

# Environmental Impact Statement

## Proposed Netball NSW Headquarters Site 107, Sydney Olympic Park

Prepared for

**Netball NSW**



Supported by the



July 2012

## Declaration

This Environmental Impact Statement has been prepared by Helen Mulcahy Urban Planning Pty Ltd on behalf of Netball NSW and constitutes an environmental assessment prepared in respect of SSD 5207 - Site 107 Sydney Olympic Park.

The application seeks approval for the construction of a purpose-built headquarters for Netball NSW which includes six (6) indoor netball courts on land at Sydney Olympic Park (SOP). The site is located at the southern end of Olympic Boulevard, between Sarah Durack Avenue and Shirley Strickland Avenue and is known as Site 107 under the SOP Master Plan 2030.

This Statement has been prepared in accordance with the requirements of Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* and addresses the matters set out in the Director General's Requirements issued by the Department of Planning and Infrastructure on 2 April 2012.

This Statement contains all available information that is relevant to the environmental assessment of the proposed development and should be read in conjunction with the specialist information as detailed below:

Quantity Surveyors Certificate of Cost (CIV)	Rider Levett Bucknall	<b>Appendix 1</b>
Director General's Requirements	Department of Planning and Infrastructure	<b>Appendix 2</b>
Site Survey	Hard and Forester	<b>Appendix 3</b>
Geotechnical Report (incl. supplementary advice)	Coffey Geotechnics	<b>Appendix 4</b>
Phase 1 Preliminary Site Investigation	Coffey Environments Australia Pty Ltd	<b>Appendix 5</b>
Acid Sulphate Soil Risk	Coffey Environments Australia Pty Ltd	<b>Appendix 6</b>
Arborist Report	Naturally Trees	<b>Appendix 7</b>
Architectural Package (incl. Landscape)	Scott Carver Architects	<b>Appendix 8</b>
ESD Report	ARUP	<b>Appendix 9</b>
Remediation Action Plan	Coffey Environments Australia Pty Ltd	<b>Appendix 10</b>
Structure Report (incl. Bulk Earthworks)	ARUP	<b>Appendix 11</b>
Traffic Impact Assessment	ARUP	<b>Appendix 12</b>
Access Report	iAccess Consultants	<b>Appendix 13</b>
Civil Works Package (incl. stormwater)	ARUP	<b>Appendix 14</b>
Draft Construction Environment Management Plan	Crown Project Services	<b>Appendix 15</b>
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Details of Consultation with Agencies	Various	<b>Appendix 18</b>
Fire Engineering report	ARUP	<b>Appendix 19</b>
Acoustic Report	Norman Disney Young	<b>Appendix 20</b>
Wind Impact Assessment	Cermak Peterka Petersen	<b>Appendix 21</b>
BCA Advice	Davis Langdon	<b>Appendix 22</b>
Fire Sprinkler Tank Removal	LHO Group Pty Ltd	<b>Appendix 23</b>

This Statement has been prepared with the assistance of the specialist consultants listed above and the information contained herein is based on the content of their respective reports / plans / advice.

On this basis I hereby declare that the information contained in this Environmental Impact Statement is intended to be neither false nor misleading.



.....  
**Helen Mulcahy**  
 Director

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**NOTE:** Architectural Drawings, Landscape Plan and Civil Drawings are also provided at A3 in a separate volume.

# Executive Summary

## Purpose of this Report

This Environmental Impact Statement (“**EIS**”) has been prepared in respect of development at Sydney Olympic Park (“**SOP**”) and is submitted to the Minister for Planning and Infrastructure for a State Significant Development Application pursuant to Part 4 of the *Environmental Planning and Assessment Act 1979* (“**EP&A Act**”) and *State Environmental Planning Policy (State and Regional Development) 2011* (“**SEPP (SSD)**”). The proponent is Netball NSW.

The development application seeks approval for:

- bulk earthworks and excavation;
- remediation of minor sub-soil contamination;
- tree removal;
- construction and use of five (5) indoor netball courts of international standard, plus one (1) Show Court with seating for some 800 spectators;
- amenities for players, officials and the public;
- café;
- medical facilities – first aid, physiotherapy, massage etc;
- ancillary storage facilities and equipment areas;
- office / administration areas for occupation by Netball NSW;
- ancillary minor events including business-oriented occasions or cultural, social or sporting-related occasions occurring on one or more days throughout the year;
- utility services connections, which necessitates redirection / relocation of existing underground services;
- associated civil and landscape works, including relocation of the entry / exit to the P7 Car Park; and
- land subdivision.

The proposed development has a total Capital Investment Value (“**CIV**”) of \$28.27 and is therefore classified as State Significant Development (“**SSD**”) pursuant to Schedule 2 of the SEPP (SSD). A Quantity Surveyor Certificate of Cost has been prepared by Rider Levett Bucknall to accompany this application.

A request for the issue of the Director General’s Environmental Assessment Requirements (“**DGRs**”) was sought on 2 March 2012 and duly issued to the Proponent by the Department on 2 April 2012.

## Project Outline

The development involves the construction of a purpose-built headquarters for Netball NSW. It includes six (6) indoor netball courts constructed to International Standard, one of which will be a ‘Show Court’ and providing seating for approximately 800 spectators. The complex will include amenities for players, officials and the public, a café, medical rooms and storage and equipment areas as well as new administration offices for Netball NSW.

The site is located in the Southern Sports Precinct at SOP, at the southern end of Olympic Boulevard, between Sarah Durack Avenue and Shirley Strickland Avenue. It is known as Site 107 under the Sydney Olympic Park Master Plan 2030. **Figure 1** illustrates the location of the site in the context of the Southern Sports Precinct.

The Site 107 is part of a larger parcel of land at Sydney Olympic Park and is legally described as Lot 201 in DP 1041756. The registered proprietor of the land is SOPA. The estimated area of Site 107 is approximately 9,700m<sup>2</sup> and is owned by the Sydney Olympic Park Authority (“**SOPA**”).

The physical constraints associated with Site 107 and the spatial requirements of the proposed facility have resulted in an expansion of the development site to the south, resulting in an encroachment into the adjacent P7 Car Park. The land to which this application applies covers an area of some 18,813m<sup>2</sup>.



**Figure 1** Location of Site 107 in the context of the Southern Sports Precinct (Source: Master Plan 2030)

## Planning Context

Section 6.0 of this EIS identifies and considers all relevant legislation, environmental planning instruments and SOPA policies and plans. The proposed development is generally consistent with all relevant planning controls.

The site is zoned B4 Mixed Use under *State Environmental Planning Policy (Major Development) 2005* (“**Major Development SEPP**”). The proposal is permissible with consent and satisfies the objectives of the zone.

## **Environmental Impacts**

This EIS provides an assessment of the environmental impacts of the proposed development in accordance with the DGRs and details the undertakings made by Netball NSW to manage and minimise potential impacts arising from the development of the Netball Central project.

## **Conclusion**

The proposed development will replace current facilities at the Anne Clark Centre, Lidcombe and will provide Netball NSW with a high profile, elite sports facility commensurate with the aspirations of the sports' administration and supported by the NSW Office of Communities (Sport and Recreation). Netball Central will be an icon for the sport of Netball in Sydney and across NSW generally.

The potential impacts of the development are able to be managed through a range of mitigation measures (which are described in Section 8.0 of this Statement). In view of the planning merits of the proposed development, it is considered that approval by the Minister for Planning and Infrastructure is warranted.

# 1.0 Introduction

## 1.1 Background

Netball is recognised as having the highest level of female participation of any team sport in Australia. With almost 106,000 registered members playing netball at all levels of performance in all parts of the State, New South Wales comprises approximately one third of the total number of registered participants in the country. In addition, more than 200,000 school children to participate in regular netball games and competitions.

In competition terms, NSW is one of the most successful netball states in Australia, responsible for the management and support of one team competing in the ANZ Championships (NSW Swifts), two Australian Netball League (ANL) teams (Waratahs and Blues) and three Underage State Teams (17's, 19's and 21's).

Netball NSW is administered by NSW Netball Limited through a Board of eight (8) Directors, seven of whom are elected by the Netball NSW Council at its Annual General Meeting each year. The Chief Executive Officer is appointed by the Board as a non-voting Director.

The Netball NSW Council comprises Life Members, the Board of Directors and two (2) delegates from each affiliated Association.

As at 20 June 2012 Netball NSW had:

- 100,189 registered players
- 5,410 registered members (includes non-players)
- 128 affiliated Associations

Member Associations play their competitions on a variety of surfaces ranging from grass, bitumen or other synthetic surfaces on outdoor courts while contemporary indoor courts are generally required to be sprung timber flooring.

### 1.1.1 Existing Facility

Netball NSW currently occupies the Anne Clark Centre located in Church Street at Lidcombe on land leased from Auburn Council. The existing facilities do not meet the contemporary needs of Netball NSW for the following reasons:

- (i) the four (4) existing indoor courts are not accredited to international standards and therefore do not comply to hold elite level netball games;
- (ii) during major competitions such as the State League Netball, the middle court at the Anne Clark Centre cannot be used for competition purposes due to need to accommodate spectators and other ancillary equipment;
- (iii) the food service area is inadequate;
- (iv) female and male toilet facilities do not meet current standards;
- (v) player and umpire change and regeneration areas are small;
- (vi) the Administration area does not meet existing staff demand and future growth requirements; and
- (vii) the existing parking area is insufficient to meet current requirements.

### **1.1.2 Background to the Current Proposal**

In early 2011, Netball NSW and the NSW State Government announced funding for a Netball Centre of Excellence at Sydney Olympic Park (SOP).

Netball Central will replace current facilities at the Anne Clark Centre and will provide Netball NSW with a high profile, elite sports facility which meets international standards. Netball Central will be an icon for the sport of netball in Sydney and across NSW generally.

Sydney will host the World Netball Championships in 2015 (WNC 2015), with competition centred on Sydney Olympic Park. The Allphones Arena (originally the Sydney Superdome) will provide the primary competition venue. It is anticipated that Netball Central will play a critical role as a training facility for all international netball teams competing in the 2015 WNC both prior to, and during, the tournament.

## **1.2 Overview of the Proposed Development**

The application seeks approval for the construction of a purpose-built headquarters for Netball NSW. The works comprise:

- bulk earthworks and excavation;
- remediation of minor sub-soil contamination;
- tree removal;
- construction and use of five (5) indoor netball courts of international standard, plus one (1) Show Court with seating for some 800 spectators;
- amenities for players, officials and the public;
- café;
- medical facilities – first aid, physiotherapy, massage etc;
- ancillary storage facilities and equipment areas;
- office / administration areas for occupation by Netball NSW;
- ancillary minor events including business-oriented occasions or cultural, social or sporting-related occasions occurring on one or more days throughout the year;
- utility services connections, which necessitates redirection / relocation of existing underground services;
- associated civil and landscape works, including relocation of the entry / exit to the P7 Car Park; and
- land subdivision.

## **1.3 Analysis of Feasible Alternatives**

Prior to embarking on the Netball Central project at Sydney Olympic Park, Netball NSW and its advisors considered a number of alternatives, as detailed below.

### **1.3.1 Refurbishment / Expansion of the Anne Clark Centre**

This option would see Netball NSW remain at the Anne Clark Centre, which is part of the Wyatt Park facilities and is leased from Auburn Council. It occupies a total area of approx. 4,000m<sup>2</sup>.

The ageing building no longer meets the needs of the sport given the growth that netball is currently experiencing and is forecast to experience in the future.

NSW requires an expanded premise / home to operate from as the growth in both participation numbers and administration structure has increased significantly.

The NSW Swifts compete in the ANZ Championships and require a venue which provides quality high performance training facilities, with respect to on court requirements and Sports Science / Medicine requirements.

Redevelopment of the existing facility was ultimately rejected for a number of reasons including:

**(i) Location**

The facility is located at the western end of a cul-de-sac (Church Street) adjacent to the railway line which has a number of disadvantages:

- constrains vehicular accessibility;
- is located approx. 1.2km from Lidcombe railway station;
- is not a pedestrian-friendly environment, particularly after dark;
- ongoing vandalism issues associated with the location of the facility and the lack of passive surveillance; and
- safety issues associated with the operation of the phasing of the signalised intersection of Church Street and Olympic Way and the 90° angle parking in Church Street.

**(ii) Physical Constraints**

- There is no space for additional courts within the existing leased area and the site is unable to meet future needs due to lack of space.
- Any expansion of the Anne Clark Centre or the capacity of the existing car park is physically constrained by the adjoining Lidcombe Oval site, further complicated by the heritage status of the grandstand.

**(iii) Cost**

The Anne Clark Centre is an ageing building which required a significant capital investment to achieve a satisfactory redevelopment / refurbishment of the facility to bring it up to international competition standards.

