 Maps and graphics of the site;
- ES Volume 2, Part 1, Appendix 1.2 Tree Survey;
- ES Volume 2, Part 1, Appendix 1.3 Existing Views & Photomontages;
- ES Volume 2, Part 1, Appendix 1.4 Visual Effects Assessment Table.

### 8.2 Policy Context

#### National Planning Policy

##### National Planning Policy Framework (2012)

- 8.2.1 The National Planning Policy Framework (NPPF) was published in March 2012 and consolidates the previously adopted Planning Policy Statements and Planning Policy Guidance Notes for use in England. It contains a number of criteria relating to the importance of good design and sustaining and enhancing the significance of heritage assets.

- 8.2.2 Section 7 of the NPPF deals with the requirements for good design, and the overarching statement can be found at para. 57, which states: -
- ‘It is important to plan positively for the achievement of high quality and inclusive design for all development, including individual buildings, public and private spaces and wider area development schemes.’
- 8.2.3 Paragraphs 58 sets out in detail those objectives and components that plan making should consider in making good places through high quality design.
- 8.2.4 Explicit within paragraph 62 of the NPPF is the requirement to consider formal, impartial Design Review as part of the Planning process. The Stadium Expansion proposals have been before the Places Matter! Design Review Panel on two occasions prior to submission, and comments made by them have been taken on board within the design development of both the stand expansions and the surrounding public realm. Details of these responses and the changes that have resulted from them are set out in section 3 of the Design & Access Statement.
- 8.2.5 The Anfield Stadium and surrounding area lies within relatively close proximity to 2 registered landscapes; Stanley Park – Grade II\* Registered Landscape, Anfield Cemetery – Grade II\* Registered Landscape.
- 8.2.6 Although not explicit in relation to visual impacts, paragraph 126 states that, ‘*the desirability of new development making a positive contribution to local character and distinctiveness*’

### **Local Policy (Statutory & Non-statutory Policies and Strategies)**

#### **The Liverpool Unitary Development Plan (UDP) Adopted 2012**

- 8.2.7 The Liverpool UDP was adopted in November 2002. Relevant policies of the UDP comprise:
- 8.2.8 *Policy H4: that aims to ensure that new development in such areas has regard to its impact on residential amenity and the character of the area.*
- 8.2.9 *Policy HD15: refers to positive action to protect and enhance the character and setting of Historic Parks, Gardens and Cemeteries by preparing strategies for their management and maintenance; seeking funding for restoration and improvement and encouraging greater use, understanding and interest. Development will not be permitted in or adjacent to an historic landscape where it adversely affects its character and setting, or would undermine its original function. Any development that is permitted should be of a high standard of design and materials.*



- 8.2.10 Policy C7: refers specifically to Liverpool and Everton Football Clubs. It recognises their importance to the economy of the city and indicates that the City Council will assist the clubs in progressing their development proposals provided that these do not adversely affect residential amenity. The policy also recognises car parking and amenity problems experienced by local residents to the clubs, particularly on match days, and aims to provide effective solutions to remedy those problems and maintain and enhance residential amenity in the area.
- 8.2.11 Policy HD18 sets out the general design requirements that the City Council will expect from new developments including:
- a. scale, density and massing of the proposed development and relationship with its locality;
  - b. local characteristics and distinctiveness in terms of design, layout and materials
  - c. external boundary and surface treatment;
  - d. impact on the city skyline, roofscape and local views;
  - e. the provision of adequate arrangements for pedestrian and vehicular access and car parking.
- 8.2.12 Policy HD23 states that new development proposals should make proper provision for tree planting and include high quality landscaping and boundary treatment.
- 8.2.13 Policy HD24 encourages the provision of public art as part of development and that contributes to the surroundings and the amenity of the wider area.
- 8.2.14 Policy HD28 refers to the requirements for external lighting schemes that have regard to amenity and impact on landscape area.

#### Liverpool Local Plan (Draft 2014)

- 8.2.15 Following the publication of the NPPF in March 2012, the Council has resolved to prepare a Local Plan. This single document will take forward the principles of the earlier draft Core Strategy, updated to take account of this new guidance, the changed economic climate and emerging corporate priorities. The Core Strategy (that reached draft stage in 2012) places considerable emphasis on North Liverpool and seeks to focus new development to regenerate it and similar 'Urban Core' areas of the City. Relevant draft strategic policies of the Core Strategy include:
- 8.2.16 *SP23 – Place Making and Design Principles which sets out criteria to ensure innovative, high quality design to create well-integrated and useable place.*

#### The Anfield Strategic Regeneration Framework (SRF) Adopted April 2014

- 8.2.17 This adopted framework document outlines the key objectives for future enhancements within the area until the Liverpool Local Plan is adopted in late 2015/ early 2016. It contains general

parameters and guidance for new development in the Anfield area relating to key principles including design quality, amenity, community safety, improvements to the public realm and sustainable transport.

- 8.2.18 The document includes specific parameters for the expansion of the Anfield Stadium with reference to, inter alia, high design quality and distinctiveness, the creation of high quality public realm and maximising activity at street level.

### **8.3 Assessment Methodology and Significance Criteria**

#### **Methodology**

- 8.3.1 This assessment has been carried out with reference to the Guidelines for Landscape & Visual Impact Assessment, 3rd Edition, 2013 (referred to hereafter as “the Guidelines”). The assessment included both a desk-based analysis and on-site field study and observation. The desk study involved the collation and review of existing maps and written information about the site and the wider landscape beyond. The main sources of information included:
- Ordnance Survey plans and topographic survey information;
  - Aerial photographs;
  - Natural England National Character Areas;
  - City of Liverpool Unitary Development Plan, adopted November 2002;
  - Anfield/ Breckfield Regeneration Strategy, Green Space Masterplan & Preliminary Visual Appraisal. Derek Lovejoy Partnership, May 2002;
  - Stanley Park – Historic Survey and Restoration Plan, ASH Consultants, Jan 1998;
  - Stanley Park & Anfield Cemetery Restoration Plan, Planit EDC Ltd & The Architectural History Practice Ltd, Sept 2003;
  - The Anfield Strategic Regeneration Framework, LCC, (Adopted April 2014);
  - The Liverpool Urban Design Guide (SPG);
  - The Core Strategy ‘Submission Draft’ 2012;
  - Liverpool Local Plan (Draft 2014); and
  - North Liverpool Strategic Regeneration Framework (2010).
- 8.3.2 This information provided the basis for an appraisal of the pattern and character of the site and its surroundings and served to identify relevant planning policy and special designated areas and highlighted potential receptors of landscape and visual impact.
- 8.3.3 The visual assessment for the scheme was carried out through a mix of desktop analysis and observation on site. An initial desk study of the area, with reference to topographic data and aerial photographs, was used to determine the broad Zones of Visual Influence (ZVI), i.e. local areas of land that are visually connected to the site. The principal views of the site were determined in the field and agreed with LCC’s planning department, with particular emphasis on checking potential visual receptor areas such as public footpaths, principal vehicular routes and residential areas.

- 8.3.4 Representative viewpoints were identified which were considered to be of particular significance in terms of providing a range of views of the site and where development would have the potential to affect the quality and character of existing views.
- 8.3.5 Photographs of each of the principal viewpoints have been taken by a professional photographer using a fixed lens camera. The camera lens had a focal length equivalent to 50mm, i.e. similar to that seen with the naked eye. Where panoramic views were taken, the individual frames have been stitched together in accordance with the Guidelines. The photographs were taken in the winter months and therefore represent the situation when the filtering of views by existing trees will be minimal and the expanded stadium will be most visible.
- 8.3.6 To create the photomontages, a digital block model of the proposed scheme was produced. Using 3-D modelling software, perspective views of the model were created and placed accurately within the photographs. The location and scale of the scheme within the photographs is verified by topographic survey, whereby, key features within the view are surveyed. This has been used, together with digital terrain data, to accurately position the rendered model within each photomontage.
- 8.3.7 As proposals for the Anfield Road Stand Expansion are only in outline at this stage, photomontages have been prepared using a simple block model. Whilst the model is less detailed in respect of elevational treatments and engineering detail, the scale and mass of the proposal is clearly depicted. However, it is important to note that the supporting roof truss appears as a solid mass whereas it is more likely to be a lattice structure as the existing and proposed stands; in the circumstances the images over-estimate the massing of that part of the scheme. The actual location of the proposed stand is accurately plotted using the same 3-D modelling software as the Main Stand expansion proposals.
- 8.3.8 Each viewpoint is digitally modelled and assessed twice to consider the impact of both development phases. The first set of montages considers the phase 1 expansion of the Main (western) stand. The second considers the Phase 2 expansion of the Anfield Road (northern) stand together with Phase 1.

### **Degree of Significance**

- 8.3.9 In assessing impact on the selected viewpoints, a number of criteria have been employed. These include:
- a measure of the view's importance;
  - the degree of visibility of the scheme from the viewpoint;
  - the sensitivity of the visual receptor;
  - the magnitude of the predicted impact;
  - the ultimate significance of the impact; and
  - the level of confidence in the prediction.

## Level of Importance

8.3.10 The importance of the various views have been categorised in Table 8.1.

Table 8.1: Categories of a views importance

Importance	Area
National	Views from national trails/long distance recreational routes and affecting the setting of nationally significant buildings or green open spaces.
Regional	Views from the main arterial routes connecting to the city and regionally important open spaces.
District	Views from or affecting long distance recreational routes and district wide public facilities.
Local	Views from the local road network and minor open spaces.

## Degree of Visibility and Prominence

8.3.11 The degree of visibility and prominence of the proposed scheme within the selected viewpoint is measured in accordance with the scales shown in Table 8.2.

Table 8.2: Scale of visibility and prominence

Visibility	Definition	Prominence	Definition
1	Highly Visible	1	Very Prominent
2	Partially Visible	2	Reasonably Prominent
3	Scarcely Visible	3	Not prominent

## Sensitivity of Visual Receptors

8.3.12 Visual receptors include the public or community at large, residents, visitors and other groups of people or individuals. In defining the sensitivity of visual receptors, account has been taken of the degree to which they are likely to be focussed on the landscape or wider setting. Potential seasonal screening effects have also been identified. The sensitivity of the visual receptors identified has therefore been categorised in Table 8.3.

Table 8.3: Sensitivity of visual receptors

Sensitivity	Visual Receptors
High	People visiting recreational or civic spaces and users of public footpaths and residents whose views or visual amenity may be affected.
Medium	Users of local road network (pedestrians or cyclists travelling at low speeds).
Low	Users travelling along the local road network (car-borne and travelling at higher speeds)

### **Magnitude of Impact**

- 8.3.13 The magnitude of the impact is measured in relation to the extent that changes affect the character and features of the view or landscape, either in a positive or negative way. The following descriptions define the magnitude:
- Major - Leads to a major alteration to key elements/features/characteristics of the view and/or introduces elements considered to be totally uncharacteristic when set in the attributes of the receiving landscape;
  - Moderate - Leads to a partial loss or alteration to one or more of the key elements/features/characteristics of the view that may be prominent but may not necessarily be considered to be substantially uncharacteristic when set in the attributes of the receiving landscape;
  - Minor - Leads to a minor loss of or alteration to one or more of the key elements/features/characteristics of the view that may not be uncharacteristic when set in the attributes of the receiving landscape;
  - Neutral - Leads to a very minor loss of or alteration to one or more key elements/features/characteristics of the view that are not uncharacteristic when set in the attributes of the receiving landscape – approximating to the “no change” situation.

### **Significance of Effect**

- 8.3.14 In determining the significance of the effect, account was taken of the sensitivity of the visual receptor the importance of the view and the predicted magnitude of the impact. The effect is described in terms of either being beneficial or adverse, where the effect is clearly identifiable, and neutral where the effect is not clearly identifiable:
- Major - Where there would be a very noticeable and highly significant alteration to the existing view;
  - Moderate - Where there would be a clearly noticeable and moderately significant alteration to the existing view;
  - Minor - Where there would be a perceptible alteration to the existing view, but one of low significance;
  - Minor – Neutral - Where there would be a noticeable change in the character or characteristics of the view, but where this change is not considered detrimental;
  - Neutral - No discernable change in the existing view or landscape.

### **Confidence**

- 8.3.15 The predicted effect is assessed against the criteria set out below in order to attribute a level of confidence to the assessment:
- High - The predicted effect is either certain, or very likely to occur, based on reliable information or previous experience;
  - Medium – The predicted effect and its level are best estimates, based on on-site and desktop study;

- Low – The predicted effect and its level are best estimates, based on given knowledge and experience. More information may be needed to improve the level of confidence.

## 8.4 Baseline Conditions

### Site Location

- 8.4.1 Anfield, situated approximately 3km to the north of the city centre, is an inner city Victorian community characterised predominantly by neighbourhoods of terraced properties. The existing stadium is hemmed in by those narrow streets on three sides and separated from surrounding properties by a narrow external concourse surrounded by high walls and railings.
- 8.4.2 Refer to Figure 8.2 in Volume 2, Part 1, Appendix 1.1 for existing site aerial photograph.

### The Development

- 8.4.3 The proposal is to deliver an expanded stadium, which increases spectator capacity; significantly enhances the match day experience for its fans (internally and externally) and broadens the range and choice of facilities at the ground.
- 8.4.4 Expansion of the Main Stand will require the demolition of three rows of terraced houses (both sides of Lothair Road and south-east of Alroy); the majority of those properties have now been purchased and LCC has submitted an application setting out its intention to commence demolition in late Spring 2014.
- 8.4.5 The development offers potential to significantly improve fan circulation and movement around the stadium and in turn to successfully integrate the stadium with the surrounding area, in particular, its connection and relationship with Walton Breck Road and Stanley Park.
- 8.4.6 The main elements of the Club's brief are:

#### Phase 1

- To expand the Main Stand capacity by circa 8,300 seats with supporting back-of-house facilities and new retail store;
- Retain existing seating during construction;
- Provide VIP parking and team coach drop-off in a secure location beneath a new podium;
- Establish a new pedestrian link between Walton Breck Road and Stanley Park;
- Establish new 'fan zones' adjacent to the expanded stadium, and a sensitively designed perimeter and boundary treatments with adjacent areas;
- Provide a new location and flexible space for Outside Broadcast vehicles to meet Premier League size obligations; and
- Relocate existing memorials and LFC heritage features within the public spaces.



#### Phase 2

- Expand the Anfield Road Stand capacity by c.4,800 seats, all for general admission;
- Provide additional external fan zones, and further commercial floorspace for LFC;
- Creating the conditions and identifying sites for economic investment and job creation; and
- Management of match-day traffic and people movement.

#### The Stadium

- 8.4.7 The ownership has expressed a desire to see the expanded stadium remain as four individual stands and for those to 'look as if they have always been there' using traditional architectural forms and materials.
- 8.4.8 The extended Main Stand will be approximately 140m long x 65m wide and rise to a height of c.45m. A 6m to 8m high podium will run along the length of the stand with steps at either end. The podium will help to create a break in scale with the residential properties in neighbouring Aloy Road. The stand will have an active façade, including a new club shop. Secure VIP parking and team coach drop-off will be secured beneath the podium.
- 8.4.9 The Main Stand has an orthogonal seating tier design with splayed walls and roof designed to both wrap around the structure, and reduce the interface in scale and height with the existing adjacent stands. Although the Anfield Road stand is less developed, the same devices have been employed in the massing of the corners to ensure close integration with the neighbouring stands and a stepping down of the structure towards the park.
- 8.4.10 Options are being explored for incorporating the Club's crest into the fabric of the building, and the use of club colours for secondary cladding elements.

#### Public Realm

- 8.4.11 The design response for the public realm is to create a series of high quality public and managed spaces between the expanded stadium and adjacent uses to deliver a number of key principles, including:
- Improving the visual and functional relationships of the stadium with Stanley Park;
  - A vibrant public square ('fan zone') fronting Walton Breck Road, where activity is also encouraged on non-match days;
  - Creating a strong pedestrian link ('The Grove') for better integration of the stadium with Walton Breck Road, Stanley Park and the surrounding residential neighbourhoods;
  - An appropriate interface with adjacent residential properties, through the gradation of the open space to a more domestic scale at its north-western edge; and
  - An appropriate setting for the relocated Hillsborough Memorial.

### **Development Phasing**

- 8.4.12 A phased plan of development is proposed that will allow the Club to continue to use the stadium up until the new stand is completed. The proposed timetable for the first phase is as follows:
- Site start on new stand January 2015;
  - Completion of new stand August 2016.
- 8.4.13 At this stage, there is no indication as to the commencement date or programme for the construction of the Anfield Road Stand expansion however it is assumed this will have a similar duration to that of the Main Stand

### **Topography**

- 8.4.14 Refer to Figure 8.3 in Volume 2, Part 1, Appendix 1.1 for an illustration of topography within the site and surrounding context.
- 8.4.15 The broad topography of the site slopes down from north to south, with the lower areas of the site adjoining Walton Breck Road. There is a change in level of approximately 4.5m from the highest point around Stanley Park to the mid-point along Walton Breck Road. Along the portion of Walton Breck Road that adjoins the site the change in level is approximately 1.5m.
- 8.4.16 The gradient along Gilman street becomes shallower compared to Alroy Road and across Anfield Road to Stanley Park, with a level change of approximately 1m. The relatively shallow gradient afforded by this area of the site is continued eastwards to the stadium, creating a large level clearing with subtle cross falls. There is little variance in the landform that would otherwise reduce the scale and monotony of this area.
- 8.4.17 Anfield Road to the north has an existing change in level of approximately 3m, sloping down from West to East, this gradient is similar to the general fall along the length of Dahlia Walk in Stanley Park, albeit the level change along Dahlia Walk is approximately 4m. The surface car park between Anfield Road and Dahlia Walk is set lower by approximately 1m from Anfield Road and by 1.5m to 2m from Stanley Park (Dahlia Walk).
- 8.4.18 The local topography is currently exploited to maximum effect in the design of the adjacent Stanley Park with the formal terrace and walks positioned at the higher southern edge of the Park (Northern edge of the development site) allowing views over the rest of the Park and beyond. The manipulation of levels through ground modelling varies within different parts of the Park. The levels to the eastern portion of Stanley Park are dictated by the need to create flat plateaus for the sports pitches within the area.

## **Environmental Designations and Open Space**

- 8.4.19 Refer to Figure 8.4 in Volume 2, Part 1, Appendix 1.1 for the location of key green open spaces and designated areas
- 8.4.20 The site does not include any environmental designations. There are, however some surrounding landscapes that are designated. It is important to set the site within the context of existing or proposed designations relating to landscape, environment and historical significance. The designations of relevance to this assessment are:

### **Stanley Park – Grade II\* Heritage Asset.**

- 8.4.21 The park was designed in 1867 by the renowned landscape architect, Edward Kemp, with architectural features by E.R. Robson. It is considered to be one of the finest mid-Victorian parks in the region and of national significance because of the quality of its original design, particularly the western section of the park. The park occupies an area of approximately 45 hectares, and its significance is further enhanced by its proximity abutting Anfield Cemetery. The park includes a number of listed buildings and structures.

### **Anfield Cemetery – Grade II\* Registered Landscape.**

- 8.4.22 The cemetery design was completed by Edward Kemp, based on an earlier skeleton layout, produced by William Gay, around 1860. The cemetery is also considered to be of national significance and is characterized by an unusual complex of roadways and footpaths, inter-linking a number of listed historic buildings. The cemetery covers an area of approximately 56 hectares and with the adjacent Stanley Park forms a continuous open space of some 101 hectares.

## **Tree Protection Controls**

- 8.4.23 There are no significant trees that lie within the application boundary. Those of any scale are confined to the northern edge of the development site, adjoining Stanley Park. These are protected under a Tree Preservation Order (TPO) No. 132.
- 8.4.24 The northern boundary of the site fronts on to Stanley Park, specifically an area called 'Dahlia Walk'. Trees within Stanley Park are protected by a group TPO and given additional protection under the Park's status as a Registered Landscape. There is a general presumption against development that is likely to have an adverse effect on the integrity, landscape setting or distinctive character of the landscape.

## Tree Survey

- 8.4.25 A tree survey has been carried out, covering Stanley Park to the east of Mill Lane. Amenity Tree Care Ltd. carried out the survey on 18th December 2013. The tree survey is contained in Volume 2, Part 1, Appendix 1.2.
- 8.4.26 The report covers the trees that are located east of Mill Lane within Stanley Park - this includes Dahlia Walk, which abuts the northern edge of the proposed scheme site.

### Dahlia Walk

- 8.4.27 The walkway comprises a simple straight path along the southern edge of the park and formed part of the original park proposals. The path is flanked by a mix of grass and shrub borders with a wide border of mature and semi-mature trees, allowing intermittent views of the distant hills to the north-west. Self-seeding of trees in this area has created a more enclosed walkway than was probably intended within Kemp's original vision, which was clearly designed to make the most of views from this elevated position.
- 8.4.28 The trees comprise a large number of flowering cherries and other ornamental trees, including False Acacia and Laburnum. Other species include Sycamore, Ash, Elm and Hawthorn. A large group of early-mature, self-seeded Sycamore have established as a group along the northern edge of the walkway. The trees are generally in good or reasonable condition, although some thinning would help to maintain views and improve the establishment of individual specimens.

### Priory Road

- 8.4.29 Large informal groups of trees lie along this edge of the park. These are predominantly mature Sycamore and Ash, with occasional Holly and Cherry and are generally in good or reasonable condition.
- 8.4.30 The trees play a significant role in defining the tree-lined character of Priory Road and its link with the adjacent Anfield Cemetery.

### Arkles Lane

- 8.4.31 The trees lining this eastern edge of Stanley Park form a more linear pattern along the edge of the car park and Arkles Lane. They comprise a variety of species, including Hawthorn, Sycamore, Planes, Lombardy poplar and Holly. Most are in good or reasonable condition but are generally less mature than those along Priory Road.

#### Former Rear Gardens along Anfield Road:

- 8.4.32 The former rear gardens of properties along Anfield Road contained a number of mature trees. The remaining trees (following the demolition of the housing along Anfield Road) that abut Dahlia Walk are covered by a general TPO applying to all trees backing onto Stanley Park.
- 8.4.33 The trees include a number of mature and early mature Sycamore, Ash and Lime Trees. The mature trees play a significant role in defining the tree-lined enclosure of Dahlia Walk.

#### Anfield Road/ Alroy Road/ Walton Breck Road:

- 8.4.34 No existing trees are located within the remaining LFC Ownership and application site, though there is an interface with those that are located along the northern boundary of Stanley Park, as described in Section 8.4.25 above.

### **Built/ Landscape Heritage**

- 8.4.35 There are two grade II\* Registered Landscapes and 43 Listed Buildings within one kilometre of the application site. These are dealt with in detail within chapter 7, Built Heritage, of the ES. Figure 8.5 in Volume 2, Part 1, Appendix 1.1 is included to indicate the context of the stadium in relation to Stanley Park and Anfield Cemetery, and to the locations of sensitivity from which the proposed extensions may be visible.

### **Townscape and Landscape Character**

- 8.4.36 Refer to Figure 8.6 in Volume 2, Part 1, Appendix 1.1 for the Townscape Character Area boundaries.
- 8.4.37 The protection and enhancement of local environmental quality involves understanding and respecting the character and distinctiveness of place and identity.
- 8.4.38 A Character Study was therefore prepared which identifies the key townscape characters around the Stadium and adjacent context, including the historic landscapes of Stanley Park and Anfield Cemetery in order that a comprehensive analysis of any impact on the built form can be thoroughly assessed.
- 8.4.39 The general land cover and features within and adjacent the site are illustrated in in Volume 2, Part 1, Appendix 1.1, under Figure 8.6. In describing the existing landscape characters, Figure 8.6 in Volume 2, Part 1, Appendix 1.1 divides the study zone into discrete areas that are considered in turn below. The areas are largely defined by the landscape structure of the adjacent Stanley Park; the neighbouring terraced streets and the wider Anfield Cemetery. It is not intended that these should be considered to be definitive boundaries, however, they do

help to define the character and feel of different parts of the study area. Each character area has been assigned a quality level (high; medium and low) and an assessment has been made of their sensitivity to change (high; medium and low).

#### Anfield Stadium:

- 8.4.40 The built form of the existing stadium has a scale and presence that dominates the surrounding terraced streets. The stadium has grown over the 20th Century within the patterns of high density housing resulting in the ground becoming hemmed in with little scope for expansion to meet modern needs.
- 8.4.41 The car park / family zone to the north of Anfield Road creates a clear zone of approximately 57m between the stadium and Dahlia Walk (Stanley Park). An existing surface car park to the east of the stadium creates a clear zone of approximately 18m to the rear gardens of the terraced houses along Skerries Road. Secured by 2m high brick walls and with gated access the car park can be secured from public access and clearly defines the eastern edge at ground level of the stadium.
- 8.4.42 The stadium and its immediate surroundings are of a low townscape quality, but with a low sensitivity to change.