### **1.3.2 Blacktown Olympic Park / Western Sydney Parklands**

The Parklands corridor includes a range of existing high quality sports facilities developed for the 2000 Olympic Games for equestrian, shooting, baseball, softball and mountain biking competitions.

The site which was considered by Netball NSW was located in the vicinity of the Eastern Road Sports precinct. This was a “greenfield site” and following a further analysis, the construction of a new facility in this location was considered to be cost prohibitive having regard to:

- the majority of the site was within the 1 in 100 year flood and the need to construct the new facility with an appropriate freeboard; and
- the cost associated with installation of infrastructure and services.

### **1.3.3 Preferred Option**

Site 107 was selected by Netball NSW in consultation with SOPA, NSW Office of Communities (Sport and Recreation) for the following reasons:

- physical site characteristics;
- the environmental capacity of the site and its ability to accommodate the physical extent of the proposed development;
- the establishment of a sporting facility of this nature in this location is consistent with the provisions of Sydney Olympic Park Master Plan 2030 and the objectives of the Southern Sports Precinct; and

- the importance for Netball NSW to be located in Sydney's premier sports precinct and the associated benefits to the sport of netball.

The SOP Master Plan aims to both ensure Sydney Olympic Park becomes an active and vibrant town within Metropolitan Sydney, and to protect the role of SOP as a premier destination for cultural, entertainment, recreation and sporting events.

MP 2030 provides specific design controls regarding sustainability, public domain, event controls, land use and density, building form and amenity, access and parking, transport strategies and infrastructure, landscaping and community infrastructure.

Having regard to the above, the proposed location of the Netball Central facility is considered to be appropriate for the following reasons:

- it is located close to the geographic heart of the Sydney metropolitan area, optimising access for affiliates, members and players;
- Sydney Olympic Park is an acknowledged centre for sports excellence;
- it will improve the use of existing resources and infrastructure at Sydney Olympic Park;
- Sydney Olympic Park affords flexibility in the site area available to accommodate a development of this scale and nature; and
- the facility will benefit from the infrastructure available at Sydney Olympic Park, which is specifically designed to support major sporting facilities /events and associated parking demands.

## 1.4 Objectives of the Proposal

The following key objectives were identified by Netball NSW and translated by Scott Carver Architects to inform the ultimate design of the proposed facility:

- to create a flagship for netball in NSW which enhances / lifts the profile of the sport and the role of Netball NSW;
- to create an iconic, cutting edge sporting facility;
- to locate the facility in an area which enables netball to rub shoulders with other sports professionals and elite athletes;
- to provide a model facility to which other aspire and which inspires players to strive for the pinnacle of the sport;
- to provide a home for the 'Swifts';
- to provide a home for the NSW netball community, from the grass roots through to the elite;
- to provide a regional administration hub for netball with training facilities and support services for affiliates, members and players;
- to create a high quality environment that aids the development of the sport and the individuals playing within it;
- to provide a flexible facility to accommodate netball events for the next 20 years, including tournaments and other major events such as nationals; training; academies; and holiday programmes;
- to increase netball-related commercial opportunities;
- to provide a healthy, safe environment for players of all ages and abilities;
- to provide a highly inclusive facility, with access for all spectators including those with disabilities and parents with prams;
- to create a facility with high levels of clarity / legibility of operations and circulation; and
- to provide a facility which builds upon and pushes beyond the legacy of the "Green Games"<sup>1</sup>, to be a flagship for innovation and sustainability

<sup>1</sup> Sydney Olympic Games 2000

## 1.5 Approval Path

Under the provisions of SEPP (SSD) a project will be a State Significant Development if it falls into one of the classes of development listed in Schedule 1 of the SEPP or is a development exceeding a certain Capital Investment Value (CIV) on a State Significant Site identified in Schedule 2 of the SEPP.

Sydney Olympic Park is an identified SSD site in Schedule 2. Development that has a CIV of more than \$10 million on land at SOP satisfies the requirements to qualify as a SSD. It is considered to have significance and will contribute significant social and sporting benefit to the locality, region and the State. A Quantity Surveyor's Certificate of Cost which confirms the CIV for the proposed development at \$28.27 million has been prepared by Rider Levett Bucknall, a copy of which is included at **Appendix 1**.

The SSD application will be assessed under the relevant provisions under Part 4 of the EP&A Act. However, in accordance with the *Environmental Planning and Assessment Regulation (2000)* (EP&A Regulation), the requirements of development control plans will not apply.

A copy of the DGRs issued by the Department of Planning and Infrastructure on 2 April 2012 is included at **Appendix 2**.

## 1.6 Specialist Information

A range of specialist information has been prepared to accompany this application, as detailed below.

Quantity Surveyors Certificate of Cost (CIV)	Rider Levett Bucknall	<b>Appendix 1</b>
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Copies of these reports / plans are included as Appendices as detailed above. An External Finishes Palette prepared by Scott Carver Architects also forms part of the DA documentation.

## 2.0 The Site and Environs

### 2.1 Location and Context

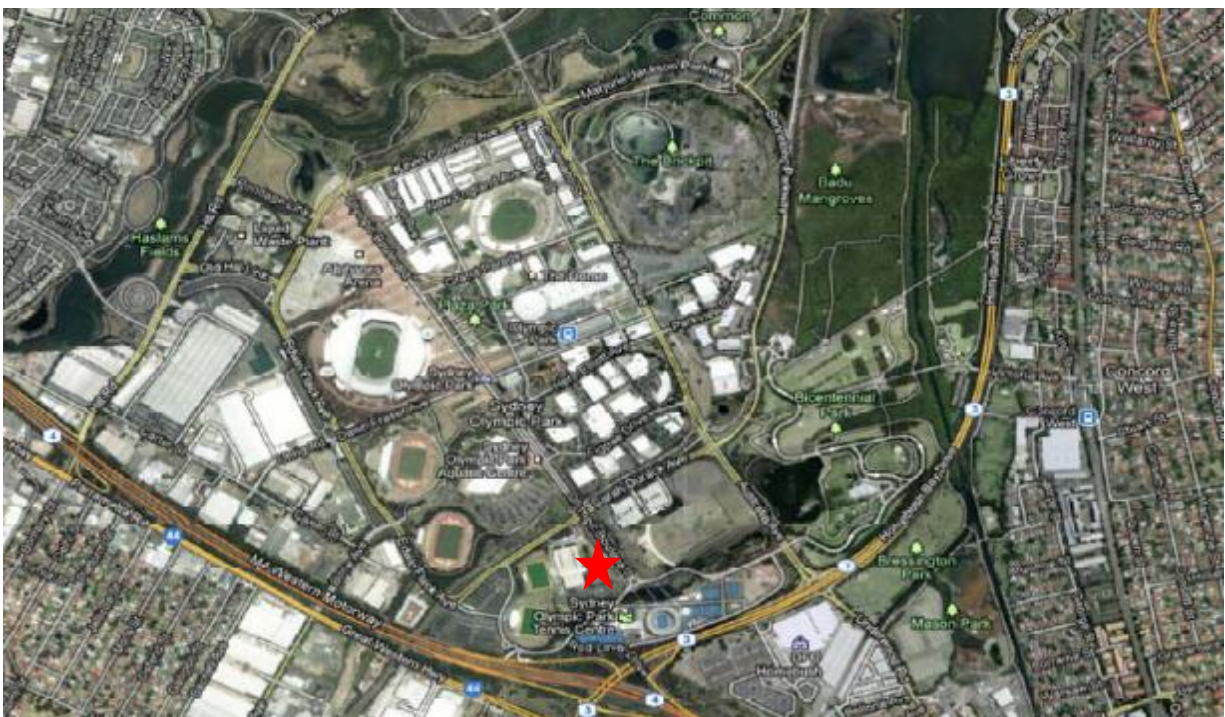
Sydney Olympic Park is situated approximately 14km to the west of the Sydney CBD and roughly 8km from the Parramatta City Centre, within the local government area of Auburn. It is centrally located in the urban corridor between the Parramatta CBD in the west and Strathfield / Burwood regional centres to the east. A series centres, including Ashfield, Burwood, Strathfield, Rhodes and Auburn, are sited along two major rail corridors and are the focus of intense development.

In a hierarchical sense, Parramatta is the primary centre, attracting major infrastructure, and commercial and residential development. Strathfield and Burwood are rapidly growing regional centres which are currently adding high density housing to their established retail, commercial and educational land use bases.

Other established areas in the vicinity of Sydney Olympic park are also undergoing change and revitalisation. The Parramatta Road corridor, the Carter Street Precinct, the North Strathfield corridor and the former Lidcombe Hospital site are developing new housing and employment uses at higher densities. The cumulative effect of such development will alter the form and function of the region over time.

Sydney Olympic Park's location at the geographic heart of Sydney and its infrastructure legacy from the Sydney 2000 Olympic and Paralympic Games have ensured excellent road and rail access from most places in the greater metropolitan area. It occupies 640 ha and offers rich metropolitan attractions, extensive sporting and recreational facilities, and generous public spaces that are ideal for hosting major events. No comparable individual venue or cluster of facilities is found elsewhere in NSW.

The site is located at the southern end of Olympic Boulevard, between Sarah Durack Avenue and Shirley Strickland Avenue and is known as Site 107 under the SOP Master Plan 2030. The plan at **Figure 2** illustrates the location of the site in the broader context of Sydney Olympic Park.



**Figure 2** Site 107 in the wider context of Sydney Olympic Park (Source: Google Maps)

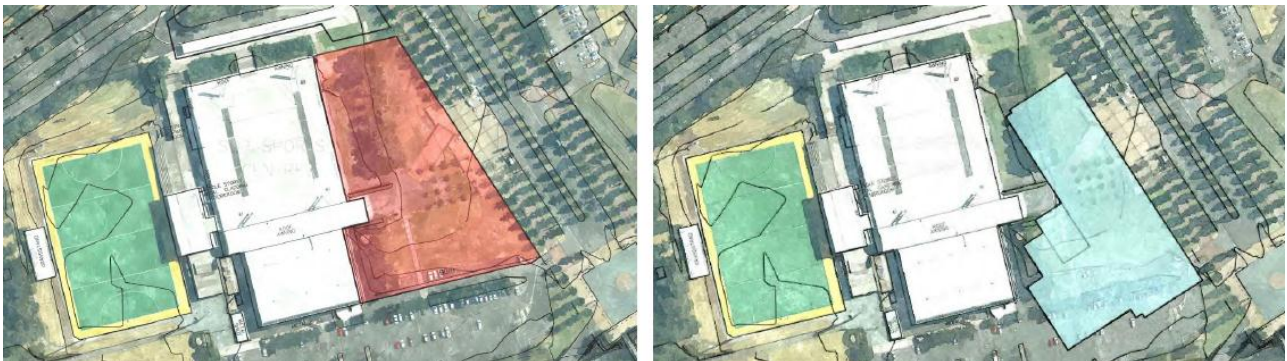
Development in the immediate vicinity of the subject site is as follows:

- the Sydney International Aquatic Centre north of Sarah Durack Avenue and the Sydney Olympic Park rail loop;
- the Tennis Centre to the south on the opposite side of Shirley Strickland Avenue;
- Olympic Boulevard to the east, with the Golf Driving Range beyond; and
- the Sports Centre to the west.

## 2.2 Site Description

The Development Application will seek approval for redevelopment of land at Sydney Olympic Park, legally described as Lot 201 in DP 1041756.

Site 107 is described in Master Plan 2030 and is estimated to have an area of approximately 9,700m<sup>2</sup>. It should be noted that this application seeks approval to extend beyond the indicative boundaries of Site 107 illustrated in the Master Plan. **Figure 3** below illustrates the proposed building footprint compared against the extent of Site 107 as shown in the Master Plan. SOPA has confirmed that the development sites identified in the Master Plan are indicative only in order to provide flexibility to both the Authority and developers / designers to achieve economically viable development with optimal design integrity.



**Figure 3** Site 107 (shown left) compared to proposed building footprint (Source: Scott Carver Architects)

This encroachment into the P7 Car Park, to the south effectively increases the land to which this application applies to an area in the order of 18,813m<sup>2</sup>. This area encompasses the proposed changes to the access arrangements to the P7 Car Park at the southern end, the shared forecourt immediately to the north of the proposed building and the Olympic Boulevard western footpath and verge. **Figure 4** illustrates the extent of the land to which this DA applies (green line).