#### Anfield Village/Rockfield:

- 8.4.43 Pre-1919 terraced housing is the most prevalent building type in Anfield; these dwellings are characteristic of the housing stock of that period and found across the city. There are grander and more elaborate examples of this building typology on Anfield Road where villas with large canted bay windows contrasted with the less detailed design of properties around Rockfield Road, Blessington Road and the streets running perpendicular to Walton Breck Road. These properties are not recognised by statutory or local heritage protection, but do form part of the distinctive Victorian urban landscape of the City, contrasted with the openness of Stanley Park and Anfield Cemetery and the scale of Anfield Stadium.
- 8.4.44 Significant housing clearance has already been carried out along Lake Street and Tinsley Street, creating an open green space to the South West of the Stadium. This has gone some way in changing the stadium's setting, providing a degree of separation from the terraced housing along Gilman Street. The green space is primarily lawn with a small number of footpaths serving pedestrian movement between Walton Breck Road, Lothair Road and Back Rockfield Road.
- 8.4.45 This part of the site is of low townscape quality and has a low sensitivity to change. As part of the proposed Main Stand expansion, additional demolition of three rows of terraced houses (both sides of Lothair Road and south-east of Alroy) will be required. This will dramatically affect the immediate context of the stadium in a similar way to the housing clearance along Lake Street and Tinsley Street.

#### Walton Breck Road and Oakfield Road Corridor:

- 8.4.46 Walton Breck Road and Oakfield Road comprise the main vehicular route cutting through the area. The corridor contains a linear shopping area offering a number of local shops and amenities including the Lighthouse, Christ Church and a number of public houses. However, the range and quality of shops is limited - there are a high proportion of hot-food take-away shops predominantly serving the demands of football supporters on a match day.
- 8.4.47 While there are signs of some recent commercial investment, such as the 'Homebaked' Community Land Trust on Oakfield Road, the majority of commercial premises are in poor condition and the road corridor has a generally unattractive environment.
- 8.4.48 Overall the townscape quality is low, with the area having a low sensitivity to change.

#### South of Walton Breck Road:

- 8.4.49 The area south of Walton Breck Road Corridor was contained within the Former Housing Market Renewal (HMRI) Area and has already been subject to significant housing clearance and redevelopment. A new primary school and health facility have been constructed.
- 8.4.50 Further clearance and redevelopment are programmed in the short term. While this area clearly forms part of the current townscape and provides an important wider context to the stadium, the plans for its redevelopment have been largely agreed and so its current character will change. At present it is of a low townscape character overall, and with a low sensitivity to change.

#### Stanley Park:

##### a. Dahlia Walk.

- 8.4.51 Dahlia Walk has a distinct character of its own. A simple straight path is flanked by mature tree and shrub planting to create a strong feeling of enclosure and an intimate scale. Gaps in the planting allow views into the eastern part of the Park and beyond to the northern edge of the city and the distant hills of the Pennines. The walk provides a pleasant contrast to the more open feel of the remainder of the eastern part of the Park. This area is of a medium landscape quality with a high sensitivity to change.

##### b. Eastern Car Park:

- 8.4.52 The far eastern end of the Park is given over to a car park, used for match day parking. A vast area of macadam, the car park is of low quality and feels very separate from the rest of the historic Stanley Park. The area is of low landscape quality with a low sensitivity to change and there is scope for considerable positive enhancement.



c. Mill Lane Football Pitches:

- 8.4.53 The football pitches laid out to the west of Mill Lane occupy this area. An expansive and open space, the landform is dictated by the flat plateaus created for the sports pitches. This gives the area a more functional and organized character, something which is emphasised by the straight lines of the footpaths passing across the space. The area has a rather monotonous feel, due to the lack of interest that might be provided by a more sculpted landform, broken up by tree groups. The landscape is assessed as being of medium quality and would be reasonably tolerant of change. The landscape is considered to be of moderate landscape character and with a moderate sensitivity to change.

d. Formal Terrace & Gardens:

- 8.4.54 This area includes the restored formal terrace and gardens and the undulating grassed areas in the middle ground that provide a setting for the “picturesque” landscape around the lakes. The terrace, with its stone pavilions, forms a delightful walk and provides wonderful views that have been skilfully fashioned by sensitive ground modelling and composition of tree groups. The landscape is of high quality and is considered highly sensitive to relatively small changes.

e. The Lakes:

- 8.4.55 The area around the lakes has a very distinct character and strong sense of enclosure. Mature trees and shrubs line the network of footpaths and frame picturesque views across the lakes towards the stone bridges and gazebo. A new lake was formed during the parks restoration in 2009 and extends the lake character eastwards. The area has a more intimate scale than the wider areas of the Park and is a landscape of high quality. The area is highly sensitive to change.

Anfield Cemetery:

- 8.4.56 Anfield Cemetery is located to the north of Stanley Park. The first internment in the cemetery took place in 1863, with a crematorium being added near its southern edge in 1894.
- 8.4.57 Anfield Cemetery was added to the Register of Historic Parks and Gardens at grade II\* listed status in 1986. Like Stanley Park its architect was Edward Kemp.
- 8.4.58 The layout of the cemetery is based on a system of interlocking circular and curved paths arranged around an east/west axial path running close to the centre of the site. The cemetery has a generally uniform character that relates to its largely regular alignment of burial plots. The focus of the cemetery is a sunken rectangular area, formerly overlooked by the three cemetery chapels, of which only one now remains. There are nevertheless areas within the

cemetery that exhibit subtle changes in character. A description of the individual landscape character of these areas is outlined below :

f. Entrances:

- 8.4.59 A number of formal entrance points occur along Priory Road and Walton Lane, including the entrance to the Crematorium. These areas are characterised by their distinctive architectural elements, i.e. the crematorium, the gate lodges and the formal gateways into the cemetery. These are of high townscape quality and highly sensitive to change.

g. 1st and 2nd World War Cemetery:

- 8.4.60 The site of the 1st and 2nd World War Cemetery occupies a sunken area bounded by a formal hedge. The area has an uncluttered and dignified character that feels distinct from other areas of the cemetery. This area is of high townscape quality and highly sensitive to change.

h. Central burial plots:

- 8.4.61 The central area is defined within a sunken area that acts as the focus for the geometric layout of the cemetery. This area includes many of the larger and more elaborate grave and tombstones that give the area a certain feeling of grandeur. This area is of high townscape quality and highly sensitive to change.

i. Main Cemetery:

- 8.4.62 The main body of the cemetery has an open, almost parkland, feel with the ground falling gradually to the north towards the railway line. Individual trees scattered throughout the cemetery tend to frame and contain views within and out of the area. Views towards Stanley Park and beyond to the Anfield Stadium are largely limited to the southern part of the cemetery (approximately 50% of the area) due to the size and maturity of existing trees and formal shrub planting. Overall the landscape is of a high quality, with high sensitivity to change.

j. Built form to Cemetery edges:

- 8.4.63 These are areas where existing built form outside the cemetery already have a significant impact on its character. These elements include the Goodison Park stadium to the west of

the cemetery and the former Anfield School site and Petrol Station at the south east corner. These parts of the cemetery have a low townscape quality and a low sensitivity to change.

k. North East corner (Railway line):

- 8.4.64 This area at the north-east corner of the cemetery is defined by a change in the topography of the site as the area slopes markedly to the access under the railway line. The area has a more open character and the railway embankment represents a significant visual element, of medium landscape quality and with low sensitivity to change.

**Urban Grain**

- 8.4.65 Figure 8.7 in Volume 2, Part 1, Appendix 1.1 illustrates the existing urban grain of the site, and wider context.
- 8.4.66 The surrounding built form is characterised by a fine urban grain built within elongated or triangular perimeter blocks forming terraced streets. The frontages of buildings are orientated towards the public street positioned at the back edge of the footpath, and the rear elevations face private gardens; many of the perimeter blocks are divided by narrow rear alleyways. The majority of the streets and buildings are orientated along a north south axis. Much of the existing urban morphology has survived intact since the late 19th and early 20th century with the exception of some more recent small-scale infill developments.
- 8.4.67 Although, there is a general high density and a largely regular street pattern, the scale of the individual block sizes within the street pattern and the housing density does vary. The housing to the west of the existing stadium is typically within small blocks and narrow street widths averaging about 8.5m. The housing density is extremely high, i.e. around 140 dwellings per hectare. The majority of the terraced housing, however, tends to be within wider blocks, with street widths around 11m and housing densities of between 50 and 90 dwellings per Hectare.
- 8.4.68 'Arkles Lane' comprises a wide four-lane boulevard (33 metres in width) which incorporates Arkles Lane and Utting Avenue. To the north west is Stanley Park and to the east there is a tight urban grain of terraced properties facing on to the street.
- 8.4.69 'Anfield Road' contrasts with the surrounding built areas to the south in that it contains substantial detached and semi-detached properties located within spacious front and rear private gardens. Densities are extremely low and average around 6 dwellings per Ha. As part of the regeneration strategy for the Anfield area, a number of houses along Anfield have been demolished and the sites cleared. The current use of the cleared land is for surface car parking and a match day 'Fan zone' for visiting fans of the Anfield football stadium.

- 8.4.70 Along Alroy Road, Gilman Street and the streets immediately surrounding the stadium, the majority of buildings comprise two storey Victorian terraced properties constructed of red brick and welsh slate roof tiles, although many buildings have had the traditional slate replaced with concrete tiles.
- 8.4.71 The standard building design prevalent within the surrounding area is based on Georgian pattern book principles. The facades comprise symmetrical compositions providing elongated window elements that create strong vertical rhythms when viewed at street level. Typical detailing includes the use of thick window sills and lintels as well as dentils and quoins. The majority of terraced buildings are located at the back edge of the footpath. There are groups of individual buildings, which display variations in the architectural detailing.
- 8.4.72 Within the Walton Breck Road high street corridor there are groups of buildings which are 3 storeys in height, which reflect a strong 'high street' characteristic (e.g. taller ground floors and the classical proportioning of windows). To the west of Anfield Road there are larger detached properties with gable roofs that display contrasting architectural styles. The predominance of red brick, and the additional detailing exhibited in these properties can be used to inform a solution for the proposed stadium expansion.

### **Scale and Massing**

- 8.4.73 Figure 8.8 in Volume 2, Part 1, Appendix 1.1 indicates the scale and massing within the Site and the surrounding area.
- 8.4.74 The majority of buildings are 2-storeys in height, although there are small groups of 3-storey buildings along Arkles Lane, Anfield Road and Walton Beck Road. There are locations where the scale of buildings increase along the corner of major junctions and perimeter block edges in order to reinforce the importance of that node within the overall road hierarchy, thus acting as visual reference points for pedestrians or drivers. Particular examples include the corner of Arkles Lane and Anfield Road, and Arkles Lane and Priory Road.
- 8.4.75 The existing Anfield football stadium forms the tallest structure within the locality, which is approximately 37 metres at its highest point, comprising the roof structure that supports the Centenary Stand. The two football clubs of Liverpool and Everton have grown out of, and alongside, the residential communities that spawned them. Expansion of the grounds over the years has seen them become hemmed in within the traditional terraced streets.

### **Public Realm**

- 8.4.76 Stanley Park and Anfield Cemetery form an expansive area of public open space of some 101 hectares within a heavily built-up part of the city. Stanley Park is one of the city's major historic parks and provides an important recreational resource within the surrounding dense urban area. The restoration of the park over recent years has seen commercial ventures

within the Gladstone conservatory flourish, increasing activity and passive policing within the park.

- 8.4.77 The area is ringed by a number of parks and recreational areas, including, Walton Hall Park to the north and Everton Park to the south. These wider opportunities offer a valuable recreational resource but do not directly address public realm spaces directly around the Anfield Stadium and its relationship with Stanley Park.
- 8.4.78 Public realm around the stadium is considered to be of poor quality and lacking the open space to sufficiently manage match day use.
- 8.4.79 The stadium is contained on three sides by walled and gated tarmacked areas to meet its immediate parking and servicing needs. There is free-flow of pedestrian movement around the stadium on match-days; however, the narrow external areas are over-crowded and match-goers spill out into the surrounding residential streets. On non-match days access to the stadium is more limited and the enclosed ground creates a barrier to movement between Walton Breck Road and Stanley Park.
- 8.4.80 A temporary match-day 'fan zone' has been created on the north side of Anfield Road on land formerly occupied by large villas that were demolished in 2007.
- 8.4.81 The Shankly Gates and the Hillsborough Memorial are located on the Anfield Road boundary of the stadium site; these are an important focus for visitors to the stadium, although the facilities for viewing or quiet contemplation are limited by the narrow pavement and adjacent highway.
- 8.4.82 A lack of quality public realm, particularly tree planting only heightens the substantial variation in scale between the Stadium and surrounding housing

### **Movement**

- 8.4.83 Figure 8.2 in Volume 2, Part 1, Appendix 1.1 indicates the Strategic context of the stadium and Figure 8.1 in Volume 2, Part 1, Appendix 1.1 the local context. Figure 8.9 in Volume 2, Part 1, Appendix 1.1 indicates the movement framework on a match day around the site and within the surrounding neighbourhood. Details of the movement of vehicles are set out within chapter 13 of the ES, and the focus in this chapter is on pedestrian movement.
- 8.4.84 On match days a wide range of modes of transport are used to gain access to the wider area; the nature of Liverpool fan base means that many travel from outside the local area and approach Anfield by car, bus and taxi. A large number of match-goers make the final part of their journey to the stadium on foot.
- 8.4.85 To the north of the stadium a large surface car park in Stanley Park is leased from LCC by the club for use on match days. The car park can accommodate approximately 1,000 vehicles

and is accessed from Priory Road, with pedestrian connections to Arkles Lane and Anfield Road to provide access to the Stadium.

- 8.4.86 In terms of transport and accessibility, Anfield Stadium is very much 'facing' the City Centre, and this side is the focus for the majority of people arriving and leaving the stadium area.

### **Legibility**

- 8.4.87 The site and surroundings are relatively easy to comprehend for a first time visitor; this is partly a result of the regular and visually permeable urban layout but also due to the presence of landmark features and key views that are provided within the built environment.
- 8.4.88 The perimeter block characteristics of the surrounding area produce a uniform and regular pattern that is both comprehensible and predictable. The layout of the urban form provides a high degree of visual permeability along the main street network, which facilitates a person's comprehension of the built environment since they can actually see a route's destination. The legibility of the area is further strengthened because landmark buildings and features are positioned along axis of pedestrian visibility, examples include the dominant feature of the existing stadium from the streets to the south west and north west. In addition, within the surrounding townscape there are building features that form visual markers to identify junctions. These include Goodison Stadium, visible from Walton Lane at the northern edge of Stanley Park and the cemetery lodge which marks the junction of Walton Lane with Priory Road.

### **Visual Analysis**

- 8.4.89 Refer to Figure 8.11a in Volume 2, Part 1, Appendix 1.1 for an illustration of an approximate Zone of Visual Influence.
- 8.4.90 The tree and shrub cover around the perimeter of the adjacent Stanley Park and Anfield Cemetery, restricts many of the direct views towards the stadium, obscuring the lower portions and leaving the main roof and structure the most visible aspects. The dense pattern of urban housing locally, restricts views of the main bulk of the stadium to the roads directly adjoining it – this in turn means that the stadium comes in and out of view intermittently to the pedestrian even if they are very close.
- 8.4.91 A site hoarding of approximately 2.4m high currently marks the edge of Anfield Road. This dramatically blocks eye level views out of site northwards and prevents distant views of the Pennines beyond.
- 8.4.92 Visibility of the stadium from surrounding streets is generally limited to those streets directly adjoining the development site. These are principally Tinsley Street, Gilman Street, Back Rockfield Road, Anfield Road and Walton Breck Road.

- 8.4.93 The remaining residential properties at the junction of Anfield Rd and Arkles Lane are heavily impacted by the presence of the existing Anfield Stadium, the north-western elevation of which lines the edge of the road. The rear gardens of the properties back onto Dahlia Walk with the trees along this route filtering views into Stanley Park.
- 8.4.94 The existing stadium has a significant impact on the street scene along Walton Breck Road. It lacks adequate space around the building to provide an appropriate setting for such a large structure and visually dominates the adjoining housing. The existing Anfield Stadium rises above the adjoining houses on Skerries Rd and Lothair Road and dominates the rear aspect of these properties. The stadium also terminates views along Venmore Street and Hartnup Street looking northwest, again introducing a significant scale and mass of built form to the streetscape.

#### **Zone of Visual Influence (ZVI)**

- 8.4.95 Refer to Figure 8.11a in Volume 2, Part 1, Appendix 1.1 for an illustration of an approximate Zone of Visual Influence.
- 8.4.96 An initial desk study of the area, with reference to topographic data and aerial photographs, was used to determine the broad zones of theoretical visibility (ZTV), i.e. areas of land that are visually connected to the site. Initially, the ZTV was based on contour mapping and site-based assessment, using the emerging 3D models of the development proposals. However, to gain a clearer understanding as to the likely impact of the higher built elements of the proposals on the two Registered Assets in particular, it was agreed that the following methodology would be applied in compiling the existing and proposed ZVI/ Visual Envelope maps:
- A 5km, site-centred Digital Terrain model was used, with the existing urban fabric modelled as a series of blocks, to a consistent height (either two or four-storey) and fitted to the landform;
  - In respect of the existing site conditions, all development within a 1.0km radius of the application site was modelled and the initial ZVI calculated;
  - In respect of the proposed scheme, the ZVI was then calculated to pick up the Main Stand and North (Anfield Road) Stand expansions (i.e. the cumulative position);
  - This is based on the premise that Visual Envelope Mapping is primarily concerned with assessing the impacts of proposals upon surrounding Landscape Character and not simply whether something can be seen or not. The use of photomontages and wireline views adds a further dimension to enable assessment of the significance of any changes in views and whether or not those changes are positive or negative, high or low; and
  - Finally, each of the ZVI's (before and after) were composited and the difference between the two picked out in a contrasting colour to highlight the increased area of visibility of the proposed 'high' elements of the LFC Stadium Expansion scheme.



8.4.97 This methodology for ZVI creation goes significantly beyond the guidance set out within the GLVIA; it plots the visibility of the highest elements and enables the assessor to more clearly define whether the stadium is clearly visible.

8.4.98 In conjunction with local knowledge and stakeholder consultation (in particular LCC and English Heritage), representative viewpoints were identified which were considered to be of particular significance in terms of providing a range of views of the site and where development would have the potential to affect the quality and character of existing views.

### **Principal Viewpoints**

8.4.99 Refer to Figure 8.10 in Volume 2, Part 1, Appendix 1.1 for a location of the photomontage viewpoint locations.

8.4.100 The proposed viewpoints have been selected from nearby locations and cover typical views from, key vehicle and pedestrian routes, public transport routes, adjacent residential areas, key public spaces and listed structures. Particular consideration has been made to more prominent views and those that may be deemed as highly sensitive receptors.

8.4.101 A total of 24 principal viewpoints were selected in consultation and agreed with LCC and English Heritage, and include a range of distant and close views. Discussions were held between all parties as to the validity of including views of the stadium expansion from the City Centre (and in particular the historic waterfront) and it was concluded that given the distance of the viewpoint from the stadium and the topography of the city and its surroundings (borne out by the existing ZVI) there would not be any material change on views of the waterfront.

8.4.102 Each viewpoint has been assessed twice. The first considering the Main Stand Expansion (Phase 1) in isolation and the second considering both the Main Stand expansion and Anfield Road Stand expansion developed as part of a potential future Phase 2 proposal. The descriptions below detail the existing viewpoints location and context, including a description of the view towards the stadium. The visualisations for these viewpoints are illustrated in Volume 2, Part 1, Appendix 1.3.

#### **View 1**

8.4.103 View from Walton Breck Road looking North West towards the site – existing stadium clearly visible in the view.

#### **View 2**

8.4.104 View from the south side of Walton Breck Road looking East towards the site.

View 3

- 8.4.105 Looking east towards the stadium from the junction of Anfield Road and Utting Avenue/ Arkles Lane – the upper sections of the existing stadium and the Anfield Road Stand are clearly visible though the lower portions of the other stands are screened by the houses along Anfield Road and Skerries Road.

View 4

- 8.4.106 Description of location/ context with surrounding assets/ elements in view towards Stadium – glimpses of the upper portions of the stadium are possible through the existing trees along Utting Avenue/ Arkles Lane.

View 5

- 8.4.107 Looking southwest from Priory Road, across the eastern middle ground of Stanley Park. Existing stadium is visible but the lower portions are well sheltered by the trees within the park and especially Dahlia Walk.

View 6

- 8.4.108 View from Mill Lane looking south towards the site – the stadium is clearly visible in the centre of the view, though existing mature trees within Stanley Park screen much of the cladding covering the Anfield Road and Main stands.

View 7

- 8.4.109 View from Anfield Cemetery looking south towards the site – the structure of the Centenary Stand is visible in the centre of the view.

View 8

- 8.4.110 View from Anfield Cemetery looking south towards the site – a very limited glimpse of the North Stand roof structure is visible through a gap in the mature tree cover.

View 9

- 8.4.111 View from fields, East of Lakes within Stanley Park looking South East towards the site – glimpses of the stadium structure are possible above the roof line and through the existing mature trees within Stanley Park.

View 10

- 8.4.112 View from Stanley Park footpath off entrance at Walton Lane and Priory Road junction looking South East – given the dense block of evergreen planting, there is no view of any elements of the stadium.

View 11

- 1.1.1 View from Anfield Road looking South East along Anfield Road towards the site – the North Stand is clearly visible within the mid-ground of the view.

View 12

- 8.4.113 View from lakeside path in far western end of Stanley park looking South East towards the site – given the predominantly evergreen nature of the tree cover, the current stadium is barely visible within the centre of the view.

View 13

- 8.4.114 View from junction of Venice Street and Vanguard Street looking North East towards the site – due to the extensive clearance that has taken place to facilitate land for new housing, the majority of the stadium is clearly visible. This view will change as the housing development in this area proceeds.

View 14

- 8.4.115 View from road junction between Walton Lane and Walton Breck Road looking East to site – given the rising nature of the ground, only the upper portion of the Kop and Centenary Stand are visible.

View 15

- 8.4.116 View from greenspace along Saint Domingo Road between both junctions with Beacon Lane looking North East towards site – the upper structure of the Centenary and Kop stands are visible.

View 16

- 1.1.2 View from central reservation looking South West along Utting Avenue towards the site – given the extensive tree cover along Utting Avenue, only a fraction of the upper roof structure of the stadium is visible.

[View 17](#)

- 8.4.117 View from Oakfield Road at Junction with Ludwig Road looking North West to the site – the upper extent of the Kop and the Main Stand are visible within the centre background of the view.

[View 18](#)

- 8.4.118 View from central reservation of the A580 at junction with Cherry Lane looking West towards the site.

[View 19](#)

- 8.4.119 View from Lower Breck Recreation Ground, South East of Townsend Lane looking North West to the site – the upper limit of the Centenary Stand roof is visible within the middle of the view.

[View 20](#)

- 8.4.120 View from Walton Hall Park, North of Walton Hall Avenue, looking South towards the site.

[View 21](#)

- 8.4.121 View across green space along Richard Kelly Drive, south of junction with Sonning Road looking South towards the site – a glimpse of the upper extent of the stadium roof structure is just visible through a gap in the housing surrounding the green space.

[View 22](#)

- 8.4.122 View from Anfield Road looking South East along Back Rockfield Road towards the site – the side of the Kop terminates the view.

[View 23](#)

- 8.4.123 View from central reservation on Utting Avenue, North East of Queens Drive adjacent Retail Outlet looking South West towards the site – the roof of the Centenary and North Stand are visible in the background.

[View 24](#)

- 8.4.124 View from Eastern end of Stanley Park adjacent Stanley Park Car Park looking South West towards the site – the stadium is clearly visible along its entire (short) length behind the trees along Dahlia Walk.

## 8.5 Potential Effects

### Prediction of Effects

- 8.5.1 Potential landscape and townscape impacts relate to individual landscape elements, landscape character and the characteristics of the surrounding townscape. The predicted landscape impacts can be divided into temporary impacts, i.e. those which will occur during the construction phase; and permanent impacts, which will be ongoing throughout the operational phase of the proposals.