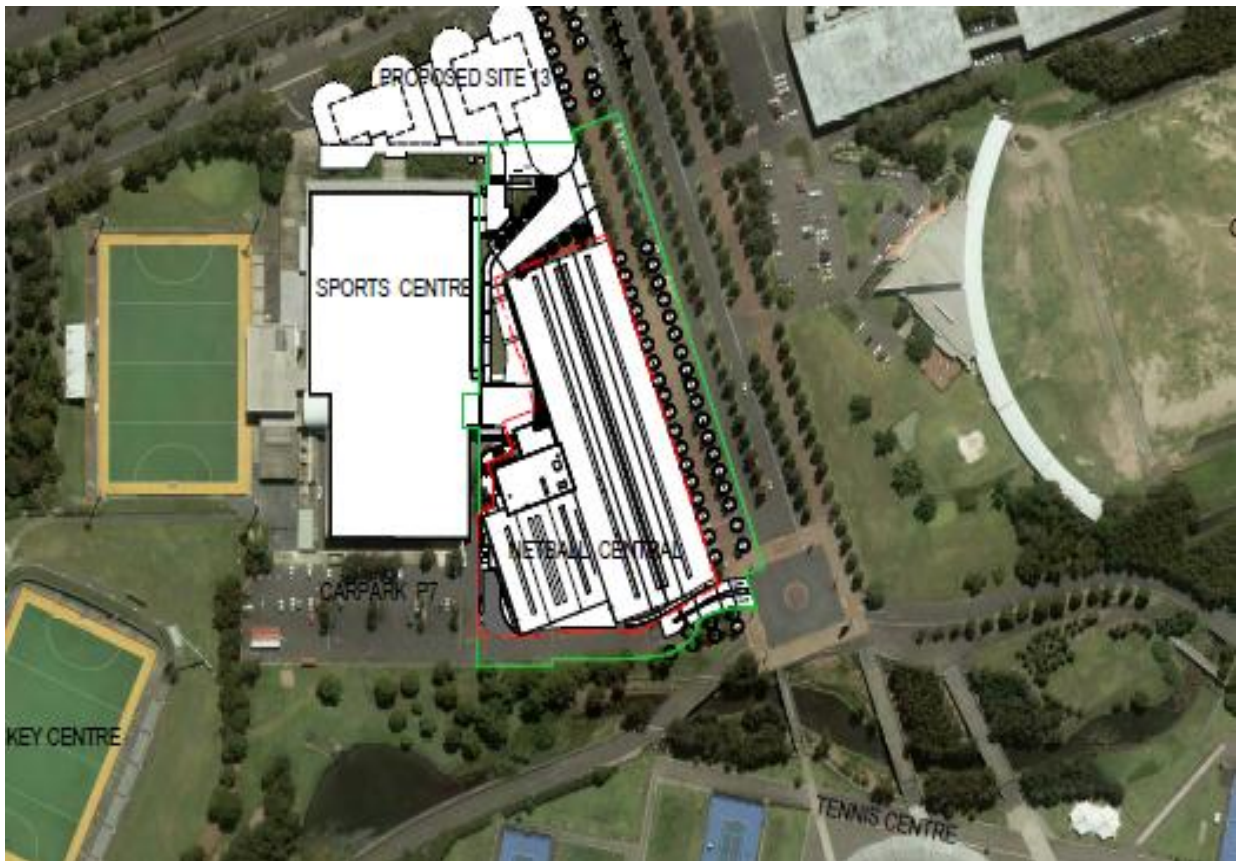
It should also be noted that this application also seeks approval for land subdivision to create a discrete parcel of land which will be reflected in the commercial lease arrangements with SOPA. At 10,338m<sup>2</sup>, this parcel is significantly smaller than the land to which the application applies. The extent of the proposed allotment is shown outlined in red on **Figure 4**. The proposed subdivision is described in further detail in Section 3.12 of this Statement.

A copy of the site survey prepared by Hard and Forester is included at **Appendix 3**.

### 2.2.1 Existing Development

The subject site is largely vacant and comprises a large open area which includes a paved pedestrian walkway to the eastern entrance of the Sport Centre and a large expanse of grass interspersed with regularized tree planting (see Section 2.2.4 below).

As described above, the footprint of the proposed building extends to the south beyond the indicative boundaries of Site 107 as documented in the Master Plan. This southern part of the site is currently occupied by the P7 Car Park, which provides at-grade parking for approximately 263 vehicles.



**Figure 4** Netball Central – land to which the DA applies (Source: Scott Carver Architects)

## 2.2.2 Topography

The site slopes towards the south from approximately RL12m AHD near the northern boundary of the site to the northern edge of the P7 Car Park which is separated from the site by a grassed slope where the ground elevation reduces to approximately RL 7m AHD at the base of the slope. Ground elevations reduce again from the base of the slope across the car park to the southern boundary of the car park by approximately 2.0 metres.

The southern portion of the site comprising the section of the P7 Car Park is at an approximate elevation of 5m AHD.

The Survey prepared by Hard and Forester (refer **Appendix 3**) includes levels across the site and environs.

## 2.2.3 Soil and Geotechnical Conditions

Geotechnical investigations of the subject site have been completed by Coffey Geotechnics. A copy of the Geotechnical Report is included at **Appendix 4**.

Coffey Environments Australia Pty Ltd has undertaken a Phase 1 Preliminary Site Investigation of the land to which this application applies (refer **Appendix 5**). The report scope is as follows:

- Identify past and present potentially contaminating activities;

- Identify potential contamination types;
- Discuss the site condition;
- Provide a preliminary assessment of site contamination; and
- Assess the need for further investigations.

## Regional Geology and Soils

The Coffey Environments report advises that the Sydney 1:100,000 Soil Landscape Map produced by the Soil Conservation Service of NSW indicates that the site is underlain by the Blacktown Soil Landscape Group whose landscape is gently undulating rising on Wianamatta Group Shale and Hawkesbury Sandstone. Local topography is described as rising to a maximum of 30 metres in the area. Broad, rounded crests and ridges with gently inclined slopes of less than 5% gradient are common. The map indicates that soils are shallow to moderately deep (less than 1.0 metre deep). Red and brown Podzolic soils occur in crests, upper slopes and well drained areas and yellow Podzolic soils and Soloths occur on lower slopes and areas of poor drainage. The subsoil is considered to be moderately reactive, have high plasticity, low fertility and poor drainage.

Coffey's examination of the 1:100,000 Sydney Geological Series (Sheet 9130) indicates that the foreshores of Homebush Bay and Parramatta River in the vicinity of Sydney Olympic Park are underlain by man-made fill overlying horizontal layers of alluvium and residual soils, overlying shale bedrock.

The man-made fill is expected to comprise dredged estuarine sand and mud, demolition rubble, and industrial and household wastes. There is an increase in the thickness of the fill from the P7 Car Park boundary towards the northern part of the site.

The sediments are expected to comprise silty to peaty quartz sand, silt and clay that exhibits ferruginous (i.e. iron rich) and humic (i.e. organic) sedimentation in places. Shell layers are also common.

The fill is underlain by the Triassic Bringelly Shale, Minchinbury Sandstone and Ashfield Shale of the Wianamatta Group comprising shale with some sandstone beds. Bringelly Shale is the uppermost unit and is described as carbonaceous claystone and laminite with fine to medium grained lithic sandstone. The Ashfield Shale is described as black to dark grey. An intermediate unit, Minchinbury Sandstone, described as fine to medium grained sandstone is situated between the Bringelly and Ashfield Shale units.

## Acid Sulphate Soils

SOPA's Acid Sulphate Soil Risk Map (see **Figure 5**) identifies a small section of the site (generally confined to the south eastern corner) as "disturbed terrain" which may include filled areas, which often occur during reclamation of low lying swamps for urban development. Other disturbed terrain includes areas which have been mined or dredged or have undergone heavy ground disturbance through general urban development or construction of dams or levees. Soil investigations are required to assess these areas for acid sulphate potential.

Coffey Environments has prepared an assessment of the Acid Sulphate Soil risk (a copy of which is included at **Appendix 6**) which indicates that the development is unlikely to encounter Acid Sulphate Soil. This advice is based on:

- a review of the Acid Sulphate Soils Map which forms part of SEPP (Major Development) 2005 (Map Ref. Sheet ASS 001);
- an examination of the Soil Landscape Map and Geology Map which indicates that the site is underlain with man-made fill overlying clayey soils likely of shale or stream origin, not of estuarine or marine origin;
- the eastern part of the proposed development is likely to require limited surface excavations to remove fill to about 8.2m AHD. The fill was observed to comprise silty clays, sandy gravels and gravelly clays of shale origin to depths varying from 3.0m bgl (TP8).to 6.2m bgl (BH7). No obvious visual evidence of ASS was encountered in the fill;

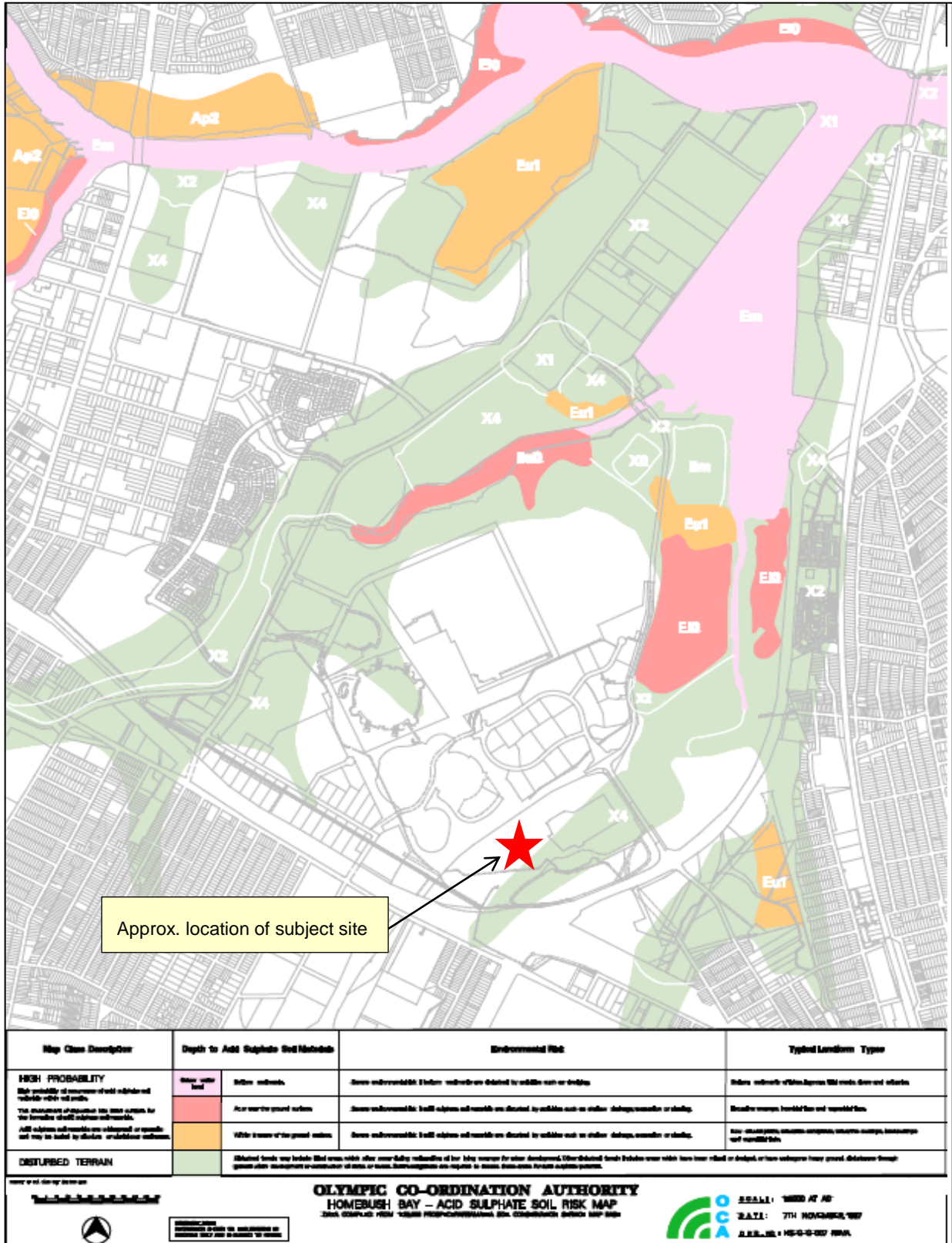


Figure 5 Acid Sulphate Soil Risk Map (Source: SOPA)

- the south-western part of the proposed development will likely require excavation of fill in the northern part to level the ground to about 6.4m AHD. The fill in this area was observed to comprise gravelly sand, sandy gravel and clay with a trace of gravel likely of shale origin. No obvious visual evidence of ASS was encountered in the fill;
- a thin layer of alluvium was encountered at three locations in the southern part of the site (BH2, BH3 and TP3, generally outside the footprints of the proposed structures. Based on borehole and test pit observations, acid sulphate soil indicators, such as presence of shell, pale yellow jarositic materials, and dark organic rich swampy materials were not observed. Therefore, ASS are unlikely to be present in this thin alluvium layer; and
- whilst minor piling work may be required, it is unlikely to disturb significant volume of soil. No obvious visual evidence of ASS was encountered at the site.