### Potential Construction Effects

- 8.5.2 The scheme is at a relatively early stage in the design and construction programme and, as such, it is difficult to predict with much certainty the precise methodology that will be adopted for construction and site management. It will be a Condition of any Planning Approval that the chosen contractor will produce a Construction Environmental Management Plan (CEMP), and this will be the opportunity to provide some mitigation of the construction impact by way of measures such as the position, height and design of construction hoardings, lighting, and temporary lighting. It is possible to identify some broad impacts that may arise during the construction phase:

- the visual impact of HGV movements carrying out works on the site;
- the visual impact of tower cranes erecting the roof structure;
- the visual impact of site lighting around construction area;
- visual and landscape impacts of remodelling ground levels;
- landscape impacts of incorporating service and utilities;
- visual impact of temporary screening measures and protective fencing;
- landscape and visual impacts of temporary parking, on-site accommodation and work areas;
- landscape and visual impact of material stockpiles.

### Potential Operational Effects

- 8.5.3 The significant potential effects that have been identified and assessed are:

#### Landscape/Townscape Effects

- 8.5.4 Potential landscape/townscape effects relate to individual landscape elements, landscape character and the characteristics of the surrounding townscape. The significant potential effects that will be identified and assessed are:
- effects on the townscape character areas within the site and valuable site features;
  - effects on the topography of the site and the surrounding area;
  - effects on designated landscapes of value and open space;

- effects on townscape character, including; urban grain, scale and massing; public realm; movement and legibility.

#### Visual Effects

- 8.5.5 Potential visual effects are considered in terms of changes to the extent of visibility of the site and changes to the identified principal viewpoints.

### 8.6 Assessment of Landscape, Townscape and Visual Effects

#### Construction Phase – Landscape, Townscape & Visual Effects

- 8.6.1 The assessment below is relevant for both development Phases; Phase 1; the Main Stand expansion and the Phase 2; the Anfield Road Stand expansion, as summarised in Table 8.4.

Table 8.4: Summary of construction phase assessment

Feature/Nature of Impact	Timescale	Magnitude of Impact	Significance of Effect	Confidence Level
The visual impact of HGV movement & general construction works.	Short Term	Moderate	Minor Adverse	Medium
The visual impact of tower cranes erecting the roof structure	Short Term	Moderate	Minor Adverse	Medium
The visual impact of site lighting around construction areas.	Short Term	Moderate	Moderate – Minor Adverse	Medium
The visual and landscape/ townscape impacts of remodelling ground levels/cut and fill operations.	Short Term	Neutral	Minor Adverse	Medium
The landscape/ townscape impacts of incorporating services and utilities.	Short Term	Moderate	Moderate – Minor Adverse	Low
The visual impacts of temporary screening measure and protective fencing.	Short Term	Moderate	Minor Adverse	Medium
The landscape, townscape and visual impacts of temporary parking, on-site accommodation and work areas.	Short Term	Moderate	Minor Adverse	Medium
The landscape/ townscape and visual impact of material stockpiles.	Short Term	Moderate	Moderate – Minor Adverse	Medium

- 8.6.2 Residents of Alroy Road and Gilman Street are likely to experience higher levels of effects during the construction phase, given their immediate proximity to the works. Overall these are considered to be moderate to high adverse, over the short term.

### Construction Works Generally

- 8.6.3 All works will be carried out within a secure and robust site hoarding thus reducing the likely visual impact. Any relocation of the hoarding to facilitate the construction works or match day circulation will be pre-planned and executed out of hours within the constraints of a task specific risk assessment. All works will be carefully planned to avoid conflicting with fixtures with any temporary way finding implemented where required to ensure minimal impact upon surrounding residents.
- 8.6.4 All construction activities will be constantly monitored by experienced managers and supervisors against pre-determined methodology and relevant health and safety legislation.

### Operational Phase – Landscape and Townscape Effects

- 8.6.5 The following effects have been assessed for both development Phases; Phase 1; the Main Stand expansion and the Phase 2; the Anfield Road Stand expansion.
- 8.6.6 If there is a differing impact and outcome for each Phase then it is stated within each assessment section.

### Effects on Site Character:

- 8.6.7 The existing stadium defines the character of the existing site. The proposed extensions are of a comparable form character and function to the existing stadium. Whilst they will be considerably larger in height and scale, the introduction of significant areas of public realm will improve the setting of the existing stadium and enable the context to better accommodate the proposed expansions. The site character will continue to be defined by the stadium, however a more sympathetic interface between the site and its surroundings will be created, resulting in an improvement to this context.
- 8.6.8 The CGI views that accompany the application clearly demonstrate these new relationships and how the setting of the stadium will be harmonised with its context. Although not selected as one of the Principal Viewpoints, the aerial view is considered important in order to give context to the stadium's 'hemmed in' relationship to its setting and also to demonstrate the poor interfaces it currently has with neighbouring housing to the west. Before and after aerial images are included within the Appendices as Viewpoint 25.
- 8.6.9 Although both stand extensions will be of a considerable scale and mass, this aerial view clearly demonstrates how the public realm works associated with the two phases of expansion will allow the stadium room to breathe, and in turn improve its setting and those of neighbouring properties in particular along Alroy Road and Gilman Street. The effect on the character of the site for both Phase 1 and 2 is therefore predicted to be Minor Beneficial.



#### Effects on Topography:

- 8.6.10 The proposed development will require only minor ground modelling to seamlessly tie into neighbouring streets and Stanley Park.
- 8.6.11 The effect on topography for both Phase1 and 2 is therefore predicted to be Negligible.

#### Effects on character of Environmental Designations and Open Space:

- 8.6.12 There is a strong relationship between visual amenity and landscape character, and in this instance it is difficult to separate the two in relation to the stadium, Stanley Park and Anfield Cemetery.
- 8.6.13 The site does not include any environmental designations and does not propose to extend into any existing quality open spaces. There are, however, two surrounding landscapes that are both on the list of Registered Historic Parks and Gardens– Grade II\*.
- 8.6.14 Although both Grade II\* and designed by the pre-eminent Landscape Architect Edward Kemp, they are of contrasting styles and this in turn affects the way in which the user experiences their surroundings, and by association the visual relationships with them.
- 8.6.15 Stanley Park was designed as an ‘inward looking’ landscape, with curving paths cutting through it and running along its perimeter – only a handful of views to the Pennines to the north were highlighted and framed. Kemp’s key design tool of using groups of trees and shrubs at path intersections focuses the user and their views to features within the park, rather than beyond it. Whilst both stadia have been present adjacent to the park for over a century, Anfield comes in and out of view through a combination of the deliberate design approach and the topography and land cover. The character of different areas of the Park is described earlier, which reveals quite distinct differences between the landscape character of the western and eastern areas of the Park. The area to the west is characterized by the many historic and listed structures and a landscape that offers a variety of scenic views and spatial sequences. In contrast, the eastern area displays a more functional and open character – exacerbated by the presence of the current car park to the east of Mill Lane.
- 8.6.16 Based on the Phase 1 proposals, although the western portion of Stanley Park is highly sensitive to visual change, the prominence of the stadium expansion will be significantly mitigated, if not obscured by the existing landform, structures and tree cover. The description of visual impacts set out within section 8.5.6 for a number of principal viewpoints (10 and 12) within the park clearly demonstrate this.
- 8.6.17 The central playing fields in Stanley Park, to the west of Mill Lane are much more exposed, with existing tree cover being grouped at footpath junctions and boundaries of the park. The sensitivity for this portion of the park is deemed to be moderate and in turn the overall predicted impact will be less than that of the western area, even though the visual prominence

- of the expanded stadium will be greater. The existing stadium is already prominent from all of these locations.
- 8.6.18 The same is true from the park east of Mill Lane, where both tree cover and paths are reduced, due to the presence of the extensive car park and the site of the former Vernon Sangster sports centre. In this section, Kemp only completed the perimeter paths and gateways and so the stadium is more visible by virtue of the design, as well as the topographical relationship – i.e. It is at the top of the hill. Through a proposed S106 Agreement the Phase 1 works will offer the mechanism to complete this section of the park, adding more diagonal paths across the 'middle ground' and significantly improving the quality of finish, connections through and relationships with the existing car park in the eastern quarter.
- 8.6.19 The Phase 2 development proposes an extension of the Main Stand, along a significant portion of Stanley Park's southern boundary known as Dahlia Walk. The extension will be located much closer to Dahlia Walk when compared to the extent of the existing stand, and so it is predicted that the degree of prominence will be relatively high in the Eastern portion of the park, but lower in the western areas for the reasons outlined above and demonstrated at Principal Viewpoints 10 and 12. However, the lower portions of the Phase 2 extension will be filtered by the existing tree cover which will go some way towards mitigating any potential adverse visual impacts on the Park and its landscape character.
- 8.6.20 In contrast to Stanley Park, Anfield Cemetery is laid out in a geometric pattern, reminiscent of the classic French landscapes. This layout based on long axial pathways and vistas – the main cruciform running roughly N-S and E-W, results in the existing stadium being visible along the southern half of the key N-S vista, but not as prominent along the E-W route. The nature of the cemetery is very different to Stanley Park, with most users visiting a discrete section or area.
- 8.6.21 It is predicted that, given the sensitivity of the receptor, the impact on Anfield Cemetery will be moderate to high based on the wide views afforded from a number of locations within the southern portions of the Cemetery and the relatively high ground on which the stadium sits. The general north west position of the Cemetery in relation to the Stadium implies that both Phase 1 and Phase 2 expansions will be less prominent, as although the stadium is visible within the existing views it is further away and less prominent on the sky line or as a proportion of the view. Existing tree cover throughout the Cemetery will screen or obscure a greater proportion of the new roof structures associated with the new stand expansions over the mid-term.
- 8.6.22 On balance, the effect on the character of adjacent Environmental Designations and Open Spaces for Phase1 and 2 is therefore predicted to be Minor Adverse for Stanley Park and Moderate Adverse in the case of Anfield Cemetery.

#### Effects on Townscape Character:

- 8.6.23 Whilst Figure 8.6 in Volume 2, Part 1, Appendix 1.1 defines the discrete areas of townscape and landscape character, the impacts on landscape character have been dealt with above. This then leaves the townscape character areas, which for clarity are set out in Table 8.5.

Table 8.5: Townscape character area assessment

Townscape Character Area	Quality (current)	Sensitivity to change	Significance of Effect (Ph1)	Significance of Effect (Ph1 &2)
Anfield Stadium	Medium	Low	High Beneficial	High Beneficial
Anfield Village/ Rockfield	Low	Low	Moderate Beneficial	Low Beneficial
Walton Breck Road and Oakfield Road corridor	Low	Low	High Beneficial	High Beneficial
South of Walton Breck Road	Low	Low	High Beneficial	High Beneficial

- 8.6.24 The proposals will help contribute positively to the major regeneration objectives of this area (as set out in the adopted Anfield SRF), reinforcing and enhancing its distinctive characteristics and unique sense of place. The high quality of the stadium design and the generous areas of public realm will set the Anfield Stadium in a far more considered context, in contrast to the 'hemmed in' nature of the existing, with all the poor relationships and interfaces it has with its neighbours.
- 8.6.25 The overall effect of the proposals for both Phase 1 and 2 on the townscape character is therefore predicted to be Moderate Beneficial.

#### Effects on Urban Grain:

- 8.6.26 The proposed scheme will have minimal impact upon the wider urban grain of the area as it deals only with the stadium expansion and associated public realm. Planned housing clearances will continue to change the urban grain around the stadium, particularly to the immediate west and south. The once 'hemmed in' stadium will be given 'breathing space' in a more appropriate public realm setting, creating a zone of open space to the west and south west of the site for Phase 1 and new public spaces to the north as part of the Phase 2 proposals.
- 8.6.27 The effect of the proposals for both Phase1 and 2 on urban grain is therefore predicted to be Moderate Beneficial.

#### Effects on Scale and Massing:

- 8.6.28 From a local scale the massing of the building will be substantially altered. Currently the North, South, East and West stands are of comparable scale, with the South Stand (The Kop) having a deeper form. As part of the new proposals Phase 1 and 2 stands will have similar prominence with their scale, height and massing but will be considerably larger in both height and scale compared to the current South Stand (The Kop) and East Stand (Centenary Stand).
- 8.6.29 This change in scale and massing will be most evident around the Main Stand where the proposed stand will be approximately 45m high and will address the 2-storey residential properties along Alroy Road. The introduction of a podium along the entire elevation will act as an important transition element between the scale of the main stand and the retained properties along Alroy Road. This podium will incorporate the Hillsborough Memorial and be set adjacent to a large N-S external concourse, providing further separation and scale transition.
- 8.6.30 The chamfered ends to the upper tier enable the roof gables to be splayed and “folded” down, helping to reduce the overall visual impact of the stand and reducing its scale in relation to the existing adjacent Anfield Road and Kop stands.
- 8.6.31 The building’s detailing, with its different elements and materials does help to positively break up the massing of the proposed development, to minimise the overall impact.
- 8.6.32 The proposed scale of the public spaces that wrap around the stadium, particularly along ‘The Grove’ which will form an important north-south route and transition zone between the scale of the stadium and the adjacent housing along Alroy Road. Careful consideration to public realm structures including the height/ species of proposed tree planting will be key to ensuring a successful balance of scale is achieved.
- 8.6.33 The impact of the proposals on scale and massing for Phase 1 is, therefore predicted to be Minor Adverse due to the stepping down of the building through the podium and the quality of the public realm enhancements.
- 8.6.34 For Phase 2 it is predicted that the impact would be Moderate Adverse as it will significantly increase the scale and massing of the stadium on Anfield Road and terminate the views along it in both directions.

#### Effects on Public Realm:

- 8.6.35 Impacts upon the landscape and character of Stanley Park and Anfield Cemetery have been dealt with under 8.5.5.3; this section deals with the public realm surrounding the stadium and interfacing with Walton Breck Road.

8.6.36 Expansion of the Main Stand (Phase 1) will be coupled with the planned demolition of housing along Lothair Road and Alroy Road. The additional open space created from the proposed housing clearances will afford a sufficient buffer zone of approximately 45m between the adjacent Alroy Road properties and the expanded stadium.

8.6.37 The proposed areas of public realm adjacent Walton Breck Road and Alroy Road have the potential to have a highly positive effect on the local public realm offer, as well as greatly improving the setting for the new stadium. High standards of architectural and landscape design are proposed to these important areas of public realm.

8.6.38 The Design and Access Statement (**Document D1/1**) sets out the analysis and identified opportunities which have been developed into a series of drivers forming the basis of the design approach for the public realm:

*1. Extend the Influence of Stanley Park*

8.6.39 Extend the influence of Stanley Park and Dahlia Walk through the public realm, wrapping the stadium and connecting the spaces with parkland trees, lawns and planting, creating a green foil to the Stadium.

*2. Stadium on the Park*

8.6.40 Introduce a new pedestrian Avenue, through planting and activities along the western edge of the new Main Stand into Stanley Park. This will provide a strong Community edge and scale that responds to the Alroy Road properties.

*3. Enhance Historical fabric*

8.6.41 Enhance the historical fabric and re-interpret historic routes, through new planting, extended footpaths and environmental works.

*4. Space and circulation*

8.6.42 Significantly improve spectator circulation and movement around the stadium and the surrounding area and, in particular, strengthening relationship between Walton Breck Road and Stanley Park. Create a new focal point for Anfield/Breckfield in the form of a new high quality public space, enclosed by new commercial uses.

## 5. Sequence of Views

- 8.6.43 Maximising key views of the stadium and of the Park, improving legibility.

## 6. Building on Site Geometry

- 8.6.44 Enhance the existing car park within Stanley Park to increase capacity, improve its setting within the park, its interface with its surroundings and to broaden its usability on non match days.
- 8.6.45 The proposed expansion of the Anfield Road Stand (Phase 2) will extend approximately 35m to the north across Anfield Road. The current surface car park will be removed and become a new area of public realm serving the Phase 2 expansion and define the interface between Stadium and Park. The proportion of the new public realm adjoining the stadium has been driven by both the access and circulation requirements of the operational stadium and also the challenge of ensuring the interface of the stadium with Stanley Park is appropriate and not detrimental to its character or heritage context. Beyond this interface, new footpaths and planting will be carried out across the middle ground to the east of Mill Lane, providing better pedestrian connections, dispersing fan movements on match days and completing the park as a considered whole.
- 8.6.46 The overall effect on the public realm for Phase1 and 2 is therefore predicted to be Major Beneficial.

## Effects on Movement

- 8.6.47 In terms of pedestrian movement the Phase 1 proposals provide improved local links around the stadium, particularly improving linkages between Walton Breck Road, existing residential areas and the adjacent Stanley Park. A proposed formalised pedestrian crossing point across Walton Breck Road will improve pedestrian permeability from the Breckfield neighbourhood via Anfield Square and the stadium to Stanley Park.
- 8.6.48 The widening of the fan zone to the north of Anfield Road during Phase 1 and closure to vehicles on match day will improve pedestrian circulation. The improved circulation and open space adjacent to the enlarged stadium will be a benefit for local residents and visitors to the stadium on non-match-days, creating a safe, vehicle free environment along the northern edge of the site.
- 8.6.49 The Phase 2 proposals impact pedestrian movements in a subtle manner, diverting pedestrians off Anfield Road and across a new public realm 'concourse' between the new Anfield Road stand expansion and Dahlia Walk to the north. Intermittent, short linkages are

proposed along the length of Dahlia Walk to improve pedestrian permeability between the Stadium and Stanley Park.

8.6.50 The effect of the proposals on movement for Phase 1 is predicted to be Major Beneficial.

8.6.51 The effect of the proposals on movement for Phase 2 is predicted to be Moderate Beneficial.

#### Effects on Legibility

8.6.52 Further enhancements to legibility will be clearly evident from both a district perspective as well as a local one. The proposed scheme will heighten the presence of the Stadium due to the prominence of the expanded stands and further mark it as a key landmark building for North Liverpool.

8.6.53 As part of Phase 1 the expanded stand will provide an improved public, active face for the Stadium where there was previously a blank façade serving only Match Day fan and vehicle entrances -, thus improving the site's street-level legibility. Improvements include a new Club shop, the integration of the Hillsborough Memorial into the façade of the new Main Stand and a raised podium, integrated into the expanded stand that will offer wider views out of the site.

8.6.54 The new public realm will unify the spaces between both phases, improving street level legibility into and through the site towards the surrounding streets and Stanley Park and new signage will be provided for way-finding within the Anfield area and links to the city centre

8.6.55 The Anfield Road stand expansion will improve fan access into the stand through improved ground level access and an upper, externally stepped route to the upper tiers. On non-match days however the frontage will not be active, thus retaining the status quo of the current operation of the stand and not significantly improving the legibility of this portion of the site.

8.6.56 The effect of the proposals on legibility for Phase 1 is therefore predicted to be Moderate Beneficial.

8.6.57 The effect of the proposals on movement for Phase 2 is therefore predicted to be Minor Beneficial.

### Operational Phase – Visual Effects

#### Principal Viewpoints

8.6.58 The following viewpoints have been assessed for both Phases of development (Phase 1- Main Stand expansion; Phase 2 – the addition of the Anfield Road Stand expansion). The Visualisations for these viewpoints can be referred to in Volume 2, Part 1, Appendix 1.3.



#### View 1

##### Phase 1:

- 8.6.59 The main stand roof is visible above the Kop, but does not rise above the Centenary Stand, which dominates the majority of the existing view.
- 8.6.60 The development does not alter the visual impact of the view and the effect is therefore assessed to be Neutral.

##### Phase 2:

- 8.6.61 The Main Stand roof is just visible above the Centenary Stand. The impact and subsequent effect on this view is therefore predicted to be Minor Beneficial, by virtue of the balance created by expansion of both stands.

#### View 2

##### Phase 1:

- 8.6.62 The Main Stand extension and its interface with the Kop is clear from this view. However, the extensive areas of public space that surround the expanded Main Stand and interface with Walton Breck Road dominate the view. These spaces help settle the building scale and mass into their urban context, currently dominated by the rear blank elevation of the Main Stand and remove all of the derelict land that currently degrades the view.
- 8.6.63 The development fundamentally alters the visual impact of the view and the effect is therefore assessed to be Major Beneficial.

##### Phase 2:

- 8.6.64 The development is not visible (shown as a green line for clarity) and so does not alter the visual impact of the view and the effect is still therefore assessed to be Major Beneficial.

#### View 3

##### Phase 1:

- 8.6.65 The Main Stand roof structure is visible, but is partially screened behind the existing trees on the corner of Anfield Road and Utting Avenue/ Arkles Lane. The development does not materially alter the overall view and the effect is therefore assessed to be Neutral.

Phase 2:

- 8.6.66 Although partially screened by a number of mature trees, the Anfield Stand expansion will be clearly visible in the view, rising above the existing buildings on the corner of Anfield Road/ Utting Avenue. The large structure will close off views down Anfield Road. The impact and subsequent effect of the proposals on this view is therefore predicted to be Minor Adverse.

[View 4](#)

Phase 1:

- 8.6.67 The majority of the Main Stand will be hidden by the extensive spread of mature trees within Stanley Park. As glimpses of the existing stadium are already apparent from this location, the visual impact and subsequent effect is predicted to be Neutral.

Phase 2:

- 8.6.68 A high proportion of the Anfield Road Stand roof will be visible, though filtered by the existing trees along Utting Avenue/ Arkles Lane. Whilst the existing stadium is visible, the lattice roof structure and part of the roof will be visible on the skyline and create some additional enclosure to the view. The visual impact and subsequent effect is therefore predicted to be Minor Adverse.

[View 5](#)

Phase 1:

- 8.6.69 The proposed Main Stand will be set behind mature trees both in the foreground and along its lower portions, tree planting along Dahlia Walk. Whilst the current stadium is visible from this location, the North Stand will be a significant addition within the views across the park. The impact of the proposals on this view is therefore predicted to be Minor Adverse.

Phase 2:

- 8.6.70 The majority of the Anfield Road Stand will be visible within the centre of this view, albeit that the lower portions are filtered by the trees along Dahlia Walk. The impact and subsequent effect of the proposals on this view is therefore predicted to be Moderate Adverse.

[View 6](#)

Phase 1:

- 1.1.3 The scale and mass of the Main Stand is a significant addition to this view. Whilst existing mature trees within the park screen the lower portions, the main roof form and supporting

structure rise above the level of the opposite Centenary Stand. However, the elegance of the roof form and the presence of the existing stadium serve to reduce the significance of the visual impact. The impact and subsequent effect of the proposals on this view is therefore predicted to be Minor Adverse.

Phase 2:

- 8.6.71 The scale and mass of the Anfield Road Stand is a further significant addition to this view. As it is located on the highest ground, and Mill Lane is the only axial route within the park, the impact and subsequent effect of the proposals on this view is therefore predicted to be Moderate Adverse.

#### View 7

Phase 1:

- 8.6.72 Whilst the existing stadium is visible, the new expansion will be a key visual element from within the Cemetery. This has been assessed as an adverse impact as it introduces an external element of scale that detracts from the self-contained and well-landscaped views.
- 8.6.73 It will be difficult to mitigate the visual effects of the new expansion, without adversely affecting the landscape character of the cemetery. The further growth of the existing trees along Priory Road will reduce the effects slightly, but they are likely to remain as residual effects over the long term.
- 8.6.74 The impact and subsequent effect of the proposals on this view is therefore assessed to be Minor Adverse.

Phase 2:

- 8.6.75 The addition of the Phase 2 expansion amplifies the perceived mass of the stadium and although in context to the Phase 1 stand in terms of scale, the cumulative visual intrusion of the two expansions seen together dominates a significant portion of the tree lined horizon.
- 8.6.76 The impact and subsequent effect of the proposals on this view is therefore assessed to be Major Adverse.

#### View 8

Phase 1:

- 8.6.77 Unlike view 7, the impact of the Main Stand from this location within the cemetery is much reduced. The distance of the stadium from the viewpoint, coupled with the significant number of mature trees that assist in screening much of the mass, and only part of the roof is visible.

The impact and subsequent effect of the proposals on this view is therefore predicted to be Neutral.

Phase 2:

- 8.6.78 Although the Anfield Road Stand is visible within the central portion of the view, again the presence of a significant number of mature trees, both within and outside the cemetery, serve to screen much of the structure. The impact and subsequent effect of the proposals on this view is therefore predicted to be Minor Adverse.

#### View 9

Phase 1:

- 8.6.79 Moving eastwards from within the dense tree cover of the western end of the Park the Main Stand is suddenly revealed as a major new bulk of development within the view. The stadium becomes the dominant visual focus within the south eastern end of the Park.
- 8.6.80 The impact and subsequent effect of the proposals on this view is therefore predicted to be Moderate Adverse.