## Contamination

A series of eight (8) test pits were excavated across the site and eight (8) boreholes were drilled. Representative soil samples were collected from each test pit and borehole and analysed for contaminants of potential concern. Based on the scope of work undertaken, Coffey Environments made the following conclusions:

- the concentrations of TPH, BTEX, PAHs, OCP, OPP and heavy metals in soil samples analysed were reported either below the laboratory limits of reporting (LORs) or below the adopted assessment criteria.
- the Golf Driving Range landfill site is located immediately to the east and it encroaches into the southeastern corner of the site.
- asbestos fibres in soil were detected in the southeastern corner and northern portion of the site, which are located on the southern and northern edges of the proposed development footprint.

Based on these findings, Coffey Environments has indicated that the site is suitable for the proposed development subject to:

The asbestos containing soil material be delineated by collection of additional soil samples surrounding the test pit location and asbestos containing material be removed and the site validated. Asbestos containing soil in the deeper soil samples be delineated by additional soil sample collection surrounding the test pit (TP1) and asbestos containing soil can be managed on site. Management of asbestos contaminated soils may include capping of soils under a suitable barrier, consisting of either:

- hard pavement (concrete or bitumen); or
- a marker layer of geo-fabric or mesh, covered by a minimum thickness of clean landscape materials (topsoil). The landscape materials will need to be stabilised with suitable vegetation to minimise erosion of the cap.

Removal or disturbance (during construction) of the asbestos containing soil material should be carried out under an Asbestos Removal Plan with supervision by a NSW WorkCover licensed (AS1) contractor. The potential for any dusts generated during construction works will need to be managed with periodic spraying of water etc during works, together with the implementation of suitable erosion and sediment controls.

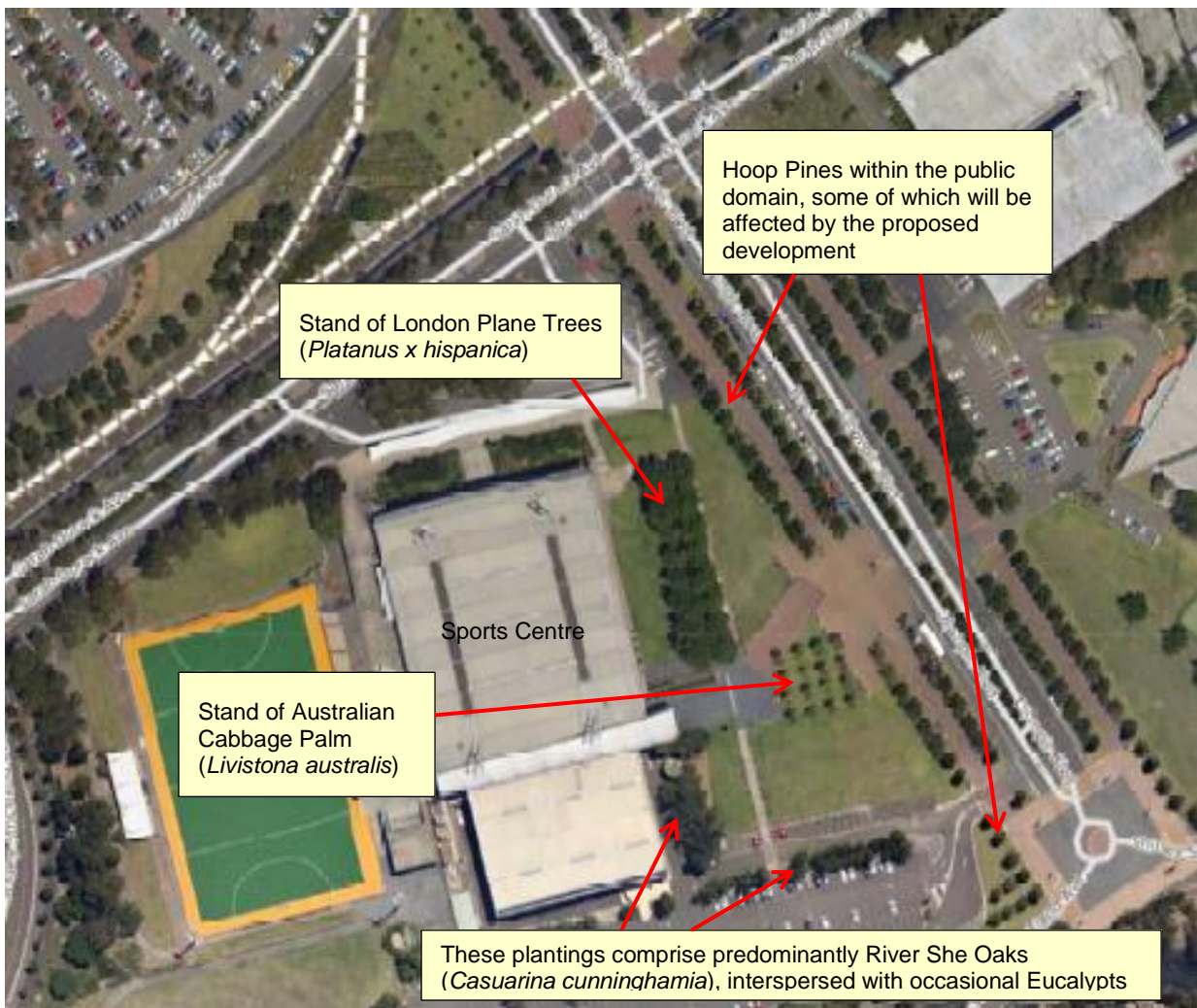
### 2.2.4 Vegetation

Existing vegetation on the site includes a large expanse of grass along the Olympic Boulevard frontage, adjacent to the eastern entry to the Sports Centre. Two (2) stands of formal tree planting are located within the setback of the Sports Centre from Olympic Boulevard.

A less formal lineal tree planting arrangement is located along the northern edge of the existing P7 car park. A similar area of planting provides a landscape screen to the existing loading dock which services the Sports Centre.

**Figure 6** below illustrates the location of the existing vegetation on the site and in the immediate vicinity.

Naturally Trees Arboricultural Consulting has prepared a detailed Arboricultural Assessment, a copy of which is included at **Appendix 7**. The report includes a schedule of existing trees on and in the immediate vicinity of the site, providing a tree identification number and including details of the species, its size and the general condition of each specimen.



**Figure 6** Existing vegetation in the vicinity of the site (Source: Nearmap)

There is a total of 124 trees within the boundaries of the land to which this application applies (green line on **Figure 4**), 65 of which require removal as a result of the proposed development.

A number of the existing Hoop Pines located in the western verge of Olympic Boulevard also fall within the sphere of influence of the proposed development. However it should be noted that the Arborist only inspected those trees which could be affected by the construction footprint (ie. those in the western row, closest to the site).

The impact of the proposed development on existing vegetation is discussed in further detail in Section 6.8 of this Statement and in the Arborists Report at **Appendix 7**.

## 2.2.5 Vehicular and Pedestrian Access

Pedestrian access to / from the site is available from the existing walkway off Olympic Boulevard, which currently services the eastern entry to the Sports Centre. Pedestrian and vehicular access to the site is available from the P7 Car Park to the south.

Olympic Boulevard is the primary north-south pedestrian access through Sydney Olympic Park, with wide footpaths and generous road width. The Boulevard provides the most direct route to the Town Centre, Olympic Park railway station and other major sporting facilities such as the Aquatic Centre, ANZ Stadium, Allphones Arena and the Sydney Showground.

Sarah Durack Avenue intersects with the Boulevard approximately 70 metres to the north of Site 107 and provides an east – west connection across the site to Australia Avenue and Parramatta Road.

Shirley Strickland Avenue to the south of the site provides access to the Tennis Centre and is a secondary access to Australia Avenue.

## 2.2.6 Public Transport

The Sydney Olympic Park railway station is located approximately 900 metres to the north (a walk of approx. 12 minutes) of the site along Olympic Boulevard. This is a branch line from Lidcombe and provides services every 10 minutes to in peak hours.

During major events, direct services to Central Station and the western lines are provided. The following bus routes service Sydney Olympic Park, as follows:

- Route 401 Lidcombe to Olympic Park Station
- Route 525 Burwood to Parramatta via Rydalmere
- Route 526 Burwood to Olympic Park Ferry
- Route 533 Chatswood to Olympic Park Station

Route 401 operates between Lidcombe Railway station and Olympic Park station at 20 minute intervals in peak periods and at 40 minute intervals during the off peak. Services run between 6.00am and 7.00pm on weekdays and between 8.30am and 5.50pm on Saturdays.

Routes 525 and 526 operate in both peak and off peak periods at 10 minute intervals in the peak and 20 minute intervals in the off peak. Services operate between 5.30am and 10:00pm Monday to Friday and between 6:20am and 10:00pm Saturday and between 7:30am and 8:00pm on Sundays and Public Holidays.

Route 533 is a peak hour only service providing connections between Chatswood, Lane Cove and Ryde and Sydney Olympic Park. Services operate between 6:40am and 9:00am and between 4:40pm and 6:30pm to Olympic Park, Monday to Friday. Services operate at 15 minute intervals during these peak times.

The set down area for bus services is the eastern side of the Olympic Park Station in Park Street. This location is approximately a 15 minute walk to the site.

## 2.2.7 Heritage and Archaeology

### European Heritage

An examination of the Heritage Map (Sheet HER 001) for Sydney Olympic Park which forms part of SEPP (Major Development) 2005 indicates that the site is not located within a General Conservation Area.

The only heritage conservation areas currently identified at Sydney Olympic Park are the Abattoir Precinct and the Millennium Parklands Heritage Precinct.

Having regard to the above, it is considered that there is no further investigation in relation to heritage required as part of this assessment.

### Aboriginal Archaeology

Sydney Olympic Park is situated on the traditional lands of the Wann clan, known as the Wann-gal. The lands of the Wann-gal stretched along the southern shore of the Parramatta River between Cockle Bay (Cadi-gal land) and Rose Hill (Burrumatta-gal land).

The Wann-gal and their ancestors have lived in the Homebush Bay area for thousands of years. Physical evidence of the usage of the Homebush Bay area by Aboriginal people was found in 1986 near the Newington Village site in the form of stone artefacts. In addition, Aboriginal stone artefacts and an axe-marked tree, used by Aboriginal people for hunting possums, were found within Newington Nature Reserve.

Aboriginal shell middens (campsites where shellfish and other foods were consumed) were known to have lined Homebush Bay and the Parramatta River but were destroyed in the limekilns in the eighteenth and nineteenth century and subsequent alterations to the shoreline.

There have been no known Aboriginal archaeological finds on or in the vicinity of Site 107. In the event that any Aboriginal objects are discovered during the bulk earthworks / remediation, works will cease immediately and the Office of Environment and Heritage (OEH) will be notified. Works will not resume until written approval to do so is obtained from OEH.

## 2.3 Land Ownership and Zoning

The registered proprietor of the land is the Sydney Olympic Park Authority and is legally described as Lot 201 in DP 1041756. A copy of SOPA's land owners consent is included in the supporting documentation for this application.

The site is zoned B4 Mixed Use under the provisions of *State Environmental Planning Policy (Major Development) 2005* (Major Development SEPP). Clause 9, Part 23 of Schedule 2 of the SEPP sets out the objectives and the land use table for the B4 zone as follows:

- (a) *to protect and promote the major events capability of the Sydney Olympic Park site and to ensure that it becomes a premium destination for major events,*
  - (b) *to integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling,*
  - (c) *to ensure that the Sydney Olympic Park site becomes an active and vibrant town centre within metropolitan Sydney,*
  - (d) *to provide for a mixture of compatible land uses,*
  - (e) *to encourage diverse employment opportunities,*
  - (f) *to promote ecologically sustainable development and minimise any adverse effect of land uses on the environment,*
  - (g) *to encourage the provision and maintenance of affordable housing.*
- (2) *Development for any of the following purposes is permitted without consent on land within Zone B4 Mixed Use:*
- environmental protection works; recreation areas.*
- (3) *Except as otherwise provided by this Part, development for any of the following purposes is permitted with consent on land within Zone B4 Mixed Use:*

*roads; any other development not specified in subclause (2) or (4).*

- (4) Development for any of the following purposes is prohibited on land within Zone B4 Mixed Use: bulky goods premises; caravan parks; industries; moveable dwellings; resource recovery facilities; restricted premises; rural industries; sex services premises; truck depots; warehouse or distribution centres.*

The proposed sporting facility is permissible with consent in the B4 zone.