Phase 2:

- 8.6.81 The Anfield Road Stand further contributes to the visual bulk within the view across the park. However, despite being a large structure, it sits comfortably with the Main Stand and this pairing reduces the significance of the impact. The impact and subsequent effect of the proposals on this view is therefore predicted to continue to be Moderate Adverse.

#### View 10

Phase 1:

- 8.6.82 Given the extensive tree and shrub cover surrounding the lake, the majority of which is evergreen, the development of the Main Stand does not alter the view and is therefore assessed to be Negligible.

Phase 2:

- 8.6.83 Given the extensive tree and shrub cover surrounding the lake, the majority of which is evergreen, the development of the Anfield Road Stand does not alter the view and is therefore assessed to be Negligible.

#### View 11

##### Phase 1:

- 8.6.84 The Main Stand rises above the roof line of the existing terraced houses along Anfield Road, albeit that the majority of its length is screened by those houses in the foreground. However, the presence of the expanded Main Stand only blocks out views of the current stadium and results in the removal of a block of housing in the mid ground. The impact and subsequent effect of the proposals on this view is therefore predicted to be Minor Adverse.

##### Phase 2:

- 8.6.85 The Anfield Road Stand will result in the closure of Anfield Road, and although the proposed public realm will enhance the setting, views to the east will be blocked off. The impact and subsequent effect of the proposals on this view is therefore predicted to be Moderate Adverse.

#### View 12

##### Phase 1:

- 8.6.86 Given the extensive tree and shrub cover surrounding the lake, the majority of which is evergreen, the development of the Main Stand does not alter the view and is therefore assessed to be Negligible.

##### Phase 2:

- 8.6.87 Given the extensive tree and shrub cover surrounding the lake, the majority of which is evergreen, the development of the North Stand does not alter the view and is therefore assessed to be Negligible.

#### View 13

##### Phase 1:

- 8.6.88 Whilst the existing stadium dominates the existing view, the Main Stand is a significant addition to the view, both in terms of scale and mass. The use of red brick within the main stand element helps to blend the mass with the adjacent housing, thus reducing the bulk and significance of the impact. The impact and subsequent effect of the proposals on this view is therefore predicted to be Minor Adverse; that view will change as the intervening housing is developed and the impact and effect is then predicted to be Minor Beneficial.

Phase 2:

- 8.6.89 The addition of the Anfield Road Stand is barely visible in this view, and therefore the impact and subsequent effect of the proposals on this view is therefore predicted to continue to be Minor Adverse.

View 14

Phase 1:

- 8.6.90 The upper part of the Main Stand roof structure is barely visible behind the existing housing in the background of the view. The scheme does not alter the view and the impact and subsequent effect is therefore assessed to be Neutral.

Phase 2:

- 8.6.91 None of the Anfield Road Stand is visible in the view. Neither phase of the development alters the view and the impact and subsequent effect is therefore assessed to be Neutral.

View 15

Phase 1:

- 8.6.92 The upper part of the Main Stand roof structure is partially visible behind the existing housing and trees in the mid-ground of the view. The scheme does not alter the view and the impact and subsequent effect is therefore assessed to be Neutral.

Phase 2:

- 8.6.93 The upper portion of the North Stand is visible in the view, though it is lower than the Main Stand and in harmony with the Centenary Stand. The impact and subsequent effect of the proposals on this view is therefore predicted to be Minor Adverse.

View 16

Phase 1

- 8.6.94 In this view the wide central reservation, tree planting, street lighting and repetitive housing frontages sets up a strong, linear boulevard effect. Mature tree planting creates a sense of grandeur, complimenting the two-storey housing. Whilst the existing stadium cannot be seen in the current view, the Main Stand proposal is clearly visible above the housing roofline. When viewed as a whole the general skyline, remains uncompromised as the stadium maintains a comparatively low profile that is quickly surpassed by the housing roofline to the right and avenue trees to the left.

8.6.95 The impact and subsequent effect of the proposals on this view is therefore predicted to be Neutral.

Phase 2:

8.6.96 The Anfield Road Stand sits below the Main Stand and the main block of mature trees along the centre of Utting Avenue. The impact and subsequent effect of the proposals on this view is therefore predicted to be Minor Neutral.

[View 17](#)

Phase 1:

8.6.97 The roof structure and seating terrace of the proposed Phase 1 expansion can be seen in this view from Oakfield Road. A clear, unobstructed view of the immediate Southern portion of the internal seating terrace is revealed, afforded by the angle and distance the view is taken. This 'reveal' is possible due to the relative height of the proposed expansion compared to the existing South Stand (The Kop). The deep view breaks down the perceived mass of the expansion by improving the legibility of its constituent parts; Roof, Roof support, Seating terraces and façade from Oakfield Road.

8.6.98 The mid-ground view (shops along Oakfield Road) is comprised of a mix of frontages, gable ends, street light columns, varying rooflines and a view of the existing Kop beyond. The stand expansion can be seen to continue this variety and visual interest of the street through its reveal of details of the external and internal structure, adding depth and detail to the new street backdrop.

8.6.99 The impact and subsequent effect of the proposals on this view is therefore predicted to be Minor Beneficial.

Phase 2:

8.6.100 The proposals for the Anfield Road Stand expansion cannot be seen from this view.

8.6.101 The impact and subsequent effect of the proposals on this view is therefore predicted to remain as Minor Beneficial

[View 18](#)

Phase 1:

8.6.102 No view



Phase 2:

8.6.103 No view

[View 19](#)

Phase 1:

8.6.104 The Main Stand expansion adds an additional layer/ tier to the existing view and enhances the visual relationship between users of the grass pitches and the stadium. The new expansion forms a low, spreading structure that is in keeping with the Sports Centre and adds little in way of 'mass' to the view.

8.6.105 The scheme breaks the skyline of the view and the impact and subsequent effect is therefore assessed to be Minor Adverse.

Phase 2:

8.6.106 The expansion and associated roof structure appears lower than the Main Stand proposals, mitigating any perceived additional 'mass' in this view. The perceived backdrop to a number of terraced properties will be affected however the change is considered to have no detrimental consequence to the view.

8.6.107 The scheme does not break the skyline of the view and the impact and subsequent effect is therefore continued to be assessed as Minor Adverse.

[View 20](#)

Phase 1:

8.6.108 No view

Phase 2:

8.6.109 No view

[View 21](#)

Phase 1:

8.6.110 The proposed expansion slightly breaks the skyline in the far distance and pattern of the uniform residential rooflines but the extent is considered to be minimal. The view captures the northern elevation of the Main Stand expansion resulting in the expansion appearing relatively narrow compared to views from more westerly locations. Although the sensitivity receptor is

considered to be moderate based on local residents using the open green space the detriment to the view is considered to be insignificant.

- 8.6.111 The scheme does not alter the visual impact of the view and the effect is therefore assessed to be Neutral.

Phase 2:

- 8.6.112 The Anfield Road Stand forms a linear structure that again breaks the existing roofline of housing in the foreground but does not rise above the stanchion supports of the Main expansion. The horizontal, linear form of the expansion roof appears to resemble the long horizontal form of the existing roofline.

- 8.6.113 The impact and subsequent effect of the proposals on this view is therefore predicted to be Minor Adverse.

[View 22](#)

Phase 1:

- 8.6.114 The narrow Back Rockfield Road creates a distinct vista of the existing stadium, revealing a snapshot of the western elevation of the South Stand (The Kop). The introduction of the Main Stand expansion is partially revealed to the left hand portion of this vista. The height of the expansion does not break the existing roof line and is wholly contained within the view, framed by the gable ends of the adjacent terraced properties in the foreground. The brick façade of the new expansion resembles the brick built housing and garden walls in the foreground, unifying the vernacular of the view. The glimpsed roof structure and stanchions reflect those seen on the existing stadium allowing the new expansion and stadium to be read as a 'whole' improving the legibility from this viewpoint. The architectural form of the revealed corner of the expansion creates a positive engagement with Back Rockfield Road for fans walking from neighbourhoods to the West, forming a sense of destination, which is lacking in the existing view.

- 8.6.115 The impact and subsequent effect of the proposals on this view is therefore predicted to be Minor Beneficial.

Phase 2:

- 8.6.116 The proposals for the North Stand expansion cannot be seen from this view.

- 8.6.117 The impact and subsequent effect of the proposals on this view is therefore predicted to remain Minor Beneficial.

### View 23

#### Phase 1:

- 8.6.118 The existing stadium can be seen in the current view, appearing subtly on the skyline. The position of the new Main Stand expansion creates a distinct highlight within the view and although it breaks the relatively consistent skyline it is considered not to have a detrimental effect on the view. By creating a strong focal point to the view, without appearing out of scale with the housing in the foreground, it is considered to be a positive introduction to the skyline.
- 8.6.119 A proliferation of street lighting and furniture along Utting Avenue dominates the skyline in both the foreground and mid-ground focussing the view towards the expansion.
- 8.6.120 The receptor sensitivity of this view is deemed low based on users travelling along the road network towards Liverpool and thus any visual impacts, whether significant or not will not adversely effect the character of the view.
- 8.6.121 The impact and subsequent effect of the proposals on this view is therefore assessed to be Minor Beneficial.

#### Phase 2:

- 8.6.122 The Anfield Road Stand expansion partially obscures the Main Stand, mitigating the perceived cumulative visual impact of the stadium. The visibility of the three stands improves the wider legibility of the stadium from this viewpoint. The addition of the Anfield Road Stand increases the perceived mass of the stadium, however its scale and proportion is comparable to the Main Stand expansion and does not adversely affect the character of the skyline in this view.
- 8.6.123 The scheme strengthens the stadiums landmark status in this view. The impact and subsequent effect is therefore assessed to be Minor Beneficial.

### View 24

#### Phase 1:

- 8.6.124 The scale and mass of the Main Stand is a significant addition to this view. Whilst existing mature trees within the park screen the lower portions, the main roof form and supporting structure rise above the level of the opposite Centenary Stand. The elegance of the roof form and the presence of the existing stadium serve to reduce the significance of the visual impact. The impact and subsequent effect of the proposals on this view is therefore predicted to be Minor Adverse.

Phase 2:

- 8.6.125 The scale and mass of the Anfield Road Stand is a further significant addition to this view. As it is located on the highest ground the impact and subsequent effect of the proposals on this view is therefore predicted to be Moderate Adverse.

Zone of Visual Impacts

- 8.6.126 Figure 8.11b shows the proposed Zone of Visual Influence (ZVI) superimposed over the existing visibility. The very minor differences between the two wireline meshes, clearly demonstrates that whilst there are a number of limited additional areas across the River Mersey within Birkenhead and Wallasey, the proposed Main Stand expansion will have no impact upon the important waterfront skyline of the City Centre, and in turn the World Heritage Site or Buffer Zone.
- 8.6.127 Although this ZVI only shows the impact of the Main Stand, given the smaller relative scale of the Anfield Road Stand, it is predicted that there will be no impact upon the proposed ZVI and in turn the wider skyline.

## 8.7 Mitigation Measures

- 8.7.1 The design of the development has been undertaken alongside an on-going process of environmental assessment that has informed many of the mitigation measures proposed as part of the design development. The Design and Access Statement (**Document D1/1**), forming part of the planning submission, outlines the rationale behind the evolution of the final design. It describes the approach to “fitting” the scheme successfully into the existing townscape and the measures used to reduce scale and retain landscape and visual amenity around the stadium, with particular emphasis on creating new areas of public space, whilst allowing the stadium to function.
- 8.7.2 The principal mitigation and enhancement measures integrated into the design and delivered through proposed S106 contributions can be summarized as follows:
- Introduction of a two-storey podium along the whole length of the Main Stand expansion to step down the scale, mass and visual impact in relation to the new public spaces and retained neighbouring properties;
  - ‘Folding down’ of the roof structure to reduce height and mass of the proposed stand expansions;
  - Articulation of the podium and plinth with active uses; brick detailing and extensive glazed areas at ground level;
  - Extensive glazing along the entire length of the upper sections of the Main Stand expansion;
  - Retention of significant tree groups along the northern edge of the site adjoining Dahlia Walk;

- Substantial new semi-mature tree and shrub planting, using planting mixes to compliment much of the historic landscape character of Stanley Park to the north. The new trees are selected and located where necessary, to mitigate adverse visual effects;
- Revitalisation of Dahlia Walk that responds to the proposed stadium and associated spaces and resolves the 'awkward' link to Rose Walk;
- Creation of a continuous footpath route around the eastern end of the park to link up with the new Dahlia Walk. This completes a footpath network around the entire park and helps to unify the eastern and western areas;
- Manipulation of levels to ensure access and permeability are retained and enhanced between the stadium and adjacent streets;
- Use of proposed landform to provide partial screening of the new Outside Broadcast Area (OB). On Non-match days the OB will be used as an informal games area which will also afford the visual screening;
- Creation of substantial new public spaces - Anfield Square and The Linear Grove. These two 'spaces' will add to the quality and diversity of open space locally and create new links between the Park, Walton Breck Road and residential areas; and
- The new stadium will provide publicly accessible viewing areas and a proposed "podium" that will allow new views across the park and beyond.

8.7.3 All of these measures have been taken into account in the visual assessment and analysis contained within this chapter.

## **8.8 Cumulative effects**

8.8.1 Cumulative effects are those that may result from the combination of past, present or future actions of existing or planned activities in a project's zone of influence (Zol). While a single activity may itself result in an insignificant impact, it may, when combined with other impacts (significant or insignificant) in the same geographical area and occurring at the same time, result in a cumulative effect that is significant.

8.8.2 The current list of planned developments which are included in the cumulative impact assessment, are those identified in the Anfield SRF comprising:

- Anfield Village & Rockfield housing refurbishment;
- New build housing led regeneration;
- The Walton Breck Road (The High Street) Corridor;
- New public space and Village Square development (training hotel and offices); and
- Completion of the restoration of Stanley Park east of Mill Lane.

8.8.3 Without any evidence of the detailed design of the identified projects within the SRF (aside from the proposed works for the park to the east of Mill Lane), there has been no presented change to the significance judgments reached above. Clearly the development of all of the projects identified within the SRF will deliver a holistic approach to the regeneration of the Anfield area over the short, medium and longer term. The stadium expansion project (noting

the wider benefits described above), aligned with the range of projects within the SRF (some which are still subject to further testing and feasibility work) have the potential to deliver positive physical, social and environmental transformational change within the neighbourhood of Anfield over the longer term. Particularly in relation to the relationship between the stadium and its neighbours, the residential district to the east (Anfield Village & Rockfield) will lead to clearer and more desirable walking routes and public spaces, and the creation of amongst other things a Training Hotel on the corner of Walton Breck Road and Alroy Road will further define a very important corner in the urban fabric. In turn, the redevelopment of Walton Breck Road will ensure that the public spaces associated with the stadium expansion are exploited fully and opportunities explored to establish a more pedestrian focused character to this important movement corridor.

## **8.9 Residual Impact Assessment**

8.9.1 Consideration has been given to the potential residual effects of the proposals and includes any negative landscape or visual effects, and the identification of the potential long-term enhancements as a result of the proposals.

8.9.2 Residual negative landscape effects as a result of the proposals include:

### **Effect on character of Environmental Designations and Open Space:**

8.9.3 The effect of the Main Stand expansion on Stanley Park and to a much lesser extent, Anfield Cemetery will not be mitigated completely by the public realm and landscape proposals, or the growth of trees within and around them over the passage of time. However, the extensive cover afforded by the existing trees within the park will improve over time and when the trees come into leaf and filter the majority of the lower portions of both phases.

8.9.4 Anfield Stadium has however been a constant feature within Stanley Park since the 19<sup>th</sup> Century. It is therefore one of the defining elements of the Park, as is Everton's stadium at Goodison Park. It is well documented (and indeed highlighted in the listing for Stanley Park) that Park and football are inextricably linked in this location, as is the heritage of the community and the supporters of LFC. The Main Stand expansion will alter the character of the eastern portion of Stanley Park, but the impact and effect will be ever changing as park users move through Stanley Park as Kemp's design approach intended.

8.9.5 It is therefore considered that the residual effect on Stanley Park is Minor Adverse.

8.9.6 Whilst Anfield Cemetery will experience more of a change in character within some of its southern areas in the short term, the growth of trees within it, between it and the stadium and around the proposed stand expansions will reduce the effect within a comparatively short time period. It is therefore considered that the residual effect on Anfield Cemetery is also Minor Adverse.

8.9.7 The Phase 2, Anfield Road Stand expansion is shown in block model form, so there will be ample opportunity to explore and develop the relationship between this elevation and Stanley Park/ Anfield Cemetery. Whilst it is unlikely the ultimate height will reduce significantly, the palette of materials; the articulation of the façade and the opportunity for further tree planting along Anfield Road and Dahlia Walk, will further aid the integration of the North Stand expansion.

8.9.8 At this stage, it is therefore considered that the residual effect is Minor Adverse.

**Effect on Scale and Massing:**

8.9.9 Of the elements that make up the townscape character, the scale and massing of the stadium expansion will remain constant over time.

**Phase 1**

8.9.10 The Main Stand expansion will be a significant addition to the urban landscape of Anfield and North Liverpool.

8.9.11 However, the current stadium already defines much of the character of the surrounding area, with 'all roads leading to Anfield'. The creation of significant areas of activated public space associated with the Main Stand expansion will enable the stadium to 'sit' much more comfortably with its residential neighbours. Despite the planting of large numbers of semi-mature trees in these extensive areas surrounding the stadium, the upper portions of the Main Stand will never be hidden. Although the stadium is a 'beacon' within the surrounding area, it will have a lasting residual impact upon the scale and massing of the district.

8.9.12 We therefore consider the residual effect to be Minor Adverse.

**Phase 2**

8.9.13 The North Stand expansion, whilst being much larger than the existing stand in terms of scale and mass is tighter into the urban grain, as well as being of a comparable scale with its neighbour the Centenary Stand.

8.9.14 At this stage, it is therefore considered that the residual effect remains as Moderate Adverse.



## **8.10 Previously consented Stadium schemes within Stanley Park**

- 8.10.1 It is important when considering the impacts and effects of the two proposed expansion phases on the townscape, and perhaps more importantly on the landscape setting of the two Registered assets, that previous proposals by LFC to expand their capacity involved the construction of a new building within Stanley Park.
- 8.10.2 Although two previous schemes for stadia within Stanley Park have been granted, only one remains extant. The relevant planning permission was granted on 12 April 2006 reference 03F/3214. It was a hybrid planning permission including Full planning permission for a new 60,000 seater stadium.
- 8.10.3 The consented stadium covered the entirety of the eastern portion of Stanley Park, from Mill Lane to the Arkles Lane/ Utting Avenue boundary. The parking that was displaced was proposed to be re-provided below the stadium.
- 8.10.4 The proposed 'Stadium in the Park' had a footprint of approximately 40,845m<sup>2</sup> and reached a maximum height of 94.279m AOD.
- 8.10.5 The scale and mass of the proposed stadium was considered to have highly significant visual and landscape character impacts upon both the park and Anfield Cemetery, completely altering their character and the experience of those using both historic assets. However, taking into account the stadium essentially 'completing' the park, and the wider regenerative benefits it would have brought, on balance the overall impact was considered to be beneficial.
- 8.10.6 Whilst the proposed stadium would have resulted in the finishing off of the eastern portion of the park, the following elements of park fabric would have been lost:
- Dahlia Walk along its entire length;
  - The integrity of Mill Lane as a simple byway through the park;
  - All TPO'd trees to the east of Mill Lane and up to the Arkles lane/ Utting Avenue boundary;
  - The integrity of the boundary wall along Arkles Lane/ Utting Avenue, as new openings were proposed; and
  - Any remaining informal football pitches to the east of Mill Lane.
- 8.10.7 It is material, that all these elements will be retained and in some cases enhanced (in particular Dahlia Walk) with the current proposals to expand the existing stadium, and that it was considered acceptable by the statutory Consultees to construct a building of such a scale and mass within the Registered Landscape.

## 8.11 Summary & Conclusions

- 8.11.1 This assessment has examined the landscape, townscape and visual impacts in relation to the development proposals for both Phase 1 and Phase 2 Liverpool Football Club Stadium Expansion. The potential impacts and effects have been thoroughly assessed through a combination of desk study; research; site surveys and digital modelling. These have not only covered the application area but have also included the local and wider context.
- 8.11.2 In respect of townscape impacts and effects, the conclusion following the assessment is that on balance, the development will have a Minor Beneficial impact on the townscape and visual character for the area.
- 8.11.3 This is due to the enhancements to the already significant contribution that the existing stadium plays as a townscape component within the Anfield area. The quality of design proposed for the two stand expansions and the significant areas of high quality public realm that they will sit within will bring an uplift in townscape and public realm quality.
- 8.11.4 These spaces will have a function above and beyond aiding the functionality of the stadium on match days, rather that they will be new civic spaces for the local residents and the people of Liverpool, across a variety of scales. The history of LFC will be able to integrate better with the surrounding residential communities and in turn the further enriching the Stadium's prominence as a landmark building for the surrounding North Liverpool area.
- 8.11.5 The impact and effect to the entirety of the adjacent Stanley Park is deemed to be generally Minor Adverse broken down into residual Minor Adverse impact that the stadium expansions will have on the character and visual amenity of the Eastern portion of Stanley Park and the Negligible impacts on the Western, more sensitive historic portion of the Park. The western area of the park is visually self-contained and views toward the new stadium will be restricted to glimpses or views broken up by existing vegetation as we move towards the Eastern portion of the park across the existing playing fields. Improvements in the physical relationship between the park and surrounding urban area, through better connections between Dahlia Walk and Anfield Road, and the addition of diagonal routes through the eastern middle ground will improve circulation and help disperse fan numbers on match days. The visually poor car parking within the eastern portion of the park will be re-laid out and resurfaced, with the addition of a large number of new mature trees to further break down the mass.
- 8.11.6 The impact and effect on the Anfield Cemetery to the north of the site is deemed to be generally Moderate Adverse based on the visual intrusion of both phases of expansions and the sensitivity of the receptors in a Grade II\* Registered Landscape. Although the receptors will be relatively low numbers of the public visiting the Cemetery, the status of the landscape and clear visibility of the stadium expansion will mean the impacts and effects will be difficult to fully mitigate against. Over time this impact will reduce to Minor Adverse with the growth of

the trees within and around the Cemetery, as well as the establishment of new planting within the eastern portion of Stanley Park.

- 8.11.7 The remodelled and extended Stands in both Phases will result in a high quality development that improves the current facades viewed from Walton Breck Road (to the South West) and Stanley Park to the North, providing improved active and animated frontages that address and further enhance the adjacent streetscapes and park interface.
- 8.11.8 The proposed new public spaces around the Main Stand (Anfield Square and The Grove) will be substantial additions to the landscape of Liverpool, not just the neighbourhood or district. They are monumental in scale, able to accommodate large crowds and significant civic events. They will also provide an appropriate canvas to celebrate the heritage and success of LFC, as well as giving the Hillsborough Memorial the due reverence and setting that it deserves. These spaces will provide a scale of public realm that is more sympathetic to the current stadium and proposed stand expansions, introducing diversity and a community asset that will be highly beneficial to the people of Anfield, fans of LFC and the people of Liverpool.

## 9 Sunlight and Shading

### 9.1 Introduction

- 9.1.1 This chapter reports the potential effects on natural daylighting, sunlighting and overshadowing from the proposed development on the surrounding buildings and open spaces. A separate microclimate (wind) chapter has been compiled and is presented in Chapter 11.
- 9.1.2 The chapter provides a modelled representation of the natural sunlight and shading from the proposed development on the adjacent buildings, gardens and open spaces as carried out for a number of key dates throughout the year to provide likely worst case studies. This includes two assessments, one with the proposed development and one without to understand the potential changes resulting from the development.
- 9.1.3 This chapter presents the assessment methodology, outlines the relevant policies and legislation, records the consultation undertaken to date, describes the existing or 'baseline' conditions, and assesses the potential effects arising following completion of Phases 1 and 2. This allows the performance of the design to be assessed relative to the existing conditions and the significant impacts of the proposal to be identified. Mitigation measures are identified to avoid or minimise any potentially adverse effects where required.
- 9.1.4 This chapter has been prepared by Mott MacDonald Ltd.

#### **Design measures incorporated**

- 9.1.5 No specific sunlight or shading-related design measures are incorporated within this assessment.

### 9.2 Methodology

- 9.2.1 This section provides a description of the approach taken for the assessment of effects of daylighting, sunlighting and shading.
- 9.2.2 The methodology and assessment has been conducted in line with the Building Research Establishment Limited's (BRE's) "*Site Layout Planning for Daylight and Sunlight. A Guide to Good Practice*" (2011) ("the BRE Guide"). Most local authorities recognise the guidelines set out in the BRE Guide as the most appropriate method for sunlight and overshadowing assessments.
- 9.2.3 The BRE Guide provides advice on site layout planning to provide good natural lighting within new developments; safeguarding of daylight and sunlight within existing buildings nearby; and the protection of daylighting of adjoining land for future development. It also outlines parameters that should be used to assess access to sunlight for buildings, and what to consider when assessing overshadowing. The guide suggests values for these parameters

that developers should consider, so as to maximise the potential for retaining good sunlight and overshadowing profiles for surrounding receptors.

- 9.2.4 The methods outlined in the BRE Guide are to be viewed as tools to instruct and inform the design of developments, rather than creating mandatory criteria that must strictly be met. Whilst it is not part of planning policy, it does provide a robust assessment methodology, allowing some level of flexibility at the same time.
- 9.2.5 The criteria laid out in the BRE guidelines to be calculated for each receptor are Vertical Sky Component (VSC) and Annual Probable Sunlight Hours (APSH).
- 9.2.6 VSC is a measure of the access of a façade or window to daylight, with daylight referring to indirect or diffuse light received from the sky. A high VSC value would afford a room a generally bright appearance, while a low VSC value will give a room a gloomy feel.
- 9.2.7 APSH measures the access of a façade or window to direct sunlight, with sunlight referring to light that falls directly from the sun. A high APSH value means that the room will receive a high amount of direct sunlight.
- 9.2.8 In accordance with the BRE guidelines, VSC has been considered for all relevant façades whilst APSH has been assessed only for those that face within 90° of south.
- 9.2.9 The analysis of the ground shading considers the shadowing cast on the equinox on 21 March. Only sunlight from above an angle of 10° from the horizon was assessed, in accordance with recommendations in the BRE guidelines.
- 9.2.10 Good site layout planning for sunlight should not limit itself to providing good natural lighting inside buildings. Sunlight in the spaces between buildings has an important impact on the overall appearance and ambience of a development. The availability of sunlight should also be checked for all open spaces where it will be required. In this instance this includes:
- Gardens, usually the main back garden of a house;
  - Parks and playing fields (e.g. Stanley Park); and
  - Sitting out areas such as those in non-domestic buildings.
- 9.2.11 Each of these spaces will have different sun lighting requirements; however the worst situation is to have significant areas that only receive a limited period of sunshine over a large part of the year. Criteria laid out in the BRE Guide suggest the spring equinox (21<sup>st</sup> March) is chosen as a date for assessment. It is recommended that at least 50% of the areas of open space listed above should receive at least two hours of sunlight on 21<sup>st</sup> March.

### Sources of data

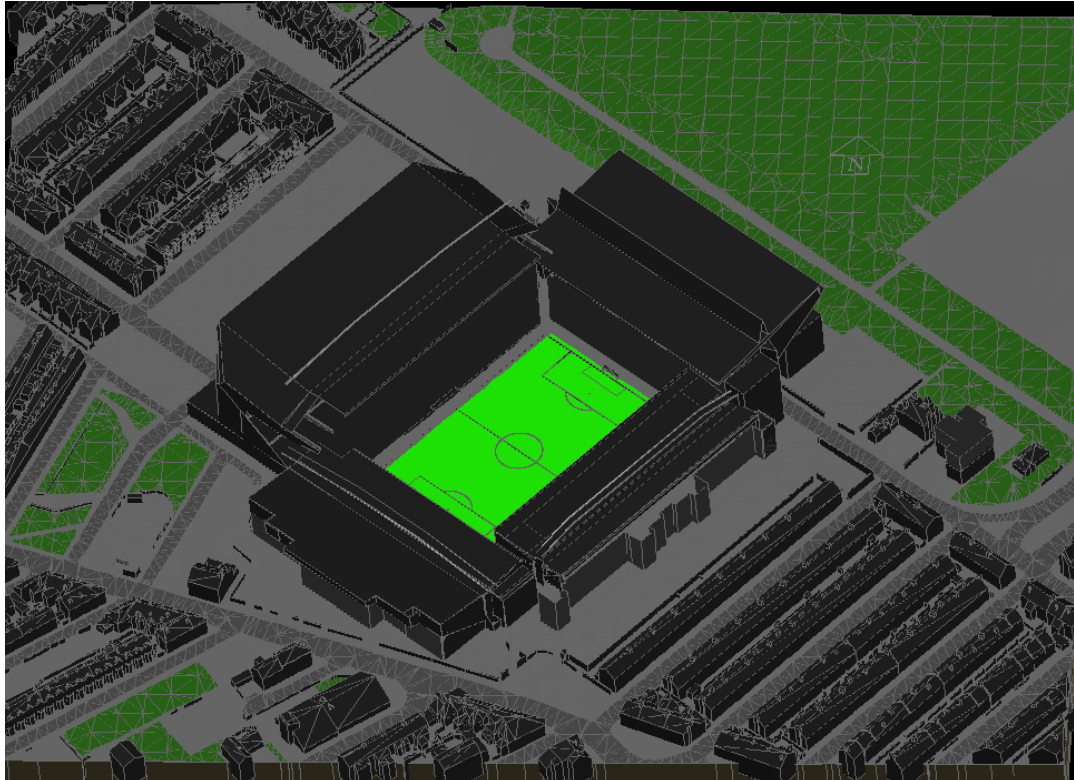
- 9.2.12 The 3D computer model of the proposed development has been based on the 3D illustrative model received from KSS Architects.

- 9.2.13 The buildings surrounding the site have been extruded from 2-D Ordnance Survey data that had been enhanced with height survey data with a stated vertical accuracy of +/- 0.5m. The investigations included information regarding window receptors as obtained from photographic information from the public realm.
- 9.2.14 Vegetation in the area of the site and its surroundings has not been included in this assessment in accordance with BRE guidance stating that *“For calculation purposes, trees may be ignored unless they form dense continuous belts.”*

#### **Software used for analysis**

- 9.2.15 The 3D computer models of the existing site and surrounding area for the analysis have been constructed from 2-D Ordnance Survey data that had been enhanced with height survey data and processed using Arcv2Cad 5.0, Global Mapper 10 and Autodesk 3ds Max Design 2010 software. The 3D model of the proposed development was created from the model supplied by KSS.
- 9.2.16 The assessment has been undertaken using computational methods within the industry-recognised software Ecotect 2011, which is designed to consider the criteria outlined in the BRE guidelines.
- 9.2.17 The sunlight model incorporated in Ecotect 2011 was used to analyse the overshadowing through 21 March, ensuring that only sunlight above an angle of 10° from the horizon was assessed.
- 9.2.18 Small scale features, such as balconies, trees, shrubs or lamp posts, were not included as they have little effect on the overall environment.
- 9.2.19 A 3-D plan view of the area modelled is shown in Figure 9.1:

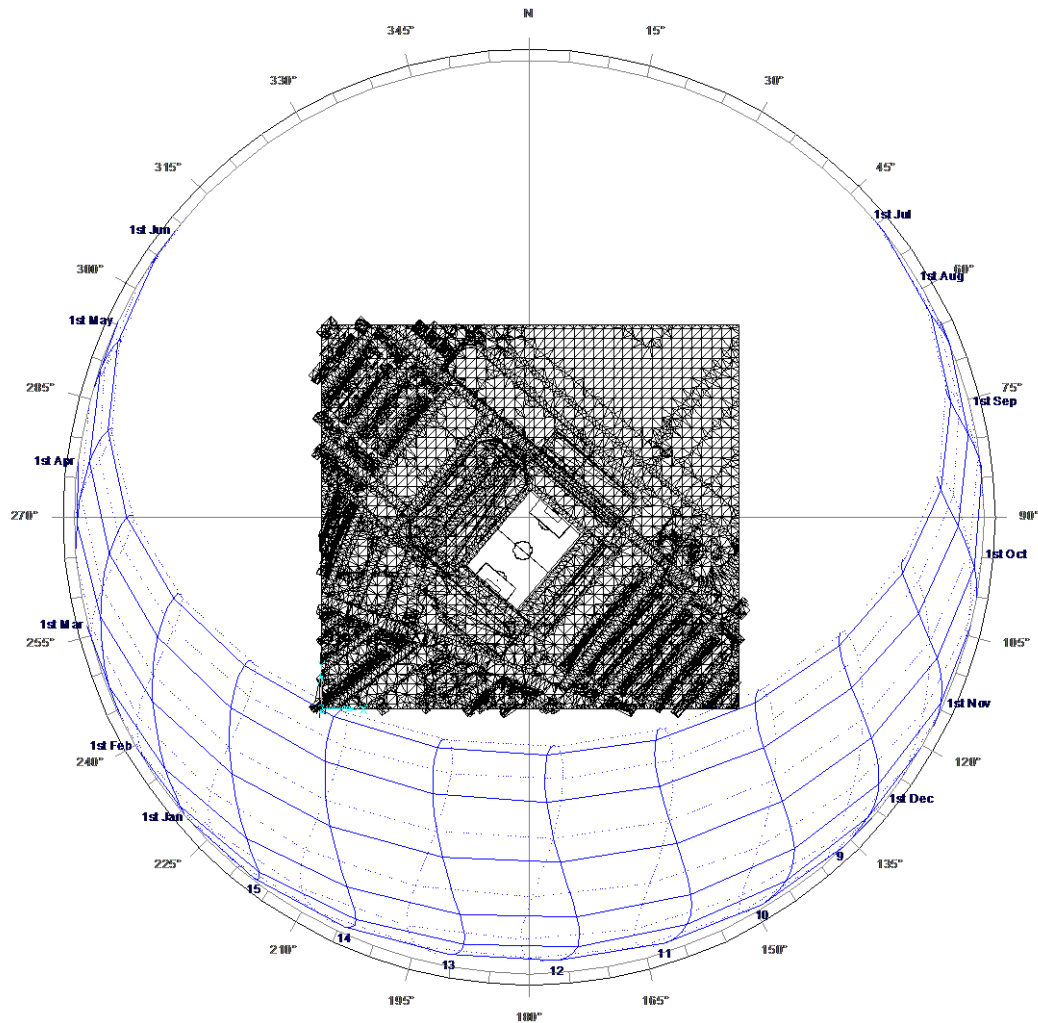
Figure 9.1: 3-D plan view of area modelled for sunlight and shadowing



9.2.20 The sun path for Anfield Stadium (latitude 53.43, longitude 2.96) is as shown in Figure 9.2 and has been used as the basis of the calculations for the assessment.



Figure 9.2: The sun path at Anfield Stadium



### Vertical Sky Component Modelling

- 9.2.21 The VSC calculations were undertaken in Ecotect 2011. The VSC values for the receptors were firstly calculated with the existing stadium in place. The proposed stadium was then enabled and the VSC values for the same receptors were re-calculated and compared to the original values.
- 9.2.22 The results were then exported and analysed in reference to the significance criteria.

### Annual Probable Sunlight Hours Modelling

- 9.2.23 As with the VSC calculations the APSH calculations were undertaken in Ecotect 2011. The receptors used for the APSH calculations were only those orientated within 90 degrees of south, as in accordance with the BRE guidelines. The APSH values for the receptors were firstly calculated with the existing stadium in place. The proposed stadium was then enabled and the APSH values for the same receptors were re-calculated and compared to the original values.
- 9.2.24 The results were then exported and analysed in reference to the significance criteria.

### Overshadow Modelling

- 9.2.25 The overshadowing effects of the proposed Main Stand and Anfield Road Stand have been modelled over four days in the year to prevent a large amount of repetitive data being produced, in accordance with industry practice.
- 9.2.26 The days chosen for the model are the summer and winter solstices (21<sup>st</sup> June and 21<sup>st</sup> December), which represent the extremes in daylight hours, and the two equinoxes in spring and autumn (21<sup>st</sup> March and 21<sup>st</sup> September), which lie between these two extremes.
- 9.2.27 The selected dates cover what are considered to be the most valuable days in terms of sunlight measurement.
- 9.2.28 Shadow measurements have been carried out at half-hourly intervals during the period whilst the angle of the sun is greater than 10 degrees above the horizon. Sunlight from below this angle is discounted, as it is likely to be prevented from reaching the ground due to the presence of fences, trees, and other low-level obstructions.
- 9.2.29 The model has used Meteorological Office data charting the average hours of sunshine for the key months of study using data obtained over the last 40 years.
- 9.2.30 The data in Table 9.1 was formulated using the sunrise and sunset times for 2014, to establish the average daily and monthly hours of sunshine for each of the chosen months.

Table 9.1: Clear Sky Sunlight Hours for Liverpool

Month	Average Monthly Clear sky (hours)	Average Daily Clear Sky (hours)
March	99.8	3.22
June	178.8	5.96
September	132.6	4.42
December	44.3	1.43

- 9.2.31 The average annual probable sunlight hours for the Anfield Stadium is 1392 hours<sup>4</sup>.
- 9.2.32 During December the sun is at its lowest point in the sky, casting the largest shadows, and having the least hours of clear sky sunshine. During June the sun is at its highest point in the sky, casting the shortest shadows and having the most hours of clear sky sunshine. During the months of March and September the daylight hours are between the extremes of December and June and have similar shadow paths to each other.
- 9.2.33 In order to illustrate the difference that the proposed development makes, 'before' and 'after', shadow plots are presented.
- 9.2.34 As gardens and amenity areas are deemed to be in use all year around, the spring equinox (21<sup>st</sup> March) shadow plots have been used as it gives an average level of shadowing. Lengths of shadows at the autumn equinox (21<sup>st</sup> September) will be the same as those for 21<sup>st</sup> March and are presented in ES Volume 2, Part 2 for completeness. Shadow plots for summertime (21<sup>st</sup> June) and wintertime (21<sup>st</sup> December) are also presented to show minimum shadow and increased shadowing respectively. In a built up area it is common for large areas of the ground to be in shadow in December.

### **Spatial scope of assessment**

- 9.2.35 For existing buildings, this chapter considers the residential buildings, roads and public spaces with closest proximity to the site. The buildings further away from the site have been included until either negligible or no effects are calculated for VSC and APSH.
- 9.2.36 For existing buildings of more than one floor, APSH values have been calculated per floor working from the ground floor upwards until negligible or no effects were calculated. Since access to sunlight increases higher in a building, all window receptors on higher floors will sustain increasingly minor effects.
- 9.2.37 For the proposed site itself, all the façades of all buildings have been assessed if appropriate to the criteria being calculated.

### **Identification of receptors**

- 9.2.38 The BRE guidelines suggest that they are intended for "use with adjoining dwellings and any existing domestic buildings where the occupants have a reasonable expectation of daylight".
- 9.2.39 The existing buildings within close proximity to the site are residential and therefore all window receptors have been assessed. These include the properties on Alroy Road, Sybil Road,

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<sup>4</sup> BRE Guide, Appendix A, Figure A3.

Coningsby Road, Gilman Street, Richfield Road, Anfield Road, Walton Breck Road, Skerries Road and Baltic Street.

- 9.2.40 All existing window receptors are assessed at one central point, as outlined within the BRE guidelines.
- 9.2.41 When considering the results of the analysis for residential buildings, the BRE guidelines further clarify that *“bathrooms, toilets, storerooms, circulation areas and garages need not be analysed, and that bedrooms, whilst they should be analysed, are less important than other living areas in terms of access to daylight.”*

#### **Assessment significance criteria**

- 9.2.42 The guideline values outlined below are those recommended by the BRE guidelines for VSC and APSH.
- 9.2.43 There are no nationally, regionally or locally published standards for assessing the significance of the results for either daylight or sunlight. Mott MacDonald has therefore developed significance criteria outlined below, taking into account the type and location of the development.

#### **Comparative VSC for existing buildings surrounding the development**

- 9.2.44 For existing buildings, the BRE guidelines recommend that the effect of a development on access to daylight at the surrounding buildings may be adversely affected if:
- the VSC measured is less than 27%;
  - and**
  - the VSC has been reduced by more than a fifth of its value before the development, i.e. is less than 0.8 times its original value;
  - and**
  - the reduction in sunlight received over the whole year is greater than 4% of APSH.
- 9.2.45 The significance criteria below have been developed by Mott MacDonald taking into account the type and location of the development.
- **Substantial Beneficial:** an increase in VSC to 1.35 or more times the existing value.
  - **Moderate Beneficial:** an increase in VSC to between 1.15 and 1.35 times the existing value.
  - **Minor Beneficial:** an increase in VSC to between 1.0 and 1.15 times the existing value.
  - **Negligible:** a reduction in VSC to between 0.8 and 1.0 times the existing value and an overall VSC value of less than 27%;
- or**
- a reduction to less than 0.8 times the existing VSC but still retaining an overall VSC of more than 27%.

- **Minor Adverse:** a reduction in VSC to between 0.65 and 0.8 times the existing value and an overall VSC value of less than 27%.
- **Moderate Adverse:** a reduction in VSC to between 0.5 and 0.65 times the existing value and an overall VSC value of less than 27%.
- **Substantial Adverse:** a reduction in VSC to between 0 and 0.5 times the existing value and an overall VSC value of less than 27%.

9.2.46 Note that the “negligible” and all “beneficial” significance criteria meet the BRE guidelines for comparative VSC values.

#### Comparative APSH for existing buildings surrounding the development

9.2.47 For buildings in general, the BRE guidelines recommend that interiors which expect sunlight should receive at least 25% of APSH.

9.2.48 For existing buildings, the BRE guidelines recommend that the effect of a development on access to sunlight at the surrounding buildings may be adversely affected if:

- either or both annual APSH falls below 25% and the winter APSH below 5%;  
**and**
- either or both annual and winter values are reduced by more than one fifth of their value before the development, i.e. is less than 0.8 times its original value.

9.2.49 The significance criteria below have been developed by Mott MacDonald taking into account the type and location of the development.

- **Substantial Beneficial:** an increase in APSH to 1.35 or more times the existing value.
- **Moderate Beneficial:** an increase in APSH to between 1.15 and 1.35 times the existing value.
- **Minor Beneficial:** an increase in APSH to between 1.0 and 1.15 times the existing value.
- **Negligible:** a reduction in APSH to between 0.8 and 1.0 times the existing value and an overall APSH value of 25% or less;  
**or**  
a reduction to less than 0.8 times the existing APSH but still retaining an overall APSH value of more than 25%.
- **Minor Adverse:** a reduction in APSH to between 0.65 and 0.8 times the existing value and an APSH value of 25% or less
- **Moderate Adverse:** a reduction in APSH to between 0.5 and 0.65 times the existing value and an APSH value of 25% or less
- **Substantial Adverse:** a reduction in APSH to between 0 and 0.5 times the existing value

9.2.50 Note that the “negligible” and all “beneficial” significance criteria meet the BRE guidelines for comparative APSH and Winter APSH (W-APSH) assessments.

### Ground Shading for the Existing and Proposed Public Open Spaces and Amenity Areas

- 9.2.51 The BRE Guidelines state that it is difficult to suggest hard and fast rules in regard to ground shading, however it is recommend that for it to appear adequately sunlit throughout the year, at least 50% of a garden or amenity area should receive at least two hours of sunlight on 21st March. If, as a result of a new development, an existing garden or amenity area does not meet the two hour requirement and the area which can receive two hours of sun on 21st March is less than 0.8 times its former value, then the loss of sunlight is likely to be noticeable.
- 9.2.52 As such, this assessment considers that a negligible impact will apply if identified receptors continue to receive at least two hours of sunlight on 21st March and meet the BRE guidelines for ground shading. If less than 2 hours of sunlight is received as a result of the development, then an adverse impact is assumed, though this is not assigned assessment criteria because no such guidance is currently available.
- 9.2.53 The fact that Anfield Stadium has residential properties in close proximity to the east, south and west sides, as well as the historic registered Stanley Park to the north, means that these receptors are regarded as being of high sensitivity for the purposes of this assessment.

## 9.3 Legislation and Policy

- 9.3.1 There are no specific legislative requirements in the UK governing impacts on sunlight and daylight. However, the following policies are acknowledged as being of relevance to the development.

### Planning Policy Requirements

#### National Planning Policy Framework (NPPF), 2012

- 9.3.2 The NPPF (Department for Communities and Local Government) refers to Government objectives to conserve and enhance the natural and local environment in the planning system. This is of relevance because the availability of sunlight forms an important part of the local environment.
- 9.3.3 Paragraph 110 on page 26 of the NPPF states that:
- '.....In preparing plans to meet development requirements, the aim should be to minimise pollution and other adverse effects on the local and natural environment...'*

### Unitary Development Plan

- 9.3.4 The Liverpool Unitary Development Plan (UDP) is a statutory document that plays a major role in shaping the future of the city. It was adopted in November 2002. Under the new planning system, the UDP is a 'saved plan'; the majority of its policies have been 'saved' and continue to carry development plan status. The UDP will eventually be replaced by the new Local Plan. Until then the saved policies of the UDP, together with those of the Merseyside and Halton Waste Local Plan comprise the adopted statutory development plan for making planning decisions in Liverpool.
- 9.3.5 Whilst the UDP does not specifically require the consideration of sunlight and shading effects within an Environmental Statement it does contain relevant policies for the protection of residential amenity (Policy H4) and environmental protection.

## 9.4 Consultation

- 9.4.1 Liverpool FC Stadium Expansion Environmental Scoping Report [Ref 2] was referred to LCC Planning Department. Table 9.2 summarises the key points of the scoping responses in relation to the sunlight and shading assessment.

Table 9.2: Scoping responses for sunlight and shading assessment

Name of Organisation	Key Concerns	Comment
Liverpool City Council	None	Methodology agreed as acceptable.

## 9.5 Assumptions and limitations

- 9.5.1 A key assumption for the study is that an open area will be created to the north-west and south-west of the stadium, with the existing neighbouring properties in the process of being or to be demolished. Given these properties will be demolished prior to stadium expansion proposals, no further assessment has been undertaken on them.
- 9.5.2 The 3-D model parameters, sky and sun positions provide modelled simulation in Autodesk Ecotect software. This software is industry standard but cannot guarantee future clear sunlight hours thus it provides a close simulation of the current parameters.
- 9.5.3 The 3-D model & overshadowing parameters do not include reflected sunlight & solar glare assessments.
- 9.5.4 The window receptors in the area of detailed study have been derived from publicly available external photographic data taken from publicly accessible locations.



- 9.5.5 The model for those buildings surrounding the site has been extruded to a maximum height from data with a quoted accuracy for the building height of +/- 0.5m. The terrain surrounding the site has been modelled based on terrain data at a 5m resolution grid.