## 3.0 Description of Proposed Development

This section of the Statement should be read in conjunction with the Architectural Package prepared by Scott Carver Architects, a copy of which is included at **Appendix 8**.

The application seeks approval for the construction of a purpose-built headquarters for Netball NSW. The works comprise:

- bulk earthworks and excavation;
- remediation of minor sub-soil contamination;
- tree removal;
- construction and use of five (5) indoor netball courts of international standard, plus one (1) Show Court with seating for some 800 spectators;
- amenities for players, officials and the public;
- café;
- medical facilities – first aid, physiotherapy, massage etc;
- ancillary storage facilities and equipment areas;
- office / administration areas for occupation by Netball NSW;
- ancillary minor events including business-oriented occasions or cultural, social or sporting-related occasions occurring on one or more days throughout the year;
- utility services connections, which necessitates redirection / relocation of existing underground services;
- associated civil and landscape works, including relocation of the entry / exit to the P7 Car Park; and
- land subdivision.

### 3.1 Description of the Building

The footprint of the facility has been dictated by the fixed size of the netball courts (designed to meet international standards) and the physical constraints imposed by the site, including the proximity of the adjacent Sports Centre, which limit the workable arrangement of the courts.

The courts have been arranged around a compact 'Hub' of amenities and administration. The Hub element is located centrally to the five (5) standard courts and immediately adjacent to the Show Court.

The five (5) standard courts have been arranged along a spine which functions as an internal "street" that connects the hub with the courts.

The building follows the topography of the site down the slope of Olympic Boulevard towards the south. This ensures that the building remains engaged with the surrounding public domain and presents an opportunity for direct visual connections into and from the netball courts.

The inevitable bulk of the building arising from the fall of the land has been located as far south on the site as is practically feasible in order to create a shared entry and breakout space at its northern end to service both the existing Sports Centre and Netball Central.

Although comprised of simple portal frames, the 5 standard courts have been designed to create a appropriate "civic" stature to Olympic Boulevard, commensurate with the scale of the public domain and general setting.

**Figure 7** illustrates the various components of the proposed development.



**Figure 7** Sectional cut through the proposed building (Source: Scott Carver Architects)

## Sustainability

Netball Central has been designed to exacting standards of sustainability which is reflected in its architecture:

- the treatment to the Olympic Boulevard facade at pedestrian level includes operable windows that serve to supply ventilation to the five (5) standard courts;
- the roof of the courts 'breathe' along the ridge line and cantilever beyond the building to optimize natural ventilation;
- rainwater is managed by a series of dramatic roof lines to descend through a medley of downpipes at the southern end of the building; and
- the structure is made substantially of timber, which is a renewable resource with its own sequestered carbon dioxide.

ESD is discussed in further detail in Section 3.8 of this Statement and the ESD Report prepared by Arup, a copy of which is included at **Appendix 9**.

## Façade Treatment

The east and north facades will be clad in a cellular polycarbonate material in order to maximise the transmission of daylight and increase the sense of openness within the court zones. Sun shading screens inhibit the trespass of sunlight directly onto the courts.

On the east facade these sun shading screens take the form of metal profiles that match the roof sheeting, positioned on the outside of the colonnade, thereby also enhancing the dramatic scale of Olympic Boulevard.

On the north façade LVL timber louvres will be positioned inside the polycarbonate, preventing the trespass of direct sunlight. In this situation the broad eaves keep direct sun from the façade in summer, while the winter sun is directed into the building in winter with a beneficial warming effect.

Tilted slightly up, all of these sun shading louvres allow filtered views into the building from outside while still excluding the sun. This louvre geometry will present the building as a lantern at night when viewed from the public domain and urban places adjacent. This is an important consideration given the intense use the building will enjoy in the early evening during the winter months.

These design elements contribute a “gentleness” to the monumental form of the building. The absolutes and specificity of elite competition - boundaries, lines, rules, scores, winners, losers, competition, focus and aggression, are contrasted with a counterbalancing, more general imprecision of a warm modern building that speaks of light, depth, ambiguity, translucency, transitions, seamlessness, luminance, ambience, atmosphere, tactility, charm, respite and conviviality.

### Gross Floor Area

The total GFA of the Netball Central facility has been calculated by Scott Carver Architects in accordance with the definition set out in the Standard LEP Template, broken down as follows:

Show Court- Level 1	1,095 m <sup>2</sup>
Court Halls (including Show court seating)- Level 2	6,182 m <sup>2</sup>
Hub- Level 1	751 m <sup>2</sup>
Hub- Level 2	697 m <sup>2</sup>
Hub- Level 3	632 m <sup>2</sup>
Hub- Level 4	646 m <sup>2</sup>
<b>TOTAL GROSS FLOOR AREA</b>	<b>10,003m<sup>2</sup></b>

## 3.2 Remediation

As described in Section 2.2.3 of this Statement Coffey Environments Australia Pty Ltd prepared a Phase 1 Preliminary Site Investigation (refer copy at **Appendix 5**) in order to ascertain the scope and nature of potential contamination.

Based on the findings of the Preliminary Site Investigation, a Remediation Action Plan (RAP) has been prepared which:

- establishes the remediation goal for the site – namely, to render the site suitable for its proposed use as a sporting facility with associated amenities based on a setting park, recreational open space, playing field land use with minimal landscaping;
- establishes site remediation criteria for the contaminants of concern;
- identifies and assesses remediation options;
- recommends a preferred remediation option;
- sets out the procedures and activities required for the implementation of the preferred remediation option;
- outlines the requirements for a contingency plan for the remediation;
- sets out the procedures and activities associated for validating the remediation;
- outlines the requirements for a site management plan for implementation during the remediation works on the site, including an Unexpected Finds Protocol;
- sets out the regulatory compliance requirements for the remediation works; and

- defines the roles and responsibilities for remediation works and validation activities.

The Proponent will ensure that all works on site will be conducted in accordance with the processes and procedures set out in the Remediation Action Plan which forms part of the documentation submitted in respect of this development application.

A copy of the RAP prepared by Coffey Environments is included at **Appendix 10** to this report.

### 3.3 Site Preparation and Bulk Earthworks

The site will be cleared of all the existing vegetation described in Section 2.2.4 of this Statement.

A Bulk Earthworks Plan has been prepared by ARUP as part of the Structure Report for the Project, a copy which is included at **Appendix 11**. The existing ground material is deemed to be uncontrolled fill. Dynamic compaction of a 1.5-2m zone will be completed to make suitable for founding the Level 1 slab for the courts.

Court 5 (the southernmost court on the Olympic Boulevard frontage of the site) will be founded on new compacted fill. Preparation of the existing ground will also be required in this area.

The foundations for the Show Court element (occupying the south western corner) of the proposed building will comprise shallow pad foundations. If the depth of fill is too great to make this solution economical, short piles / piers will be required in this part of the building.

The excavation of the Show Court area will leave relatively little fill below the bulk excavation levels and re-compaction of all fill is required.

The Level 1 slab for the Show Court element is at RL 106.4m which is below existing ground level. Accordingly, retaining walls will be required around the edges (with the exception of the southern edge) of this part of the building.

The loads from the Hub element of the proposed building are much greater than the single storey court elements. Shallow foundations to rock are not possible and therefore piles will be required. Coffey Geotechnics has undertaken additional geotechnical investigations regarding the nature of the shale bedrock in the vicinity of the Hub element in order to inform the pile design. A copy of the Coffey Geotechnics advice in this regard is included in **Appendix 4**.

Due to the condition of the existing fill in this part of the site it is anticipated that the Level 1 slab will be a suspended structure. Arup has also identified the possibility that retaining walls will be required around the external edges of this element of the building.

### 3.4 Landscape Treatment and Public Domain Works

As detailed previously in this Statement, the siting of the proposed development results in the need to share pedestrian access with the adjacent Sports Centre and retain an address for both facilities to Olympic Boulevard.

As described in Section 2.2.4 of this report, there are a total of 59 trees on the site, all of which require removal to make way for the construction of the proposed building and forecourt. Some six (6) trees, four of which are located within the P7 Car Park and two Hoop Pines in the western verge of Olympic Boulevard will require removal as a result of the relocation of the access driveway which services the Car Park.

Scott Carver has prepared a detailed landscape design for the project, which responds to the provisions of the Sydney Olympic Park Urban Elements Design Manual (UEDM), the Sydney Olympic Park Master Plan

2030 and the findings of various planning and design reviews undertaken as part of the ongoing consultation with SOPA personnel and the Sydney Olympic Park Design Review Panel.

The design creates a simple spatial structure which seeks to create maximum public benefit as well as providing pedestrian access for the Sports Centre and the new Netball Central development to Olympic Boulevard. Each of the elements of the landscape design are documented in the Landscape Design Statement and accompanying plans (included in the Architectural Package at **Appendix 8**) and summarised in the following paragraphs.

It should be noted that the primary landscape element for this project – the shared forecourt – will ultimately form part of the public domain, which is owned and managed by SOPA.

### **3.4.1 Lower Forecourt**

Situated immediately adjacent to Olympic Boulevard, this space seeks to achieve a sense of entry to both the existing and proposed sporting venues. The creation of the forecourt requires the removal and relocation of fourteen (14) existing Hoop Pines in the western verge of Olympic Boulevard, as illustrated in **Figure 8**.

The lower forecourt entry has been angled to reflect pedestrian desire lines from the P3 Car Park and the Olympic Park Railway Station. This arrangement also guides visitors directly and equitably towards the entries of both the Sports Centre and Netball Central.

Gentle grass batters will flank both sides of the pedestrian zone. The sixteen (16) Cabbage Palms (*Livistonia australis*) which are currently located on the site will be replanted in a linear and directional arrangement within the batters.

A seating area located on the northern side of the main thoroughfare is outlined by a change in material and allows people to gather and sit, outside the line of pedestrian flow.

The clean trunks of the Palms ensure high levels of visibility are maintained through the space, whilst the linear arrangement of this element of the planting contributes to both legibility and wayfinding through the forecourt.

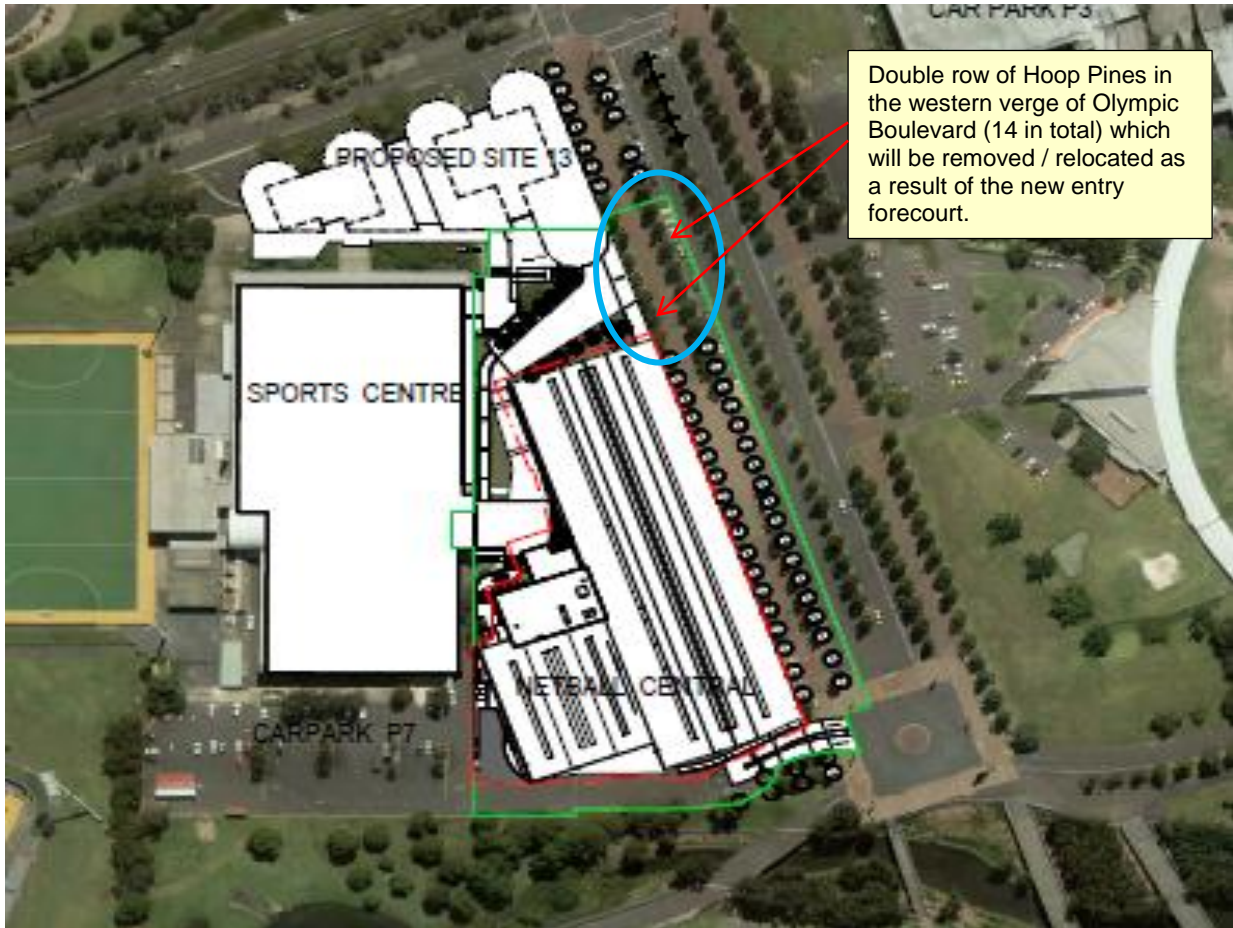
The design of the lower forecourt also responds to the potential interface with the adjacent development on Site 13, which makes provision for a café tenancy on the ground floor of the south western corner of that building.

### **3.4.2 Forecourt Ramp**

The forecourt ramp will provide a link between the lower forecourt and the upper forecourt. It is to be 5m wide at its pinch point, and will be supported by remodelled fill.

The ramp widens on its approach to the upper forecourt to allow the volume of pedestrian traffic to ease through the turn towards the upper entrance of the Sports Centre. The location and alignment of the ramp allows light to reach the existing at the mid-level windows which service the administration offices of the Sports Centre.

This ramp will achieve a maximum gradient of 1:20 with compliant landings. A 1:3 batter of native shrub planting will soften the entrance and provide visual interest for visitors and an outlook for the offices within the Sports Centre.



**Figure 8** Hoop Pines in Olympic Boulevard to be relocated as a result of the creation of the Forecourt  
 (Source: Scott Carver Architects)

### 3.4.3 Sports Centre Administration Ramp

This ramp provides an accessible route to the Sports Centre mid-level entrance which services the administration offices. The entrance to this ramp begins adjacent to forecourt ramp but is outside the general flow of pedestrians and therefore is secondary to the major event spectator flow.

This ramp achieves a 1:14 gradient at 9 metre maximum lengths and provides compliant landings. It will be constructed from light weight material.

### 3.4.4 Upper Forecourt

The upper forecourt is an entry platform for the Sports Centre and Netball Central. The platform provides a shared space addressing the entrances of both facilities, achieving an equitable relationship between the two.

The Upper Forecourt boasts expansive open space for crowds to circulate and queue during larger events, while at the same time providing shaded break out seating adjacent to the proposed café within Netball Central.

### 3.4.5 Lighting

The lower forecourt, forecourt ramp and upper forecourt will include a mixture of building-mounted, handrail-mounted and feature LED's to achieve the compliant P ratings for security during event and non-event times.

Directional lighting will allow visitors to follow a safely lit path to and from all venue entries. Uplighting of the transplanted Palms and illumination to the ramp edge with LED strips will create an energetic ambience within the forecourt entry.

All lighting will be undertaken in accordance with SOPA requirements.

### 3.4.6 Soft Landscape Elements

As indicated above, sixteen (16) existing Cabbage Palms that are located within the current landscape setback from Olympic Boulevard are proposed to be removed, stored off-site during the construction phase and relocated / replanted in the lower forecourt

Fourteen (14) Hoop Pines currently located in front of the proposed forecourt (within the western verge of Olympic Boulevard) are proposed to be removed to allow direct views of the shared entry to the Sports Centre and the proposed Netball Central. These trees are proposed to be relocated further to the south along Olympic Boulevard to fill existing gaps in the Hoop Pine plantings.

The forecourt planting will be a mixture of turf and native shrubs. The turf will provide accessible seating and rest areas during the day with a maximum grade of 1:6 to comply with NSW Work Health and Safety legislation.

The areas of mass shrub planting will provide visual interest for pedestrians and along the entry journey and will provide soil stabilisation for the 1:4 earth batters. Species selection will be undertaken in accordance with SOPA's requirements and will consider liveability, durability and Crime Prevention through Environmental Design (CPTED) principles.

## 3.5 Access, Traffic and Parking

### 3.5.1 Vehicular Access

The spatial requirements associated with a facility of this nature have resulted in a greater land-take than is shown for Site 107 in the Sydney Olympic Park Master Plan 2030. The expansion of the site further to the south necessitates the reconfiguration of the existing P7 Car Park, as follows:

- loss of 97 existing parking spaces; and
- relocation of the ingress / egress driveway approximately 25 metres to the south of its present location. The relocated driveway will effectively function as an additional "arm" of the existing roundabout (refer **Figure 9** below).

The control point within the driveway is proposed to be located further within the car park than the existing arrangement to ensure that a 19 metre long articulated vehicle<sup>2</sup> can be stored within the driveway without impacting on the operation of the existing roundabout.

Arup has prepared a Traffic Impact Assessment to accompany this application, which addresses the impact of the loss of parking in this locality and the effects associated with the relocation of the car park ingress / egress driveways. A copy of the Arup report is included at **Appendix 12**.

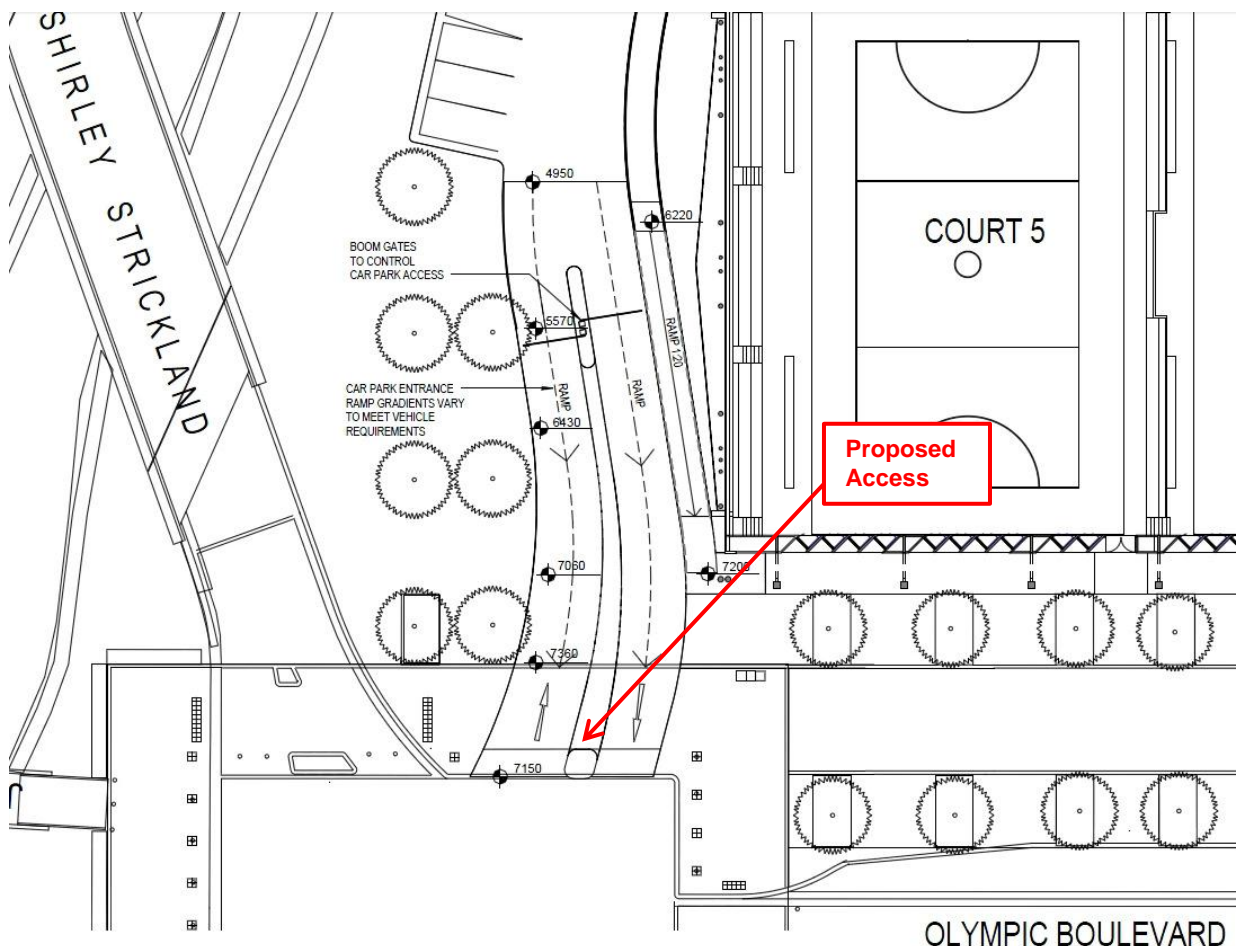
<sup>2</sup> 19m long vehicle is the largest expected to require access to the car park / loading docks for either the Sports Centre or Netball Central.

### 3.5.2 Service Vehicle Access

Notwithstanding the new car park access driveway has been designed to accommodate a 19m long articulated vehicle, the Netball Central facility is expected to be serviced by vans and rigid trucks, with a maximum size of up to 12.5m Heavy Rigid Vehicle.

The proposed loading dock is located on the south western side of the building, accessed via the P7 Car Park and located immediately adjacent to the existing loading dock of the Sports Centre. It has been designed to accommodate 12.5m Heavy Rigid Vehicles, which is considered to be the worst case, when a large delivery is occurring simultaneously with garbage collection. The area will be “hatched out” with linemarking signifying that this area is to be kept clear unless loading operations are underway.

The area will be separated from the adjacent Sports Centre loading dock and the car park by a 1300mm wide nature strip with upright kerbs.



**Figure 9** Proposed relocated car park access off existing roundabout at the intersection of Olympic Boulevard and Shirley Strickland Avenue (Source: Arup)

### 3.5.3 Parking

There is some on-street parking available in Olympic Boulevard adjacent to the site. This comprises twelve (12) one hour time limited spaces and two (2) disabled parking bays. No on-street parking is available on Sarah Durack Avenue.

As indicated above, the proposed development will result in the loss of 97 existing parking spaces within the P7 Car Park. It should be noted that no additional or replacement parking is proposed as part of this application. There are several Car Parks in the vicinity of the site, all of which are available for public use and area controlled and managed by SOPA.

**Table 3.1** Summary of Parking in the vicinity of Site 107

Car Park Name / Description	Number of Spaces	Number of Accessible Spaces
P2 – Large at grade car park for the Aquatic Centre	495	9
P3 – Large multi-storey car park off Sarah Durack Avenue	1438	46
P3a – Small at grade car park adjacent to the Golf Centre	55	4
P4 – Large at grade car park for the hockey centre	980	32
P7 – Small at grade car park for the Sports Centre	263	4
<b>TOTAL</b>	<b>3231</b>	<b>95</b>

### 3.5.4 Bicycle Provision

Master Plan 2030 requires bicycle parking to be provided at the rate of 1 space per 150m<sup>2</sup> of office floor space. There is also a requirement for the provision of visitor bicycle parking spaces at the rate of 1 space per 75m<sup>2</sup> of office floor space. As indicated previously in this Statement, the Hub element of the proposed development includes 1,130m<sup>2</sup> of office floor space for use by Netball NSW. This generates the need to provide eight (8) bicycle parking spaces for employees and fifteen (15) visitor parking spaces.

The employee spaces are located to the west of the Show Court in close proximity to the Level 1 entrance to the Hub. The visitor spaces are located within the shared forecourt. The associated change facilities and amenities are provided within the Hub element and will be shared with players and officials.

### 3.5.5 Sustainable Transport Initiatives

The development will encourage future users of Netball Central to make travel choices that support the State Plan targets of increased public transport mode share and doubling the active transport mode share. The site is located within close proximity to heavy rail stations and bus stops with connections to western Sydney, making these targets achievable. The development will include eight (8) bicycle parking spaces for employees with shower facilities to be provided (shared) with the officials change rooms.

## 3.6 Accessibility

The proposed development has been designed to incorporate key principles associated with providing independent, equitable and inclusive access for people with disabilities.

iAccess Consultants has undertaken a review of the proposed development as detailed in the architectural package prepared by Scott Carver Architects and has confirmed that the accessibility requirements of the current legislation and the SOPA Access Guidelines have been or will be satisfied. It is noted that further design resolution through the tender and construction documentation will address the detail required for accessibility compliance.