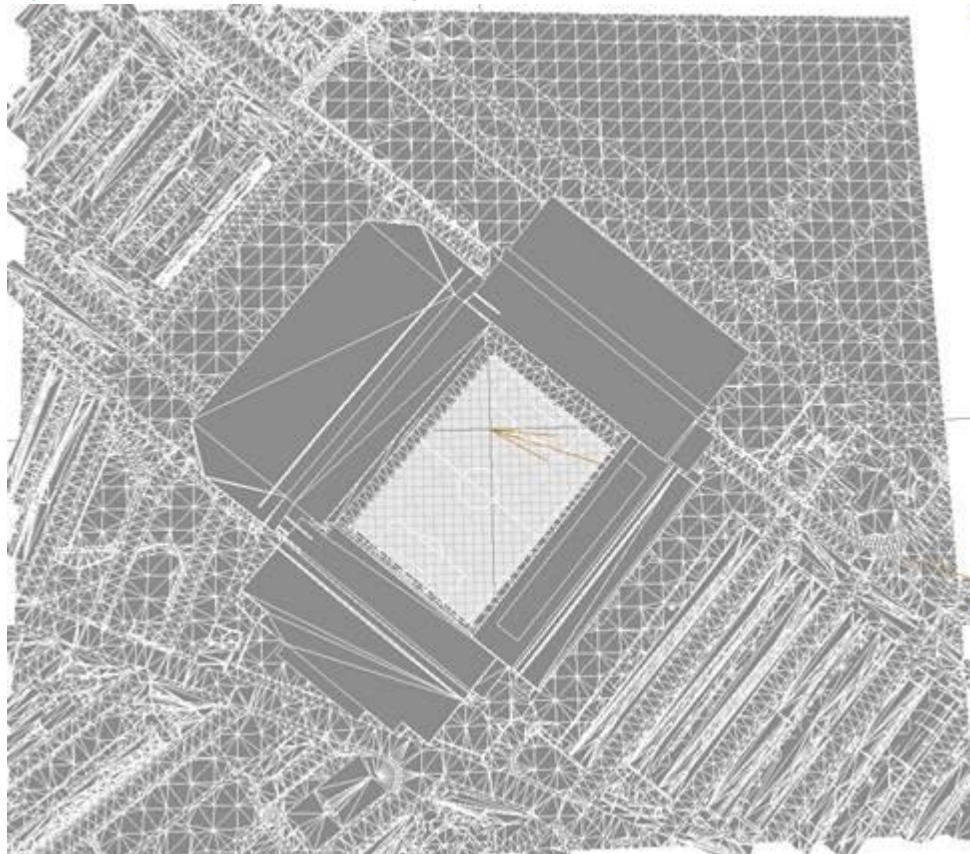
## **9.6 Baseline conditions**

- 9.6.1 Pre-1919 terraced housing is the most prevalent building type in Anfield; these dwellings are characteristic of the housing stock of that period and found across the city.
- 9.6.2 Significant housing clearance has already been carried out along Lake Street and Tinsley Street, creating an open green space to the south west of the Stadium. The green space is primarily lawn with a small number of footpaths serving pedestrian movement between Walton Breck Road, Lothair Road and Back Rockfield Road.
- 9.6.3 The frontages of buildings are orientated towards the public street positioned at the back edge of the footpath, and the rear elevations face private yards/ gardens; many of the perimeter blocks are divided by narrow rear alleyways. The majority of the streets and buildings are orientated along a north south axis.
- 9.6.4 Generally there is a high density and a largely regular street pattern; however the scale of the individual block sizes within the street pattern and housing density varies. The housing to the west of the existing stadium is typically within small blocks and narrow street widths averaging about 8.5m. The housing density is extremely high, i.e. around 140 dwellings per hectare. The majority of the terraced housing elsewhere around the site, however, tends to be within wider blocks, with street widths around 11m and housing densities of between 50 and 90 dwellings per hectare.
- 9.6.5 Arkles Lane comprises a wide four-lane boulevard (33 metres in width) which incorporates Arkles Lane and Utting Avenue.
- 9.6.6 Anfield Road contrasts with the surrounding built areas to the south in that it contains substantial detached and semi-detached properties located within spacious front and rear private gardens. Densities are extremely low and average around 6 dwellings per hectare.
- 9.6.7 Along Alroy Road, Gilman Street and the streets immediately surrounding the stadium, the majority of buildings comprise two-storey Victorian terraced properties.
- 9.6.8 Adjacent to the northern edge of the application site is Stanley Park, a grade II\* Registered Landscape, which contains open grassland and a car park to the north-easterly side. Football pitches occupy the area to the west of Mill Lane within Stanley Park.
- 9.6.9 Stanley Park forms an expansive area of public open space within a heavily built-up part of the city and is one of the city's major historic parks, providing an important recreational resource within the surrounding dense urban area.

9.6.10 As stated in section 9.6, it is assumed that properties on Alroy Road (1-27 odds), Lothair Road (1-39 odds and 2 to 28 evens), Rockfield Road (55-65 odds and 80-96 evens) and Anfield Road (146-162 evens) will all be removed and have therefore not been included in the baseline conditions. Following demolition and prior to construction, some of the adjacent remaining properties will experience a temporary improvement in sunlight and shading conditions.

9.6.11 The spatial extent of the shading assessment is illustrated in Figure 9.3 below:

Figure 9.3: Spatial extent of shading assessment



Source: Mott MacDonald Ltd

## 9.7 Baseline VSC

9.7.1 A total of 781 window receptors surrounding the site were analysed for VSC values as identified in Section 9.3. The existing maximum and minimum VSC values along with the total number of receptors tested for each area are summarised in Table 9.3.

Table 9.3: Baseline existing VSC for surrounding window receptor

Location	Alroy Road	Sybil Road	Coningsby Road	Gilman Street	Rockfield Road	Anfield Road	Walton Breck Road	Skerries Road	Baltic Road
Number of Receptors	99	128	136	43	45	70	49	195	16
Existing Max VSC	38.40 %	35.80%	35.40%	37.10%	38.70%	39.10%	38.30%	31.40%	32.70%
Existing Min VSC	27.30 %	10.10%	13.70%	35.70%	27.10%	6.30%	19.20%	15.40%	31.80%

9.7.2 These values should be considered in relation to the BRE guideline VSC value of 27%.

## 9.8 Baseline APSH

9.8.1 Of those existing window receptors surrounding the site analysed for VSC, the window receptors on Alroy Road and Sybil Road have been tested since these are within closest proximity to the site. Providing the results for these receptors are within the BRE Guideline APSH value of 25% then it is considered that all other receptors are within the BRE Guidelines and no further analysis is required.

9.8.2 A total of 204 window receptors on Alroy Road and Sybil Road were analysed for APSH values. The existing maximum and minimum value for APSH along with the total number of windows considered in each area are summarised in Table 9.4

Table 9.4: Baseline existing APSH for surrounding window receptors

Location	Alroy Road	Sybil Road
Number of APSH Receptors	85	119
Existing Max APSH	75.60%	63.40%
Existing Min APSH	38.60%	9.10%

9.8.3 These values should be considered in relation to the BRE guideline APSH value of 25%.

## 9.9 Baseline W-APSH

9.9.1 The same set of 204 window receptors analysed for APSH values were analysed for W-APSH. The existing maximum and minimum value for W-APSH along with the total number of windows considered in each area are summarised in Table 9.5.

Table 9.5: Baseline existing W-APSH for surrounding window receptors

Location	Alroy Road	Sybil Road
Number of W- APSH Receptors	85	119
Existing Max W-APSH	79.50%	69.60%
Existing Min W-APSH	56.00%	0.00%

9.9.2 These values should be considered in relation to the BRE guideline APSH value of 25%.

## 9.10 Assessment of effects

### Construction – likely significant effects

9.10.1 Following demolition of the existing buildings in Lothair Road and the south eastern end of Rockfield Road, access to sunlight for surrounding areas will improve temporarily. As construction on both new stands progresses, the effects on access to sunlight will change. It is possible that during the construction phase, effects will fluctuate and be slightly greater than that of the final development depending on the methods of construction employed. For example, scaffolding or external lifts used around the outside of the stands will temporarily create a larger structure which will therefore have a potentially greater effect than the final development. Such fluctuating effects, however, will be temporary and negligible in nature, leaving no residual effect.

### Operation – likely significant effects

#### Comparative VSC for existing buildings

9.10.2 Of the 781 window receptors surrounding the site that were tested for VSC, the changes for 755 were negligible, therefore meeting the BRE Guideline value. The results for 26 of the window receptors show minor adverse effects.

9.10.3 Table 9.6 summarises the number of window receptors in each significance range for the areas tested for comparative VSC.

Table 9.6: Comparative VSC significance summary for surrounding buildings

Significance criteria	VSC Significance (number of windows)	Locations
Substantial Adverse	0	-
Moderate Adverse	0	-
Minor Adverse	26	2 – 24 Alroy Road
Negligible	755	Alroy Road, Sybil Road, Coningsby Road, Gilman Street, Rockfield Road, Anfield Road, Walton Breck Road, Skerries Road, Baltic Street.

Significance criteria	VSC Significance (number of windows)	Locations
Minor Beneficial	0	-
Moderate Beneficial	0	-
Substantial Beneficial	0	-
Total	781	-

9.10.4 Table 9.7 summarises the new maximum and minimum VSC values with the proposed development in place and the existing maximum and minimum VSC for each area for reference.

Table 9.7: VSC for surrounding window receptors with the development in place

Location	Total VSC Receptors tested	Maximum VSC Loss	Minimum VSC Loss	Proposed Max VSC	Proposed Min VSC	Existing Max VSC for each area	Existing Min VSC for each area
Alroy Road First Floor	31	9.90%	7.70%	30.30%	27.70%	38.00%	34.80%
Alroy Road Ground Floor	50	10.30%	3.40%	30.40%	23.30%	37.70%	29.60%
Alroy Road Second Floor	18	9.20%	0.00%	31.40%	24.90%	38.40%	27.30%
Sybil Road Second Floor	25	6.90%	1.90%	32.10%	27.40%	35.80%	29.30%
Sybil Road First Floor	51	6.80%	0.00%	31.50%	17.30%	31.60%	17.50%
Sybil Road Ground Floor	52	7.00%	0.00%	26.80%	10.10%	26.90%	10.10%
Coningsby Rd 1st Floor	44	1.40%	0.00%	34.80%	25.10%	35.40%	25.50%
Coningsby Rd Gd Floor	92	0.50%	0.00%	31.00%	13.80%	31.00%	13.70%
Gilman St 1st Floor	22	7.00%	1.60%	35.20%	29.80%	37.10%	36.00%
Gilman St Ground Floor	21	7.20%	1.70%	34.10%	28.90%	36.20%	35.70%
Rockfield Rd Second Floor	9	0.90%	0.20%	37.70%	36.90%	38.70%	37.10%
Rockfield Rd First Floor	18	3.10%	0.20%	34.90%	30.80%	35.60%	32.30%
Rockfield Rd Ground Floor	18	3.20%	0.20%	29.70%	25.40%	32.90%	27.10%
Anfield Road Second Floor	10	1.90%	0.00%	38.20%	37.20%	39.10%	37.20%
Anfield Road First Floor	14	1.90%	0.10%	35.60%	29.50%	37.10%	30.00%

Location	Total VSC Receptors tested	Maximum VSC Loss	Minimum VSC Loss	Proposed Max VSC	Proposed Min VSC	Existing Max VSC for each area	Existing Min VSC for each area
Anfield Road Ground Floor	46	4.00%	0.00%	33.00%	6.30%	34.00%	6.30%
Walton Breck Rd 2nd Floor	1	0.10%	0.10%	30.30%	30.30%	30.40%	30.40%
Walton Breck Rd 1st Floor	24	2.20%	0.00%	37.10%	22.50%	38.30%	22.50%
Walton Breck Rd Gd Floor	24	2.40%	0.00%	36.20%	19.10%	37.40%	19.20%
Skerries Rd First Floor	38	4.30%	0.00%	29.40%	21.50%	31.40%	21.60%
Skerries Rd Ground Floor	142	3.80%	0.00%	27.40%	15.40%	28.80%	15.40%
Baltic Street First Floor	16	4.50%	1.10%	31.30%	28.10%	32.70%	31.80%

#### Comparative APSH for existing buildings

- 9.10.5 For all of the 204 window receptors surrounding the site assessed for APSH values, the changes were negligible, therefore meeting the BRE guideline values.
- 9.10.6 Table 9.8 summarises the number and percentage of window receptors in each significance range for the 2 areas tested for comparative APSH.

**Table 9.8: Comparative APSH significance summary for surrounding buildings**

Significance criteria	Annual APSH Significance
Substantial Adverse	0
Moderate Adverse	0
Minor Adverse	0
Negligible	204
Minor Beneficial	0
Moderate Beneficial	0
Substantial Beneficial	0
Total	204

- 9.10.7 Table 9.9 summarises the new maximum and minimum APSH values with the proposed development in place alongside the existing maximum and minimum APSH for each area for reference.

Table 9.9: APSH for surrounding window receptors with the development in place

Location	Total APSH Receptors tested	Maximum Proposed APSH Ratio	Minimum Proposed APSH Ratio	Proposed Max APSH	Proposed Min APSH	Existing Max APSH for each area	Existing Min APSH for each area
Alroy Road First Floor	31	0.73	0.69	49.10%	41.20%	69.20%	59.10%
Alroy Road Ground Floor	37	0.72	0.66	49.10%	38.40%	68.00%	38.60%
Alroy Road Second Floor	17	0.76	0.71	56.80%	43.80%	75.60%	62.30%
Sybil Road Second Floor	46	1.00	0.83	53.00%	22.70%	53.50%	23.00%
Sybil Road First Floor	47	1.00	0.90	39.90%	8.70%	41.00%	9.10%
Sybil Road Ground Floor	26	0.91	0.70	56.30%	45.10%	63.40%	51.70%

#### Comparative W-APSH for existing buildings

- 9.10.8 Of the 204 window receptors assessed for W-APSH, the changes for 197 were negligible, while 2 changes were minor adverse, 2 changes were moderate adverse and 3 changes were substantial adverse.
- 9.10.9 Table 9.10 summarises the number and percentage of window receptors in each significance range for the 2 areas tested for comparative W-APSH.

Table 9.10: Comparative W-APSH significance summary for surrounding buildings

Significance criteria	Annual W-APSH Significance	Locations
Substantial Adverse	3	1 Sybil Road, 21 Sybil Road and 23 Sybil Road
Moderate Adverse	2	9 Sybil Road and 19 Sybil Road
Minor Adverse	2	11 Sybil Road and 15 Sybil Road
Negligible	197	Alroy Road and Sybil Road
Minor Beneficial	0	-
Moderate Beneficial	0	-
Substantial Beneficial	0	-
<b>Total</b>	<b>204</b>	-



9.10.10 Table 9.11 summarises the new maximum and minimum W-APSH values with the proposed development in place alongside the existing maximum and minimum W-APSH for each area for reference.

Table 9.11: W-APSH for surrounding window receptors with the development in place

Location	Total W-APSH Receptors tested	Maximum W-APSH Loss	Minimum W-APSH Loss	Proposed Max W-APSH	Proposed Min W-APSH	Existing Max W-APSH for each area	Existing Min W-APSH for each area
Alroy Road First Floor	31	0.64	0.45	45.20%	24.30%	76.20%	62.50%
Alroy Road Ground Floor	37	0.67	0.38	42.00%	20.70%	73.50%	56.00%
Alroy Road Second Floor	17	0.68	0.45	53.90%	24.10%	79.50%	64.70%
Sybil Road Second Floor	46	1.00	0.27	52.70%	1.30%	53.70%	4.80%
Sybil Road First Floor	47	1.00	0.19	25.50%	0.00%	25.00%	0.00%
Sybil Road Ground Floor	26	0.84	0.37	56.50%	37.80%	69.60%	50.70%

9.10.11 Table 9.12 summarises the existing and proposed W-APSH values for the seven façades that sustain adverse effects.

Table 9.12: Existing and proposed W-APSH values

Significance	Existing	Proposed	Ratio	Location
moderate adverse	4.80%	2.50%	0.52	9 Sybil Road
substantial adverse	4.80%	1.30%	0.27	21 Sybil Road
substantial adverse	1.30%	0.30%	0.23	23 Sybil Road
moderate adverse	4.40%	2.50%	0.57	19 Sybil Road
minor adverse	3.20%	2.20%	0.69	15 Sybil Road
minor adverse	2.90%	1.90%	0.66	11 Sybil Road
substantial adverse	1.60%	0.30%	0.19	1 Sybil Road

9.10.12 All these façades on Sybil Road have very low existing W-APSH. They do not receive any direct sunlight during the months of December and January with limited direct sunlight in early November and February since the sun does not get high enough in the sky to appear over the

houses in Alroy Road. Any sunlight they do receive in the winter months occurs during the morning period. The reduction in the direct sunlight that the W-APSH calculations indicate in the months that the properties do receive sunlight will occur at the early to mid-morning period.

- 9.10.13 Table 9.13 summarises to the nearest 15 minutes the existing and proposed times at which the sun is first visible and then first hidden on the 21<sup>st</sup> September, the beginning of the period considered for W-APSH.

Table 9.13: Sybil Road Sun Visibility Times

Location	Existing Sun First Visible	Existing Sun First Hidden	Existing Hours of Sun	Proposed Sun First Visible	Proposed Sun First Hidden	Proposed Hours of Sun	Difference
9 Sybil Road	8:15	12:15	4:00	8:45	12:15	3:30	0:30
21 Sybil Road	8:00	11:45	3:45	8:45	11:45	3:00	0:45
23 Sybil Road	8:45	11:15	2:30	9:00	11:15	2:15	0:15
19 Sybil Road	8:45	11:15	2:30	9:00	11:15	2:15	0:15
15 Sybil Road	8:45	11:15	2:30	9:00	11:15	2:15	0:15
11 Sybil Road	9:15	11:15	2:00	9:15	11:15	2:00	0:00
1 Sybil Road	7:45	10:15	2:30	7:45	10:15	2:30	0:00

- 9.10.14 The largest change in potential access to winter sunlight hours is on the façade located on the rear first floor of 21 Sybil Road, with the sun first being visible over the proposed stadium at 08:45, 45 minutes later than in existing conditions. It is worth noting that the façades on 1 and 11 Sybil Street see no change on the 21<sup>st</sup> September, with effects appearing later in the year. These results should be considered in association with the relatively low Average Daily Clear Sky Hours of only 4.42 hours per day in September in mind.

#### Overshadowing

- 9.10.15 The overshadowing study has been undertaken at times of the day that provide a good representation of the effects from the proposed development. The times of day taken for the assessment are shown in Table 9.14.

Table 9.14: Overshadowing assessment times of day

21st June	21st December	21st March	21st September
0800	0800	0800	0800
1000	1000	1000	1000
1200	1200	1200	1200
1400	1400	1400	1400
1600	1600	1600	1600

21st June	21st December	21st March	21st September
1800		1800	1800
2000		2000	2000

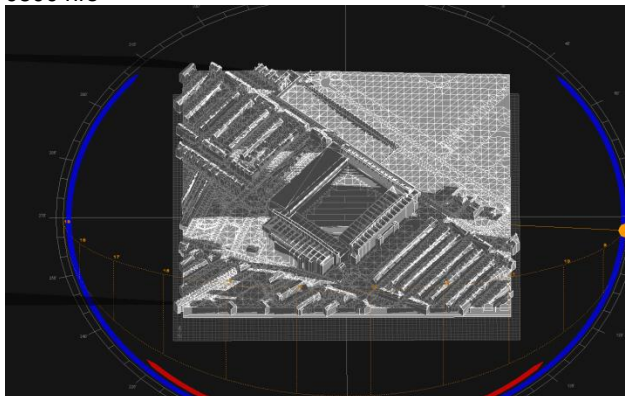
9.10.16 The BRE Guide recommends that for it to appear adequately sunlit throughout the year, at least 50% of a garden or amenity area should receive at least two hours of sunlight on 21st March.

9.10.17 The results of the overshadowing model during the spring equinox period for both the existing and proposed stadium are shown in Figure 9.4 and Figure 9.5 respectively, illustrating the results for every 2 hour period during daylight hours on 21<sup>st</sup> March.

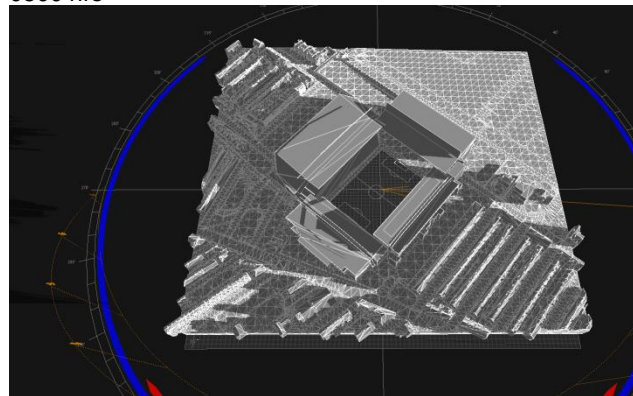
Figure 9.4: Existing stadium - spring equinox (21st March)

Figure 9.5: Proposed expanded stadium – spring equinox (21st March)

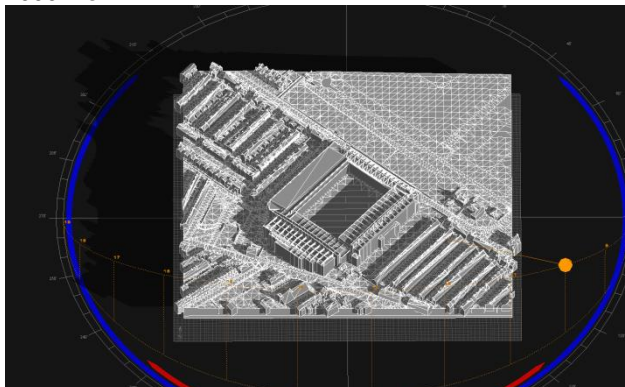
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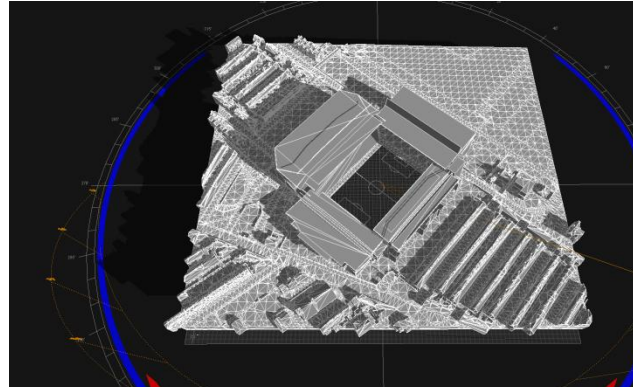
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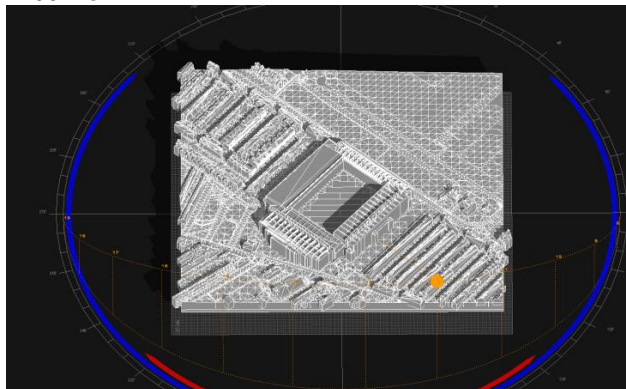
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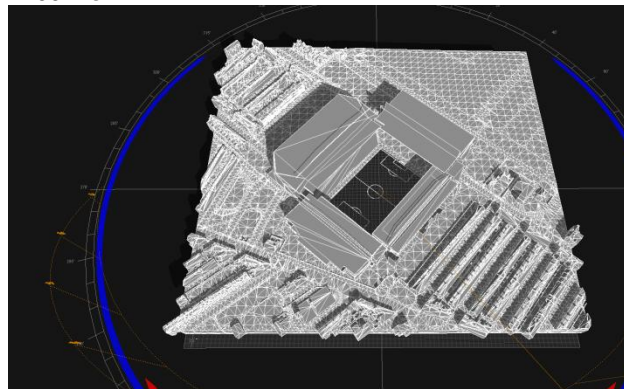
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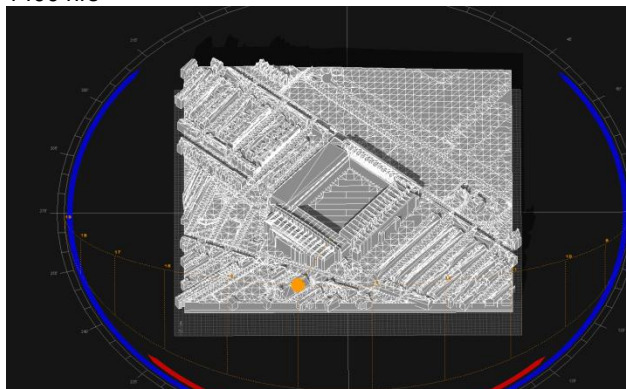
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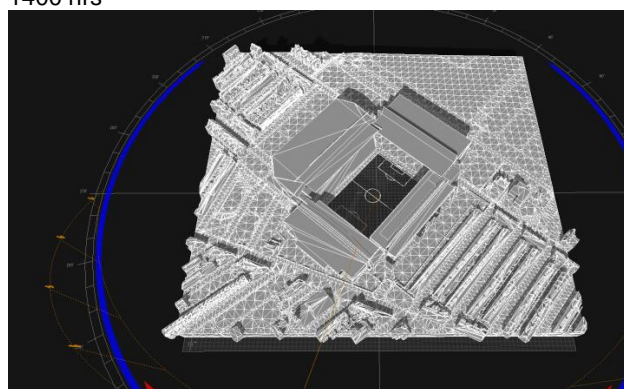
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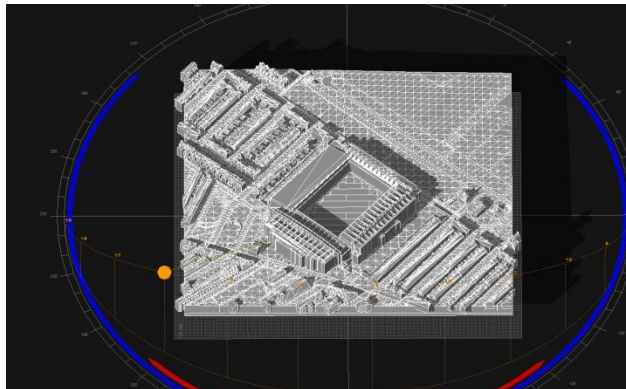
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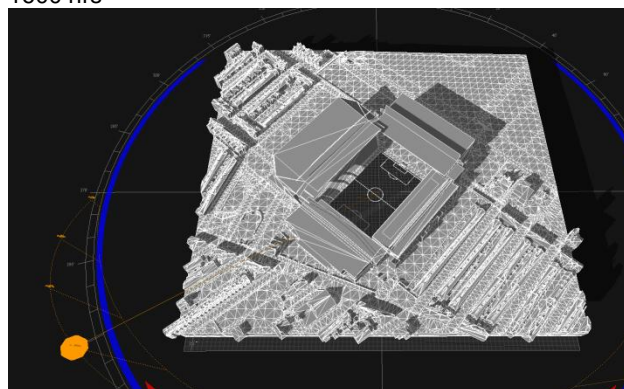
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1600 hrs

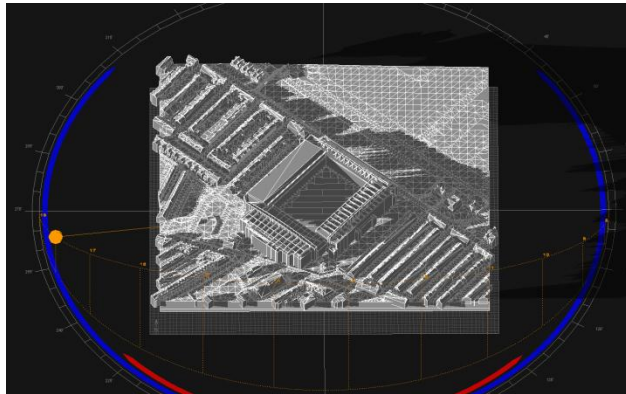


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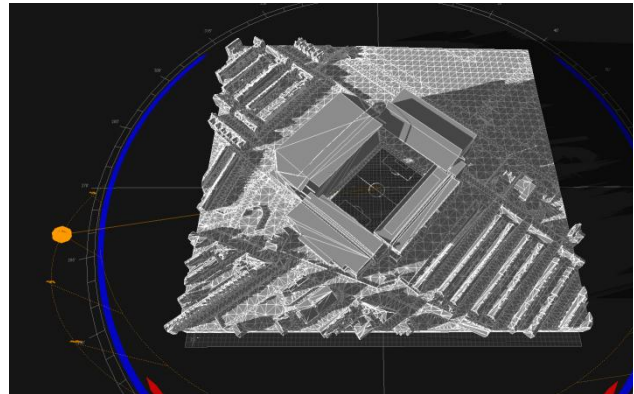


1800 hrs



2000 hrs  
N/A - Night

1800 hrs



2000 hrs  
N/A - Night

- 9.10.18 From the calculated results, the following conclusions have been made at the Spring Equinox (21st March).
- 9.10.19 For this equinox the model identifies that medium shadowing is cast from all buildings.
- 9.10.20 Between 10am and 12pm the proposed development casts larger shadows towards the north-west. The shadows stretch up towards Coningsby Road for 2 hours during 8am and 10am, whereas the existing stadium shadow cast stretches up towards Alroy Road.
- 9.10.21 Between 12pm and 4pm the shadow is cast without overshadowing of Alroy Road. From 4pm the proposed development casts longer shadows to the north-east, across Stanley Park and the car park.
- 9.10.22 For the surroundings to the proposed development considered as part of this assessment (gardens of habitable properties and open spaces), the BRE Guidelines are met since they retain more than the recommended access to sunlight, i.e. the receptors receive at least 2 hours of sunlight on 21<sup>st</sup> March. As such, a negligible effect is predicted.

#### [Overshadowing modelling in addition to BRE Guideline](#)

- 9.10.23 The BRE Guide only requires an assessment for the possible impacts caused by additional overshadowing at ground level to be undertaken for 21st March, since this spring equinox is taken as a representative month where shadows cast are midway between their longest and shortest throughout the year.
- 9.10.24 To provide a fuller picture of the possible ground overshadowing over the course of the year, the extents have been modelled for the autumn equinox (21st September), summer and winter solstices (21st June and 21st December). The results have been included to provide

additional information, over and above the BRE Guide, and are for information purposes only. The results are not required to show compliance with the BRE Guide and since all ground overshadowing guidelines provided within the BRE Guide are relate to the spring equinox, it is not possible to provide objective discussion for these images against recommended pass/fail criteria.

- 9.10.25 What follows, therefore, is a qualitative discussion of the potential ground overshadowing extents modelled within the study area at 3 other times of the year as a result of the stadium expansion.

Summer Solstice (21st June)

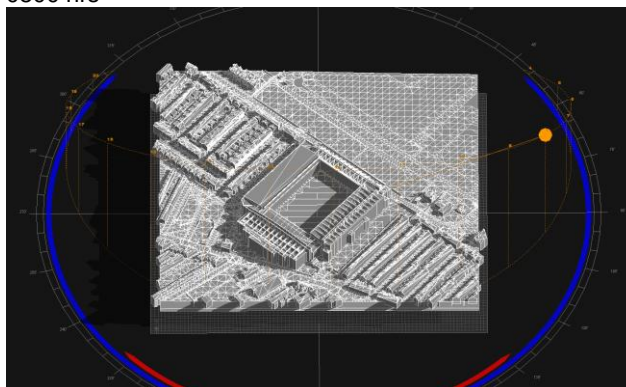
- 9.10.26 This period has more sunlight hours, with long periods of clear sky and due to the sun's high position in the sky, shorter shadows are cast when compared to the spring equinox.

The results of the overshadowing model during the summer solstice period for both the existing and proposed stadium are shown in Figure 9.6 and Figure 9.7 respectively, illustrating the results for every 2 hour period during daylight hours on 21st June.

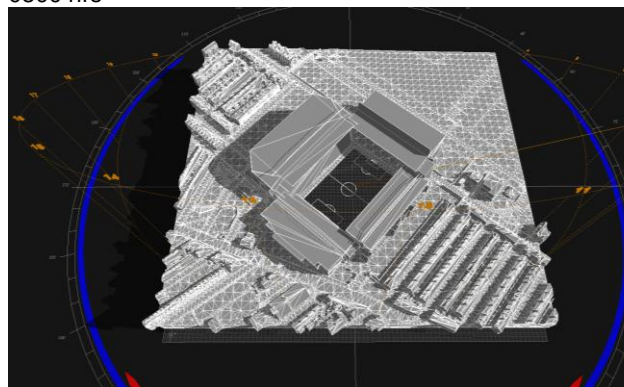
Figure 9.6: Existing stadium - Mid Summer (21st June)

Figure 9.7: Proposed expanded stadium – Mid Summer (21st June)

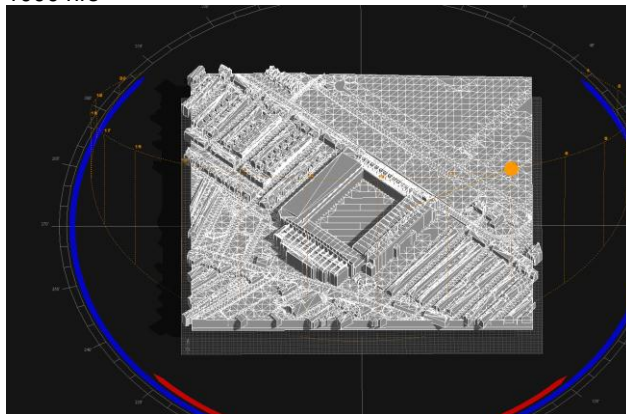
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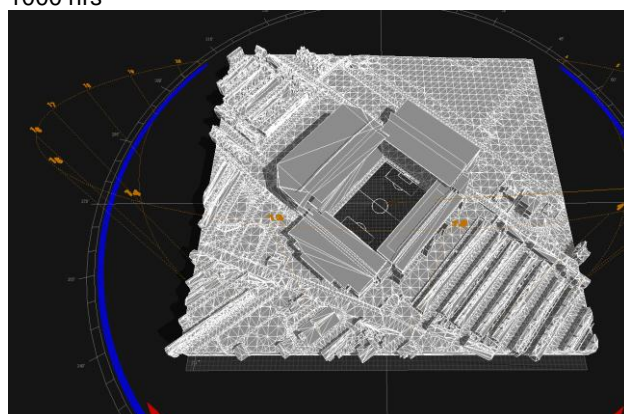
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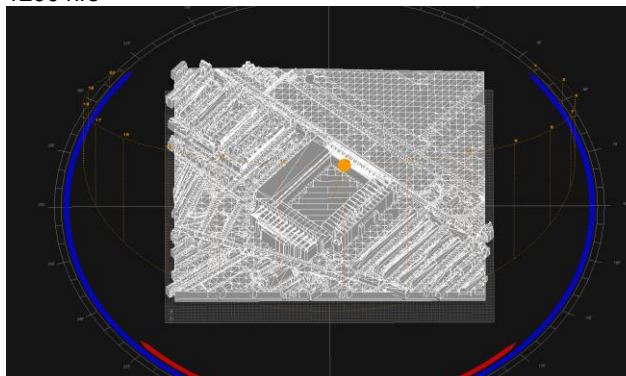
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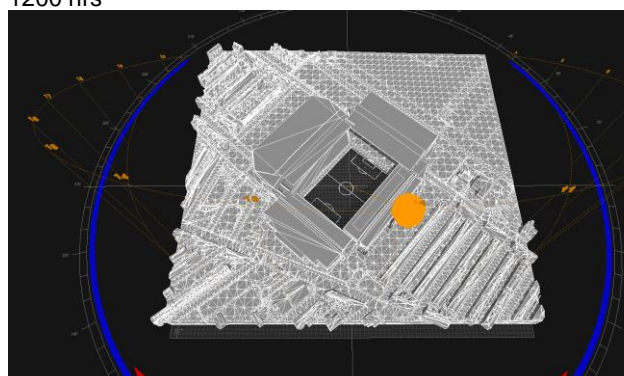
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1200 hrs

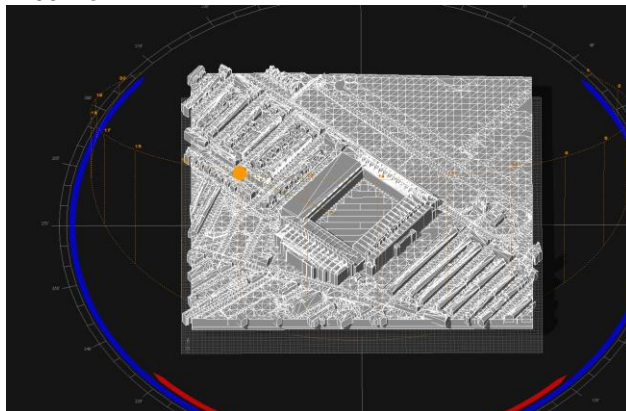


1200 hrs

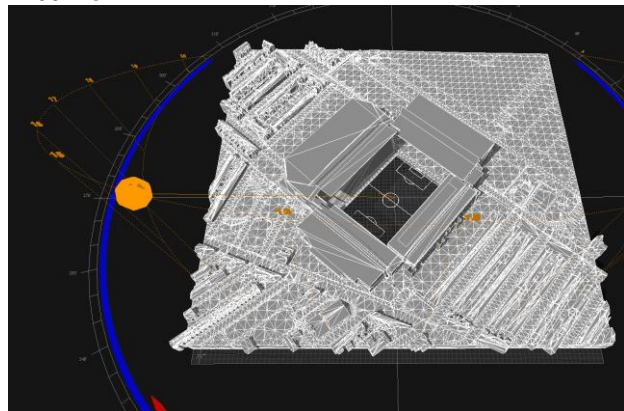




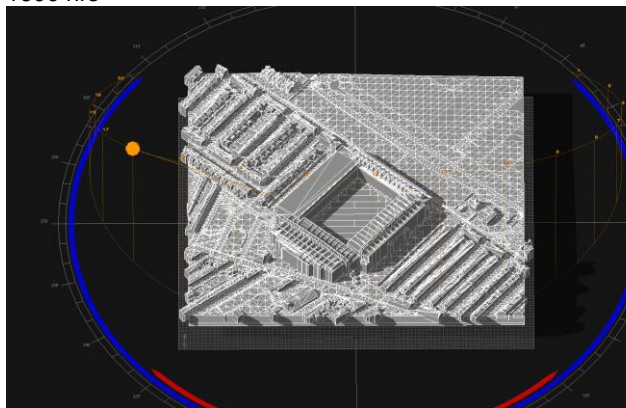
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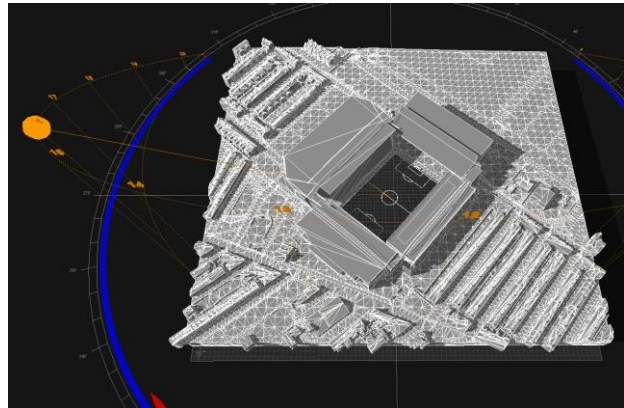
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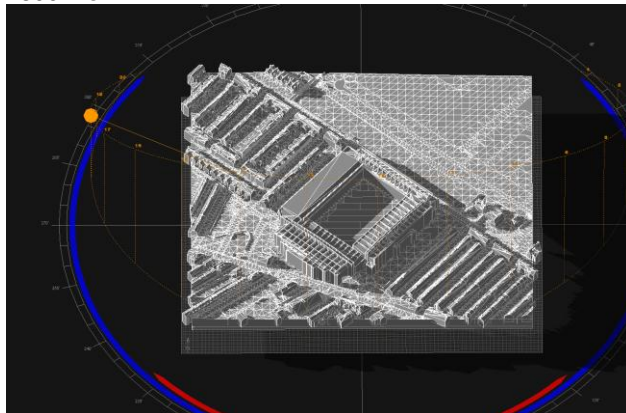
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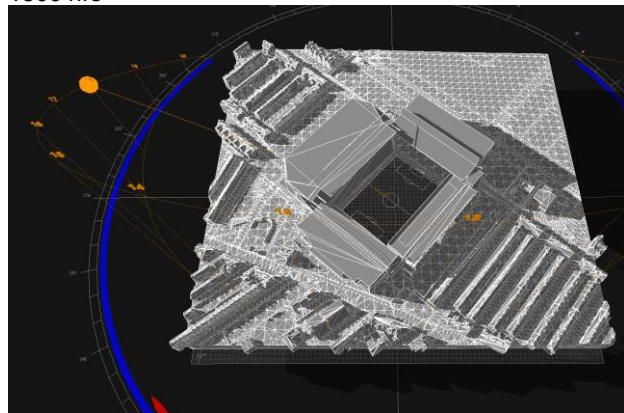
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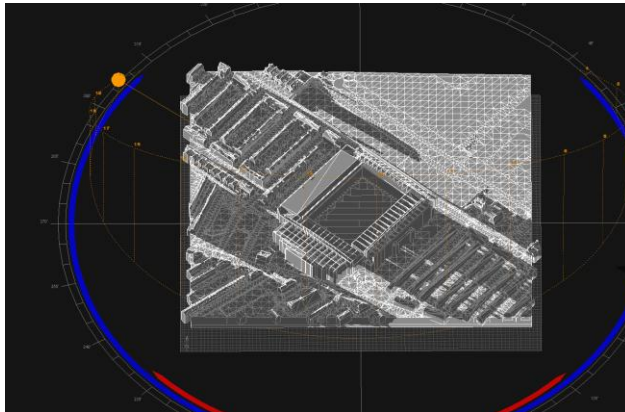
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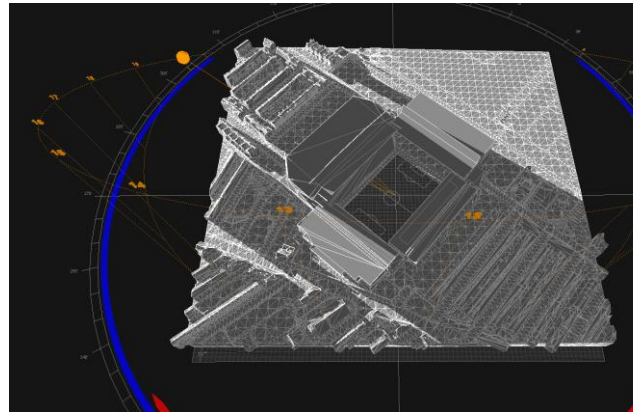
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2000 hrs



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- 9.10.27 In the morning period from 8am to 10am, the shadows are cast in a westerly direction from the proposed development's new stands towards the Back Rockfield Road/Rockfield Road area. At this time of day, the additional shadow caused by the proposed extensions at no point reach far enough to encroach on the outdoor areas associated with the properties in Alloy Road.
- 9.10.28 The shadows then move in a clockwise direction towards the east onto Skerries Road. From 12pm to 2pm, when the sun is at the highest point in the sky, the shadows do not extend far from the building footprint, producing limited overshadowing in the far southern extents of Stanley Park immediately behind the proposed development's new Anfield Road stand.
- 9.10.29 The increase in overshadowing then continues to progress eastwards between 4pm and 6pm to appear in the far southern perimeter of Stanley Park (up to the footpath immediately towards the back of 74 & 75 Anfield Road). By 8pm the overshadowing extends over Skerries Road and beyond. When considering the ground-shading for the surrounding properties and the possible changes caused by the proposed development it should be noted that the outdoor ground areas on Skerries Road and those roads to the immediate south east are already in shade at 8pm with the existing stadium in place. This existing ground shading is not caused by the existing stadium, but by the sun being so low in the sky it is already obscured by the existing property boundary walls and houses. Therefore when considering the potential additional ground-shading the proposed stadium extension produces, these are modelled as minimal, if any, additional shading.

Winter Solstice (21st December)

- 9.10.30 This period shows longer shadows cast, due to the sun's low position in the sky, but has less sunlight hours and short periods of clear sky when compared to the spring equinox.

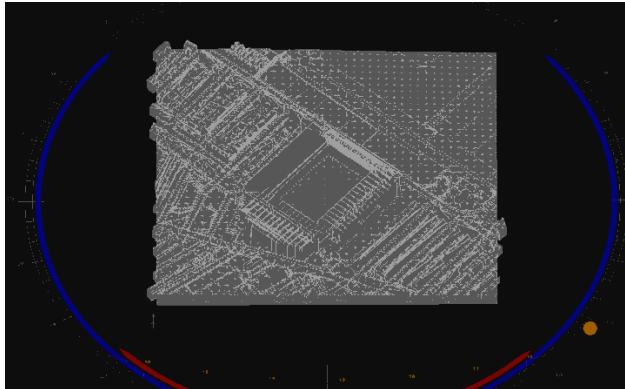


9.10.31 The results of the overshadowing model during the winter equinox period for both the existing and proposed stadium are shown in Figure 9.8 and Figure 9.9 respectively, illustrating the results for every 2 hour period during daylight hours on 21<sup>st</sup> December.

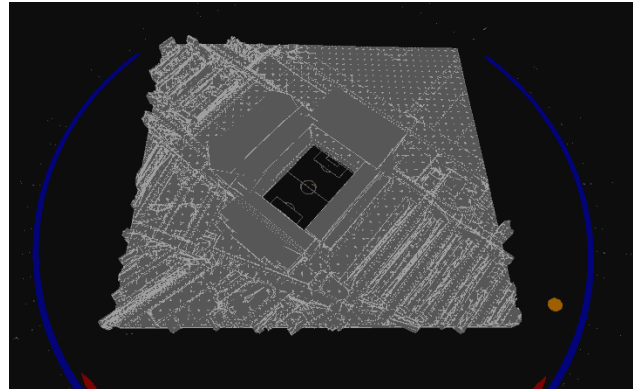
Figure 9.8: Existing stadium - Mid Winter (21st December)

Figure 9.9: Proposed expanded stadium – Mid Winter (21st December)

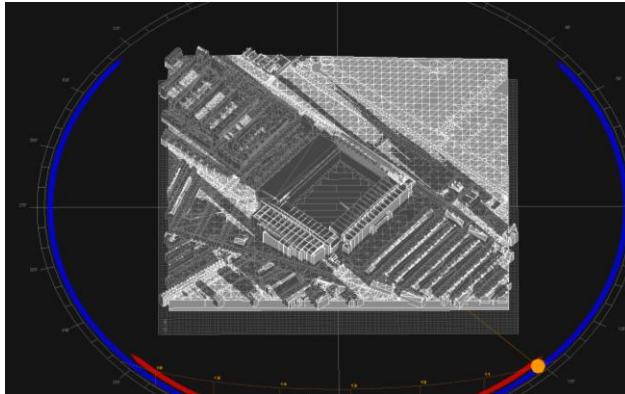
0800 hrs



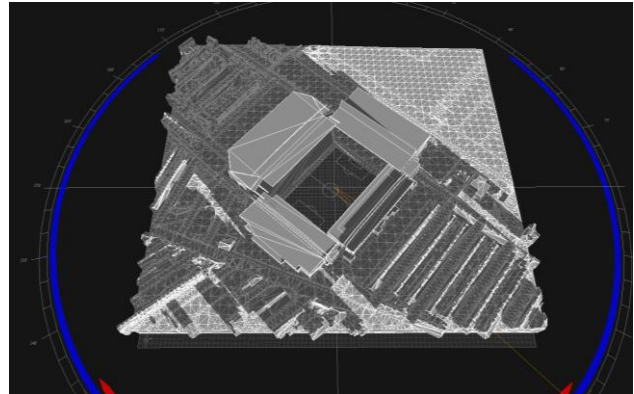
0800 hrs



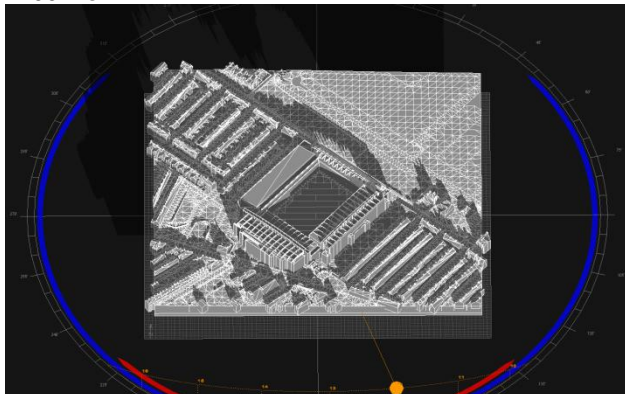
1000 hrs



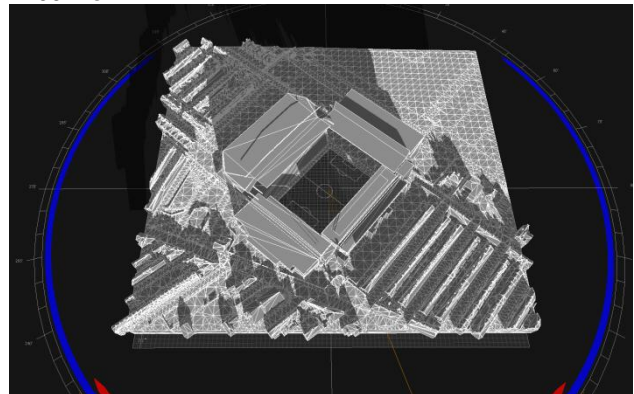
1000 hrs



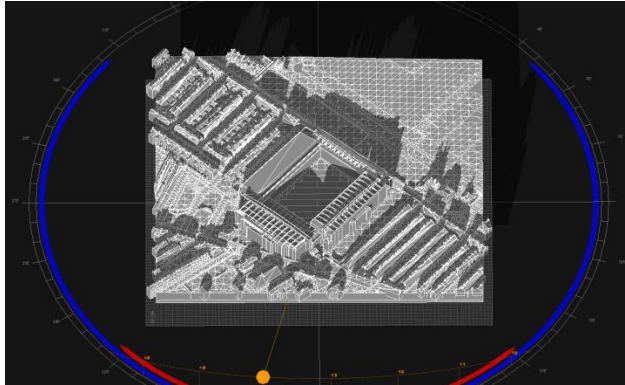
1200 hrs



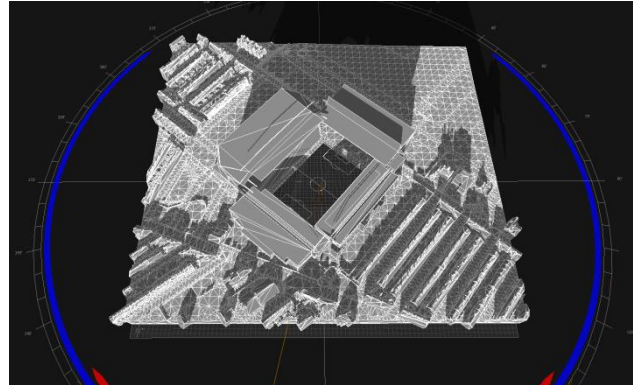
1200 hrs



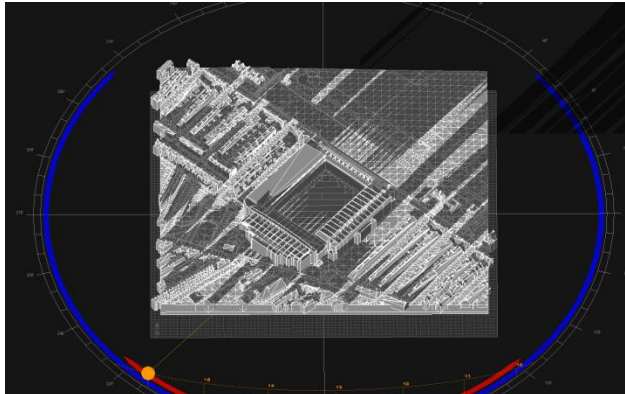
1400 hrs



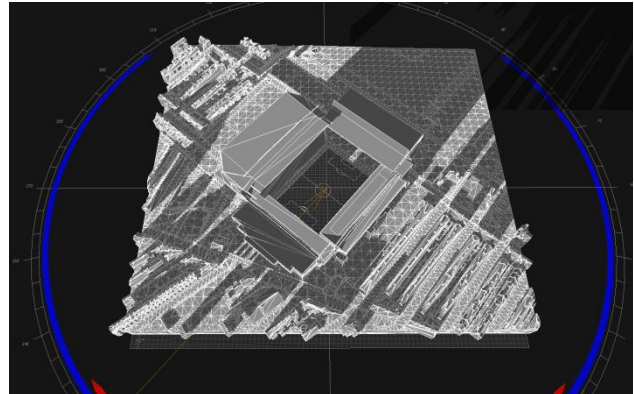
1400 hrs



1600 hrs



1600 hrs



1800 hrs  
N/A – Night

1800 hrs  
N/A – Night

2000 hrs  
N/A – Night

2000 hrs  
N/A – Night

- 9.10.32 The model shows that long shadows are cast by all buildings in the area to the north-westerly direction, moving clockwise to the north-east. During the mid to late afternoon the shadows cast from the proposed development have greater effect than the existing scenario particularly across to the residential areas northwest of the Stadium and towards the area west of Mill Lane in Stanley Park.
- 9.10.33 Since the sun is low in the sky, as with the evening period on the Summer Solstice, for the majority of the day the sun does not rise high enough to allow sunlight into the outdoor areas associated with the properties surrounding the site. Therefore when considering the potential additional ground-shading the proposed stadium extension produces minimal, if any additional shading.