A copy of the Access report is included at **Appendix 13**.

### 3.7 Water Management

Arup has prepared the Civil Works Package, a copy of which is included at **Appendix 14**. SOPA has been consulted in relation to the water management regime for the proposed development and has requested that further modelling be undertaken to determine the impact of the proposed development on the downstream system. The results of the modelling will determine whether on site detention (OSD) is required and if so, the capacity required.

SOPA has advised that there have been several flooding events experienced recently downstream from Boundary Creek at Lake Belvedere in Bicentennial Park. It is noted that SOPA has not given any indication of flooding issues at Site 107.

SOPA has expressed some concern about the introduction of another large roof area to the catchment. Furthermore, the design criteria specified in SOPA's draft *Development Control Policy: Water Sensitive Urban Design and Construction Stormwater Management* is to limit the peak discharge from the development site to be no greater than the existing peak discharge for the 5 year average recurrence interval (ARI) design storm event.

The proposed development will increase the quantum of impermeable area and will remove existing landscaping and grassed areas. The reduction in permeable surfaces will increase runoff to Boundary Creek, potentially above the peak 5 year ARI discharge. This could also result in a negative effect on the downstream flood levels.

In order to comply with the draft Development Control Policy, Arup has advised that the on-site detention of stormwater will be required. The size will be determined by a quantitative assessment of the development runoff to achieve SOPA's requirements for a 5 year ARI design storm and will include:

- modelling the existing site and determination of the existing peak 5 year ARI discharge;
- modelling the proposed development;
- determination of the detention volume and configuration required to achieve the design criteria embodied in SOPA's draft DCP; and
- documentation of the OSD system and connections.

The design and final location of the storage facility shall be determined during the detailed design phase of the project, with the final detailing included in the tender documentation.

#### 3.7.1 Roof Water Drainage

It is proposed that roof water from the Courts will drain directly from the roof over the Courts to a collection well at the base of the southern wall of the building. The drainage system has been designed to accommodate a 1 in 100 year rain event. In the instance that a suitable, safe, overland flow path can be used to drain excess flows to the existing car park area, it may be possible to reduce the drainage capacity to a lower level such as 1 in 20 year rain event. Because the roof water overflow discharges from the Courts can freely discharge clear of the roof, additional or piped overflows will not be required for the roof over the Courts.

Elsewhere roof drainage will be drained using internally located PVC downpipes. For roof drainage collection other than the main roof and eaves gutters, overflows will be provided to discharge 100% of 1 in 100 year rain events away from the building.

#### 3.7.2 Surface Water Drainage

Local areas around the building will be drained to the main stormwater system being designed in the civil works package. These areas will be pathways and courtyard areas.

### 3.7.3 Subsurface Water Drainage

Perimeter areas, retaining walls and pathways around the building will be provided with subsurface drainage to remove hydrostatic pressure and prevent seepage. The service will connect to the main stormwater system being designed in the civil works package.

## 3.8 Environmentally Sustainable Development

The principles of Environmentally Sustainable Development (ESD) will be an integral consideration throughout the development and include those areas listed below:

- comfort of occupants of the facility by maximising daylight and natural ventilation to all court areas;
- minimise energy consumption, including the implementation of various energy efficiency initiatives such as efficient equipment selection and high performance façade materials;
- water-sensitive urban design measures including proposals for water-efficient tapware and low or no-water irrigation;
- materials selection which prioritises the well-being and comfort of occupants through the selection of low VOC products;
- waste management to reduce impact during site excavation;
- transport facilities to encourage staff and visitors to use alternative modes such as public transport and bicycles;
- pollution control including refrigerant charge monitoring;
- native plant species selection to promote biodiversity; and
- re-use of existing specimens (Cabbage Palms and Hoop Pines) in the landscape treatment.

Each of these aspects is addressed in detail in the ESD Report prepared by Arup, a copy of which is included at **Appendix 9**.

## 3.9 Infrastructure and Services

### 3.9.1 Water and Sewer

The proposed development requires the relocation of some hydraulic services on the site, the supply of potable and non-potable water, fire hydrant, gas services to the site and sanitary drainage and rainwater drainage from the site. The proposal also involves land subdivision, which requires the sewage, water, recycled water, hydrant and gas services to be connected directly to the authorities' mains and not interconnected with the existing site services.

The building services are required to provide water and drainage for use by large groups of people at peak periods necessitating provision for large volumes of flow. These are to be provided using the most efficient and economic means available to ensure players and patrons needs are serviced while energy and water usage is kept to the lowest volumes possible.

There are extensive irrigation pipe networks associated with the landscape water that needs to be capped off and removed from the Netball site, a 100mm diameter non potable water meter and service and possibly a fire hydrant pipe that need to be relocated around the proposed building footprint. In addition there are large stormwater drains that run through the site that will need to be diverted as part of the main civil works.

A copy of the Civil Works Package prepared by Arup is included at **Appendix 14**.

### 3.9.2 Removal of Fire Sprinkler Water Storage Tank

The LHO Group has provided advice regarding the proposed removal of the existing 135,000 litre water storage tank which provides the fire sprinkler water supply to the adjacent Sports Centre. A copy of the LHO report is included at **Appendix 23**.

The report concludes that the existing tank can be removed and replaced with a 150mm diameter water supply connected to the 200mm diameter Sydney Water Corporation main in Olympic Boulevard.

### 3.9.3 Electricity and Communications

Ausgrid has been consulted in relation to the Netball Central project and has advised that a new substation will be required in order to accommodate the estimated load.

Works will include alterations and additions to the existing Ausgrid 11kV network and the installation of a new substation on the western side of the site, immediately to the north of the proposed loading dock (refer Dwg No. PA003 Rev F in the Architectural Package). This location has been selected in consultation with Ausgrid in order to satisfy its siting and access requirements. It is also noted that this is the only location which is no more than 10 metres from the existing Sports Centre fire booster, but is as close as possible to the Netball Central Switch Room, thereby minimising cable lengths.

The site has access to telecommunications infrastructure, which will require minor relocation to accommodate the proposed development.

## 3.10 Construction Management

Prior to the commencement of construction, a Construction Environmental Management Plan (CEMP) will be prepared by the building contractor engaged to undertake the works, which will set out the methods and procedures which are to be implemented to manage construction activities to ensure that they do not lead to the generation of unacceptable levels of environmental or community disturbance for the duration of the works.

In the interim and for the purposes of this application, Crown Project Services has prepared a draft CEMP (refer **Appendix 15**) which sets out the strategy and methodology for the construction and site management of the Netball Central development at Sydney Olympic Park. It is tailored to ensure that all environmental aspects for the demolition and construction phase of the project are addressed. Waste Management procedures and safeguards are also addressed.

The draft CEMP has been developed generally within the framework of AS/NZS ISO 14001:1996 'Environmental management systems – Requirements' and the NSW Government Environmental Systems Guidelines.

The intention of the draft CEMP is to provide an outline of requirements of, and a response in respect of, specific building practices to be employed on the construction site for Netball Central. It is anticipated that any approval issued in respect of this application will require the builder to prepare a more detailed Construction Management Plan and Waste Management Plan for SOPA sign-off prior to issue of a Construction Certificate.

The final CEMP will address the following:

- A site specific Soil Erosion and Sediment Control Plan
- Hours of Operation during Construction
- Air quality / dust control procedures
- Noise management procedures

- Waste Management Plan for the Construction Phase
- Storage and handling of materials procedures
- Details of hoardings
- Procedures to be implemented during events, including pedestrian movements, signage etc
- Environmental training and awareness
- Emergency procedures
- Procedures associated with the management of the interface with the public domain
- Any other relevant information relating to construction and its potential impacts on the surrounding area.

The site management measures will be implemented prior to the commencement of any works associated with the construction of the built form and will be maintained throughout the works in order to maintain reasonable levels of public health, safety and amenity.

A copy of the approved CEMP will be maintained on site and will be made available to officers of SOPA or Council upon request in accordance with the conditions of any consent issued in respect of this development application.

### 3.11 Waste Management

JD Macdonald has prepared an Operational Waste Management Plan for the proposed development which makes an assessment of the likely quantum and nature of waste likely to be generated by the Netball Central facility in both event mode and in terms of the day-to-day operations and outlines a series of measures designed to achieve the following:

- avoiding the generation of unnecessary waste;
- minimising the quantities of wastes generated ending up as landfill;
- recovering, reusing and recycling waste generated on site where possible; and
- compliance with relevant codes and policies that apply to the development.

A private waste contractor will collect waste daily or as appropriate (depending on the schedule of events at the facility).

The report has also informed the architectural response in terms of the provision of a garbage bin holding area adjacent to the loading dock. The consultant has recommended that the garbage room be constructed to the following specifications:

- the floor of the garbage room shall be constructed of concrete at least 100mm thick or other impervious material, graded and drained to an approved connection to the sewer;
- the floor shall be finished to a smooth even surface coved at the intersection with walls and plinths;
- waste areas or bins shall be constructed to prevent the entry of vermin;
- an adequate supply of hot and cold water shall be provided to the waste areas;
- hose cocks shall be located and protected so they cannot be damaged and fitted with an adequate length of hose;
- there is adequate natural or mechanical ventilation to the space; and
- construction of the garbage storage is to meet all requirements set out in the Sydney Olympic Park Authority "Waste Management Guidelines", BCA and Australian Standards.

A copy of the Operational Waste Management Plan is included at **Appendix 16**.

### 3.12 Subdivision

As detailed previously in this Statement, consent is also sought as part of this application for land subdivision. The land to which this application applies has an area in the order of 18,813m<sup>2</sup> and encompasses the proposed changes to the access arrangements to the P7 Car Park in the south and the shared forecourt immediately to the north of the proposed building.

The proposed subdivision will create a discrete parcel of land which will be reflected in the commercial lease arrangements with SOPA. At 10,338m<sup>2</sup>, this parcel is significantly smaller than the land to which the application applies. A copy of the draft plan of subdivision prepared by Hard and Forester, is included at **Appendix 17**.

## 4.0 Consultation

During the design development phase of this proposal and in accordance with the DGRs issued by the Department of Planning and Infrastructure on 2 April 2012, the Proponent has consulted with a range of stakeholders and authorities. The feedback received has been used to inform and refine the scheme. The consultation included:

- Roads and Maritime Services
- RailCorp
- Sydney Water
- Office of Environment and Heritage (including the EPA)
- SOPA
  - Design Review Panel
  - Access Committee

Copies of the correspondence from Crown Project Services to the various agencies, together with copies of the Minutes of relevant meetings are included at **Appendix 18** to this Statement.

### 4.1 Joint Steering Committee

As detailed previously in this Statement, Site 107 was selected by Netball NSW in close consultation with the executive of the Sydney Olympic Park Authority and the Office of Communities (Sport and Recreation).

A Joint Steering Committee has been established to oversee the Project, which includes representation from SOPA – Chief Executive Officer and General Manager, Netball NSW – President, Board Member and Chief Executive Officer and one representative from the Office of Communities. The terms of reference for the Committee are as follows:

- (i) approve the Approved Schematic Design;
- (ii) approve the budget for the Project;
- (iii) monitor and evaluate the performance of the Project Manager;
- (iv) consider any amendments to the budget of the Project, including any modification to the Approved Schematic Design;
- (v) monitor and evaluate the performance of the Development Consultant;
- (vi) monitor and direct the process for obtaining the Planning Approval;
- (vii) monitor the progress of the Project;
- (viii) approving the tender process to identify the Contractor to carry out the Project; and
- (ix) review and comment on the interaction of the Project with any other development occurring at Sydney Olympic Park.

### 4.2 Consultation with SOPA

#### 4.2.1 Design Review Panel

The development concept has been presented to the Sydney Olympic Park Design Review Panel on a total of three (3) occasions (21 July 2011, 22 September 2011 and 16 February 2012) and the feedback obtained from the Panel has been used to inform and refine the design.

A number of meetings have also occurred with SOPA's Design Team specifically to resolve the configuration and treatment of the shared forecourt with the Sports Centre.

The details of the issues raised by the Design Review Panel and the manner in which the proposal responds are discussed in Section 6.2.4 of this Statement. For the record, copies of the Minutes of the three Panel meetings are also included at **Appendix 18**.

#### 4.2.2 Access Committee

The proposal was also presented to SOPA's Access Committee on 8 May 2012. A copy of the Minutes of that meeting are also included at **Appendix 18**.

The Committee made the following recommendations:

*The proposed forecourt entry area should be reviewed and maybe redesigned into a walkway type forecourt. The Committee questioned the tapered forecourt stairs indicating that this type of construction is not good accessible building practice.*

Response: Noted. The design of the forecourt has been amended (refer Architectural Package at **Appendix 8**).