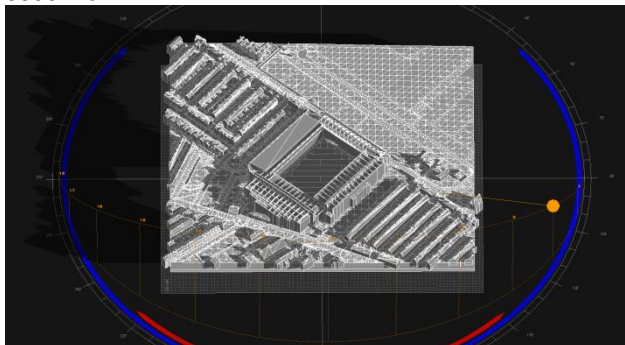
- 9.10.34 The main change on ground over-shadowing during the winter months is seen in Stanley Park after midday (12pm), predominantly to the area west of Mill Lane.

Autumn Equinox (21st September)

- 9.10.35 Although both the spring and autumn equinox months show similar changes in their shadows cast, the changes are more likely to be noticed during the month of September; due to the greater number of daily clear sky sunshine hours (Table 9.1).
- 9.10.36 The results of the overshadowing model during the autumn equinox period for both the existing and proposed stadium are shown in Figure 9.10 and Figure 9.11 respectively, illustrating the results for every 2 hour period during daylight hours on 21<sup>st</sup> September.

Figure 9.10: Existing stadium - autumn equinox (21st September)

0800 hrs



1000 hrs

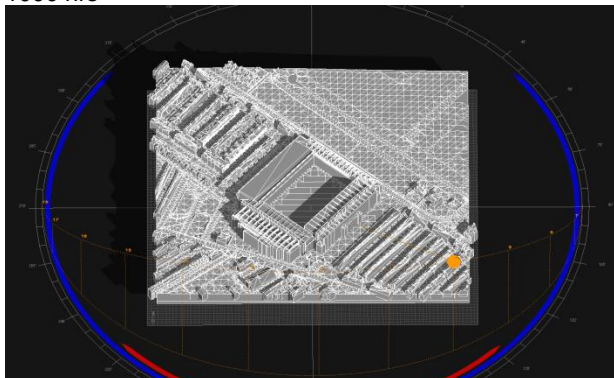
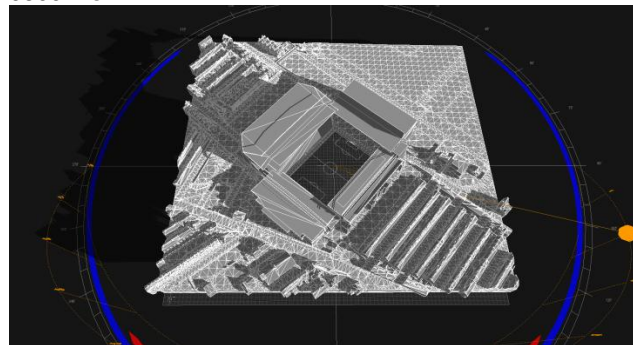
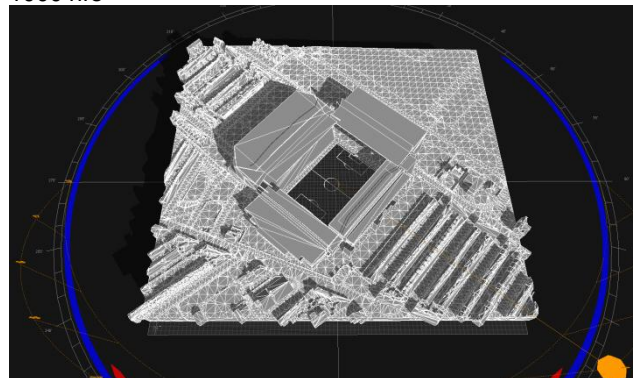


Figure 9.11: Proposed expanded stadium – autumn equinox (21st September)

0800 hrs

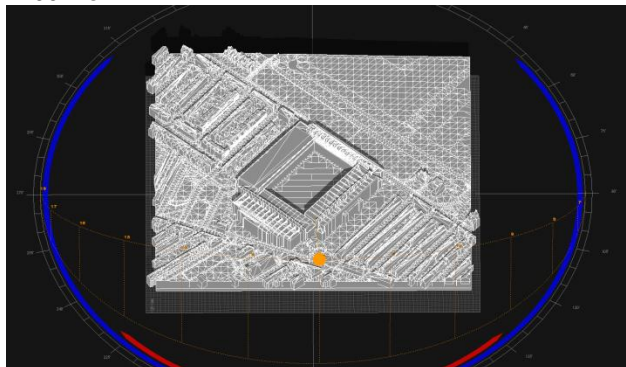


1000 hrs

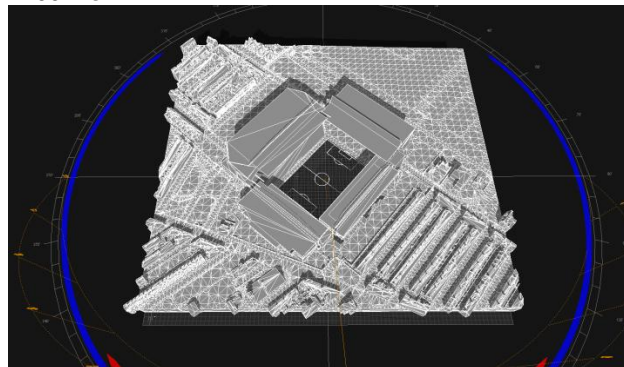




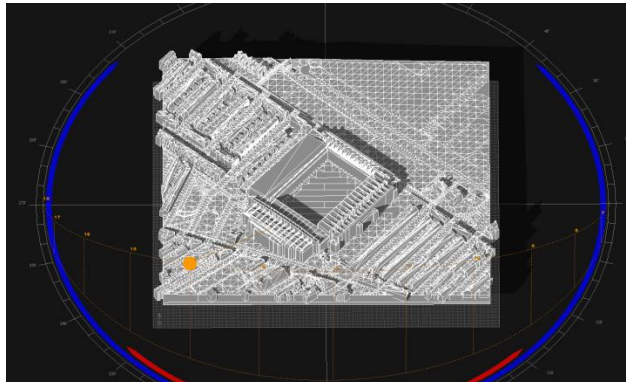
1200 hrs



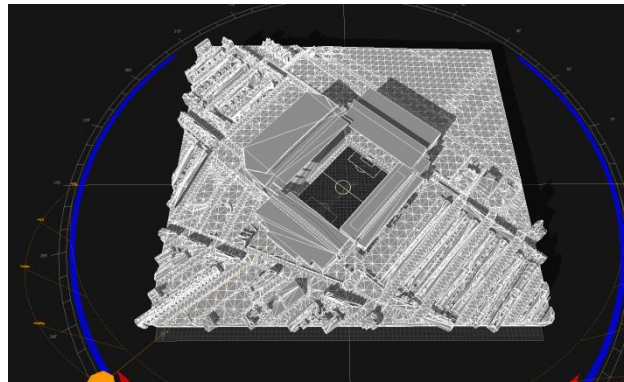
1200 hrs



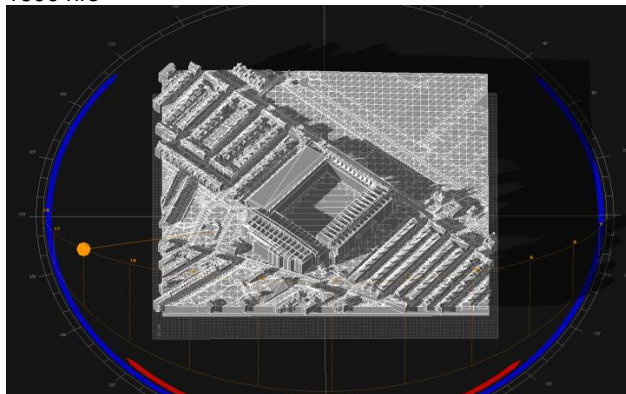
1400 hrs



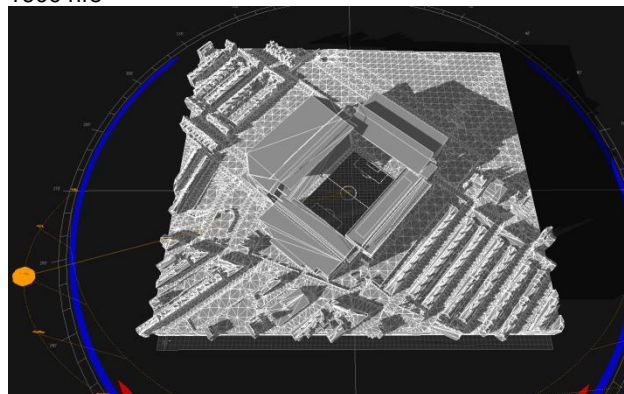
1400 hrs



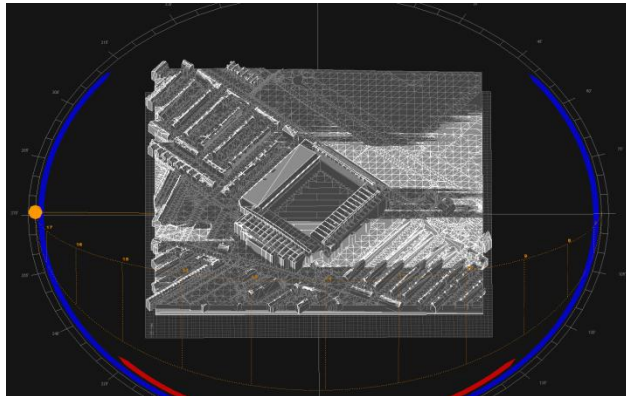
1600 hrs



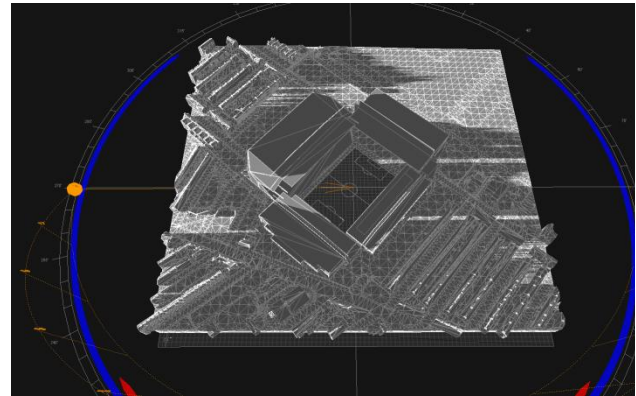
1600 hrs



1800 hrs



1800 hrs



2000 hrs  
N/A – Night

2000 hrs  
N/A – Night

- 9.10.37 During this period, the largest changes to ground-shading are likely to be experienced to the north-east across the southern extents of Stanley Park and the southern extent of the car park, between the hours of 4pm and 6pm.

### Overall effects

- 9.10.38 Of the 781 receptors tested for VSC values, the 26 that sustain minor adverse effects are located on the ground floors of the remaining houses on the north side of Alroy Road and relate to 12 individual properties. These effects arise from the fact that the baseline model used to provide the existing VSC values does not include the buildings that historically stood on the southern side of Alroy Road. Therefore the baseline VSC values in this area are up to 11% higher than in the similar position on the adjacent Sybil Road. Had Alroy Road been assessed with the southern houses in place then it is highly likely that these minor adverse effects would have been negligible, as they were in Sybil Road. In all other areas the reductions seen are negligible.
- 9.10.39 Of the 204 receptors tested for APSH and W-APSH, all met the BRE Guide requirement for APSH and 7 individual properties on Sybil Road did not meet the BRE Guide requirement for W-APSH. For these properties that do not meet the BRE Guide requirement, they are in areas that are already heavily shaded to the rear of the houses on Sybil Road, with the existing baseline W-APSH values showing a maximum of 56% to a minimum of 0% for W-APSH, therefore any reduction in W-APSH values are minimal.
- 9.10.40 Due to the width and height of the proposed development in relation to that of the existing, some additional overshadowing will be experienced. During spring and winter equinox periods, the proposed stadium shadow casts will be greater on facades of properties along Alroy Road, Sybil Road and Coningsby Road. To the east of Stanley Park and its associated car park there will be greater effects of overshadowing in late afternoon and early evening.



The effect of the shadows cast by the proposed development for these periods does not vary for the majority of the day from those shadows cast by the existing adjacent buildings and the effects will be minimal. The effects have been further minimised due to the removal of adjacent properties along Lothair Road.

## **9.11 Mitigation**

- 9.11.1 The BRE guidelines should not be seen or used as hard and fast criteria that must be adhered to as there are many other factors that go into making an attractive, sustainable and environmentally responsible development than just access to sunlight and daylight. Aside from the small number of properties on Sybil Road that sustain adverse W-APSH effects, as discussed in Section 9.11, the BRE Guide for shading has been met and therefore it is not considered that there is a requirement for mitigation measures.

## **9.12 Cumulative Effects**

- 9.12.1 Cumulative effects are those that may result from the combination of past, present or future actions of existing or planned activities in a project's zone of influence (Zol). While a single activity may itself result in an insignificant impact, it may, when combined with other impacts (significant or insignificant) in the same geographical area and occurring at the same time, result in a cumulative effect that is significant.
- 9.12.2 The current list of planned developments which are included in the cumulative impact assessment, are those identified in the Anfield Spatial Regeneration Framework (SRF) comprising:
- Anfield Village & Rockfield housing refurbishment;
  - New build housing led regeneration;
  - The Walton Breck Road (The High Street) Corridor;
  - New public space and Village Square development (training hotel and offices); and
  - Completion of the restoration of Stanley Park east of Mill Lane.
- 9.12.3 The results of the sunlight and shading testing show that the stadium expansion proposals have a largely negligible effect on off-site streets and open spaces; despite wider and longer shadows cast to the surrounding buildings.
- 9.12.4 Given the location and nature of the additional proposals, which is typically limited to 3-4 storey developments in the surrounding area in accordance with the parameters identified in the SRF, it is not expected that these will lead to significant impacts in terms of sunlight and overshadowing effects around the stadium.
- 9.12.5 When considering the effects of VSC, APSH and overshadowing in conjunction with one another, the cumulative effect is unlikely to have any more significance than the individual W-

APSH effects, since the APSH and overshadowing effects meet the BRE Guide requirements. As a result, no cumulative effects are expected for sunlight and shading.

### **9.13 Residual effects**

- 9.13.1 The residual effects will be the same as those operational effects discussed earlier. BRE guidelines suggest measures suitable for addressing residual effects on surrounding buildings such as using light-coloured building materials to help diffuse light around proposed buildings to increase localised lighting. In this instance, however, since the only adverse effects are for direct sunlight in the W-APSH calculations and are at some distance to the stadium, the building materials used will have no effect on the sunlight received in the affected areas.

### **9.14 Summary of effects**

- 9.14.1 A tabulated summary of effects is given in Table 9.15.

Table 9.15: Summary of daylight, sunlight and shading effects

Project Phase	Receptor	Summary of effect	Mitigation	Level of Effect	Nature of effect		
					Adverse/ Beneficial	Permanent/ Temporary	Residual Effect
Phases 1 & 2	VSC						
	Alroy Road	The maximum VSC loss for window receptors on properties 2 – 24 will be 10.3%	None	Minor	Adverse	Permanent	Minor Adverse
	Sybil Road	The maximum VSC loss will be 7%	None	Negligible	N/A	N/A	None
	Coningsby Road	The maximum VSC loss will be 1.4%	None	Negligible	N/A	N/A	None
	Gilman Street	The maximum VSC loss will be 7.2%	None	Negligible	N/A	N/A	None
	Rockfield Road	The maximum VSC loss will be 3.2%	None	Negligible	N/A	N/A	None
	Anfield Road	The maximum VSC loss will be 7%	None	Negligible	N/A	N/A	None
	Walton Breck Road	The maximum VSC loss will be 1.9%	None	Negligible	N/A	N/A	None
	Skerries Road	The maximum VSC loss will be 4.3%	None	Negligible	N/A	N/A	None
	Baltic Street	The maximum VSC loss will be 4.5%	None	Negligible	N/A	N/A	None
	APSH						
	Alroy Road	The minimum proposed APSH is 38.4% and the maximum proposed APSH is 56.8%	None	Negligible	N/A	N/A	None
	Sybil Road	The minimum proposed APSH is 8.7% and the maximum proposed APSH is 56.3%	None	Negligible	N/A	N/A	None
	W-APSH						
	Alroy Road	The minimum proposed W-APSH is 20.7% and the maximum proposed W-APSH is 53.9%	None	Negligible	N/A	N/A	None
	1 Sybil Road, 21 Sybil Road and 23 Sybil Road	The minimum proposed W-APSH is 0% and the maximum proposed W-APSH is 25.5%	None	Substantial	Adverse	Permanent	Substantial Adverse
	9 Sybil Road and 19 Sybil Road	The minimum proposed W-APSH is 0% - 1.3% and the maximum proposed W-APSH is 25.5% - 52.7%	None	Moderate	Adverse	Permanent	Moderate Adverse
	11 Sybil Road and 15 Sybil Road	The minimum proposed W-APSH is 1.3% and the maximum proposed W-APSH is 52.7%	None	Minor	Adverse	Permanent	Minor Adverse
	Remaining properties on Sybil Road	The minimum proposed W-APSH is 37.8% and the maximum proposed W-APSH is 56.5%	None	Negligible	N/A	N/A	None

Project Phase	Receptor	Summary of effect	Mitigation	Level of Effect	Nature of effect		
					Adverse/ Beneficial	Permanent/ Temporary	Residual Effect
	Overshadowing						
	Alroy Road	All surrounding garden properties and open spaces retain more than 2 hours sunlighting on 21st March (BRE overshadowing criteria is met).	None	Negligible	N/A	N/A	None
	Sybil Road	All surrounding garden properties and open spaces retain more than 2 hours sunlighting on 21st March (BRE overshadowing criteria is met).	None	Negligible	N/A	N/A	None
	Coningsby Road	All surrounding garden properties and open spaces retain more than 2 hours sunlighting on 21st March (BRE overshadowing criteria is met).	None	Negligible	N/A	N/A	None
	Stanley Park	All surrounding garden properties and open spaces retain more than 2 hours sunlighting on 21st March (BRE overshadowing criteria is met).	None	Negligible	N/A	N/A	None
	Gilman Street	All surrounding garden properties and open spaces retain more than 2 hours sunlighting on 21st March (BRE overshadowing criteria is met).	None	Negligible	N/A	N/A	None
	Rockfield Road	All surrounding garden properties and open spaces retain more than 2 hours sunlighting on 21st March (BRE overshadowing criteria is met).	None	Negligible	N/A	N/A	None
	Anfield Road	All surrounding garden properties and open spaces retain more than 2 hours sunlighting on 21st March (BRE overshadowing criteria is met).	None	Negligible	N/A	N/A	None
	Walton Breck Road	All surrounding garden properties and open spaces retain more than 2 hours sunlighting on 21st March (BRE overshadowing criteria is met).	None	Negligible	N/A	N/A	None
	Skerries Road	All surrounding garden properties and open spaces retain more than 2 hours sunlighting on 21st March (BRE overshadowing criteria is met).	None	Negligible	N/A	N/A	None
	Baltic Street	All surrounding garden properties and open spaces retain more than 2 hours sunlighting on 21st March (BRE overshadowing criteria is met).	None	Negligible	N/A	N/A	None

## **9.15 Proposed monitoring**

- 9.15.1 No monitoring is required for the proposed development.

## **9.16 Statement of significance**

- 9.16.1 Of the 781 receptors tested for VSC values, the 26 that sustain minor adverse effects are located on the ground floors of the remaining houses on the north side of Alroy Road and relate to 12 individual properties. These effects arise from the fact that the baseline model used to provide the existing VSC values does not include the buildings that historically stood on the southern side of Alroy Road. Therefore the baseline VSC values in this area are up to 11% higher than in the similar position on the adjacent Sybil Road. Had Alroy Road been assessed with the southern houses in place then it is highly likely that these minor adverse effects would have been negligible, as they were in Sybil Road. In all other areas the reductions seen are negligible.
- 9.16.2 Of the 204 receptors tested for APSH and W-APSH, all met the BRE Guide requirement for APSH and 7 individual properties did not meet the BRE Guide requirement for W-APSH. Of these 7, three are considered to be substantial adverse, two moderate adverse and two minor adverse effects. It should be noted that these properties are in areas that are already heavily shaded to the rear of the houses on Sybil Road and therefore any reduction in W-APSH values are minimal.
- 9.16.3 The overshadowing of the proposed stadium is expected to have a negligible effect on the surrounding receptors on 21<sup>st</sup> March. The effect of the shadows cast by the proposed development during the spring equinox does not vary for the majority of the day from those shadows cast by the adjacent buildings. This is minimised due to the previous removal of adjacent properties along Lothair Road. The increase in width and height of the proposed development in relation to that of the existing means that there will be wider & longer shadows cast to the surrounding buildings, already in the shadow of the existing properties. This would be applicable to the south-east, with the exception of shadows that fall on the properties on Alroy Road to the west of the Stadium. For the representative date during the spring equinox, buildings affected by the larger shadow cast will be properties on Alroy Road & Sybil Road during the morning hours.

## **9.17 References**

[Ref 01] - The Building Research Establishment Limited's (BRE's) "Site Layout Planning for Daylight and Sunlight. A Guide to Good Practice" (2011) Technical Appendices (for inclusion in)

[Ref 02] - Liverpool FC Stadium Expansion Environmental Scoping Report, Mott MacDonald for Liverpool Football Club and Athletics Group Limited, December 2013, report no. 317415/BTL/BNI/1/C

[Ref 03] - Email from McEvoy F. (Liverpool City Council) to Ryan S. (Turley Associates) "RE:LFC", 17/02/2014