*Handrails should be provided to the forecourt stairways if this design is to be adopted. Care should be taken with the installation of the stair handrails to avoid the handrail projection into the transverse path of pedestrian travel along Olympic Boulevard.*

Response: Noted. As above.

*Proposed planter boxes in the forecourt area may tend to be a trip hazard for vision impaired persons.*

Response: Noted. As above.

*That the proposed 1 in 20 walkways at court 2 and 4 may not work with a 900mm rise, redesign may be required in this area.*

Response: Internal ramps have been revised to meet requirements of AS 1428 regarding maximum ramp lengths.

*That there may be a safety issue for vision impaired persons along the main internal hallway/pathway of the proposed building. In particular the large central timber frame columns, these should be provided with accessible compliant handrails on both sides of the columns to avoid a collision with the columns when walking along this internal hallway/pathway.*

Response: Colour contrast to be provided to circulation route running adjacent to timber columns to guide the visually impaired past obstacles.

*It was also suggested by the Committee that wider seats with more legroom should be provided to accessible seating areas to accommodate guide dogs and people sitting with extended knees and the like.*

Response: Accessible seating areas, with associated companion seating will be provided to all spectator areas in accordance with legislative requirements. Limitations of the site footprint prevent the standard seating being widened. We understand that this is a SOPA guideline rather than a legislative requirement.

*There was also a question from the Committee as to the definition of Dwg No. 1 – Number 20 – Linear water jets and what purpose do they play.*

Response: Water jets have been omitted from the scheme.

*Mr David Martin then presented to the Committee a peer reviewed forecourt alternative as prepared by a second Architect commissioned by SOPA. This alternative design prepared by Architect Bates, Smart included a gentler sweeping walkway type forecourt which better catered for all users of the proposed building on an equal basis as well as to the existing State Sports Centre.*

Response: Noted. The design of the forecourt has been amended to reflect the alternative schematic which was commissioned by SOPA and is documented in the Architectural Package (refer **Appendix 8**).

*This alternative design did achieve better functionality. Bates Smart Architects' designs were considered by the Committee to reduce confusing decision making when entering the proposed development and should reduce construction costs, improve major event capacity of the forecourt and provide better amenity.*

Response: Noted. As above.

*The Bates Smart designs will need to be tuned to accommodate the different walking pedestrian grades to the horizontal at the interface of the Olympic Boulevard and the proposed front building entrance walkway.*

Response: Noted. As above.

*The Committee preferred the Bates Smart Architects' designs for the forecourt when compared to the Scott Carver Architects Designs. This is due to Bates Smarts offering transparent equality for all building users when entering the proposed development.*

Response: Noted. As above.

### **4.2.3 Traffic and Services**

On 11 May 2012 Crown Project Services convened a meeting with SOPA's Executive Manager Events and Precinct Coordination and the Executive Manager Major Projects in relation to:

- traffic management;
- utility services;
- the impact of the proposed development on the parking capacity of the P7 Car Park (reduction in the number of spaces); and
- the design of the relocated access to / from the P7 Car Park.

A copy of the Minutes of the aforementioned meeting is also included at **Appendix 18**.

It is not anticipated that any other agency approvals will be required to enable the proposed development to progress.

## 5.0 Director General’s Requirements

The Director General of the Department of Planning and Infrastructure issued the requirements for the preparation of the Environmental Impact Statement for the proposal. A copy of the DGRs is included at **Appendix 2**.

The following table provides a detailed summary of the individual matters listed in the DGRs and identifies where each of these requirements has been addressed in the Statement and the accompanying specialist reports.

**Table 5.1** Director General’s Requirements

Requirement	Cross Reference in EIS	
<b>General</b>		
The Environmental Impact Statement (EIS) must meet the minimum requirements in Schedule 2 the <i>Environmental Planning and Assessment Regulation 2000</i> , specifically:		
<ul style="list-style-type: none"> <li>• form specifications in clause 6; and</li> <li>• content specifications in parts (1) and (4) clause 7</li> </ul>		
Statement of Validity	Refer Declaration	
Quantity Surveyor’s Certificate	<b>Appendix 1</b>	
Site Analysis	Architectural Package at <b>Appendix 8</b> .	
Description of the Proposed Development	Section 3.0; Architectural Statement at <b>Appendix 8</b> .	
Assessment the Key Issues	Section 6.0.	
Conclusion and Justification	Section 7.0.	
Mitigation Measures	Section 8.0.	
<b>Key Issues</b>	<b>Statement</b>	<b>Specialist Report</b>
<p><b>1. Environmental Planning Instruments (EPIs)</b> Address the relevant statutory provisions applying to the site contained in all relevant EPIs, including:</p> <ul style="list-style-type: none"> <li>• SEPP (State &amp; Regional Development) 2011</li> <li>• SEPP (Major Development) 2005</li> <li>• SEPP 55 – Remediation of Land</li> <li>• SEPP (Infrastructure) 2007</li> <li>• SREP (Sydney Harbour Catchment) 2005</li> </ul> <p><i>Permissibility</i> Detail the nature and extent of any prohibitions that apply to the development.</p> <p><i>Development Standards</i> Identify the development standards applying to the site. Justify any development standards not being met.</p> <p><i>Contamination</i> Demonstrate that the site is suitable for the proposed use in accordance with SEPP 55. Address any contamination on the site, how it will be managed and any regulatory requirements under the Ongoing</p>	<p>Section 6.1.3 Section 6.1.4 Section 6.1.5 Section 6.1.6 Section 6.1.7</p> <p>Section 2.3</p> <p>Section 6.1.11</p> <p>Sections 2.2.3 and 6.1.5</p>	<p>- - - - -</p> <p><b>Appendix 5 and Appendix 10</b></p>

Requirement	Cross Reference in EIS	
<p>Remediation Notice 28040 issued under the <i>Contaminated Lands Management Act 1997</i></p> <p>→ <i>Relevant Policies and Guidelines:</i></p> <ul style="list-style-type: none"> <li>• <i>Managing Land Contamination: Planning Guidelines - SEPP 55 Remediation of Land (DUAP)</i></li> </ul>		
<p><b>2. Policies, Guidelines and Planning Agreements</b></p> <p>Address the relevant planning provisions, goals and strategic planning objectives in the following:</p> <ul style="list-style-type: none"> <li>• NSW State Plan</li> <li>• Metropolitan Plan for Sydney 2036</li> <li>• West Central Subregion Draft Subregional Strategy</li> <li>• Development Near Rail Corridors and Busy Roads – Interim Guideline</li> <li>• Sydney Olympic Park Master Plan 2030</li> <li>• Sydney Olympic Park, Guidelines for Outdoor Advertising, Identification and Promotional Signage</li> <li>• Sydney Olympic Park Access Guidelines 2011</li> <li>• Sydney Olympic Park Major Event Impact Assessment Guidelines</li> <li>• Environmental Guidelines for Sydney Olympic Park 2008</li> <li>• SOPA – Remediated Lands Management Plan.</li> </ul> <p>Detail how the development promotes or is consistent with these provisions and strategic objectives.</p>	<p>Section 6.1.8 Section 6.1.9 Section 6.1.10</p> <p>Section 6.1.11 Section 6.1.12</p> <p>Section 6.1.13 Section 6.1.14 Section 6.1.15 Section 6.1.16</p>	<p>- - -</p> <p>- -</p> <p><b>Appendix 13</b> - <b>Appendix 9</b> <b>Appendix 5 and 10</b></p>
<p><b>3. Built Form and Urban Design</b></p> <ul style="list-style-type: none"> <li>• Address the height, bulk and scale of the proposed development within the context of the locality.</li> <li>• Design quality, with specific consideration of the overall site layout, axis, vistas and connectivity, open spaces and edges, primary elements, gateways, façade, rooftop, mechanical plant, massing, setbacks, building articulation, materials, choice of colours, visual impacts including views, safety by design, and integration of services into the design.</li> <li>• Details of proposed open space, landscaped areas and interface with public domain.</li> <li>• The EIS shall demonstrate how the proposed design responds to Sydney Olympic Park Authority’s Design Review Panel recommendations. The design and layout of the development shall have regard to the access and entry areas to existing buildings, car parking areas, and future development areas in the vicinity of the site.</li> </ul>	<p>Section 6.2.1 Section 6.2.2</p> <p>Section 6.2.3 Section 6.2.4</p>	<p><b>Appendix 8</b> <b>Appendix 8</b></p> <p><b>Appendix 8</b> <b>Appendix 8</b></p>
<p><b>4. Ecologically Sustainable Development (ESD)</b></p> <p>Detail how ESD principles (as defined in clause 7(4) of Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i>) will be incorporated in the design, construction and ongoing operation phases of the development.</p>	<p>Section 3.8 and Section 6.3</p>	<p><b>Appendix 9</b></p>
<p><b>5. Amenity</b></p> <p>Including solar access, acoustic impacts, visual privacy, servicing requirements (including but not limited to, waste management, loading zones, mechanical plant), view loss, overshadowing and wind impacts. A high level of environmental amenity must be demonstrated.</p>	<p>Section 6.4</p>	<p><b>Appendices 8</b> (Architectural); <b>16</b> (Waste); <b>20</b> (Acoustic); <b>21</b> (Wind)</p>

Requirement	Cross Reference in EIS	
<p><b>6. Noise</b></p> <p>Identify the main noise generating sources and activities at all stages of construction, and any noise sources during operation. Outline measures to minimise and mitigate the potential noise impacts on surrounding occupiers of land.</p> <p>→ <i>Relevant Policies and Guidelines:</i></p> <ul style="list-style-type: none"> <li>• <i>NSW Industrial Noise Policy (EPA)</i></li> <li>• <i>Interim Construction Noise Guideline (DECC)</i></li> </ul>	Section 6.4.2	<b>Appendix 20</b>
<p><b>7. Transport and Accessibility (Construction and Operation)</b></p> <ul style="list-style-type: none"> <li>• Detail access arrangements at all stages of construction and measures to mitigate any associated traffic impacts.</li> <li>• Demonstrate how future users of the Netball NSW Headquarters will be able to make travel choices that support the achievement of relevant State Plan targets.</li> <li>• Describe measures to be implemented to promote sustainable means of transport including public transport usage and pedestrian and bicycle linkages in addition to the potential for implementing a location specific sustainable travel plan.</li> <li>• Detail the existing pedestrian and cycle movements within the vicinity of the site and determine the adequacy of the proposal to meet the likely future demand for increased public transport, pedestrian and cycle access.</li> <li>• Provide an analysis of public transport provision, expected transport mode shares based on planned future demographics</li> <li>• Provide details of proposed daily vehicle movements and assess the impacts of this traffic on the local road network, including intersection capacity, having regard to local planning controls.</li> </ul> <p>→ <i>Relevant Policies and Guidelines:</i></p> <ul style="list-style-type: none"> <li>• <i>Guide to Traffic Generating Developments (RTA)</i></li> </ul>	Sections 2.2.5, 2.2.6, 3.5 and 6.6.	<b>Appendix 15 (Draft CEMP); Appendix 12 (Traffic Impact Assessment)</b>
<p><b>8. Sediment, Erosion and Dust controls (Construction and Excavation)</b></p> <p>Detail measures &amp; procedures to minimise and manage the generation and off-site transmission of sediment, dust and fine particles.</p> <p>→ <i>Relevant Policies and Guidelines:</i></p> <ul style="list-style-type: none"> <li>• <i>Managing Urban Stormwater – Soils &amp; Construction Volume 1 2004 (Landcom)</i></li> <li>• <i>Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA)</i></li> </ul>	Sections 3.3, 3.10 and 6.6.	<b>Appendices 14 (Civil Works Package) and 15 (draft CEMP)</b>
<p><b>9. Flora and Fauna</b></p> <p>Address impacts on flora and fauna, including threatened species, populations and EECs and their habitats and steps taken to mitigate any identified impacts to protect the environment.</p>	Noted. There are no substantive impacts in relation to threatened species or EEC's. There will be some impact on existing vegetation – refer Sections 2.2.4 and 6.8; <b>Appendix 7 (Arborist Report).</b>	
<p><b>10. Heritage</b></p> <p>Where relevant, a Statement of Significance &amp; assessment of the impact on the heritage significance of any heritage items &amp;/or conservation areas should be undertaken in accordance with the guidelines in the NSW Heritage Manual.</p>	Section 2.2.7	-

Requirement	Cross Reference in EIS	
<p><b>11. Aboriginal Heritage</b></p> <p>Where relevant, the EIS shall address Aboriginal Heritage in accordance with the Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation 2005.</p>	Section 2.2.7	-
<p><b>12. Utilities</b></p> <p>In consultation with relevant agencies the EIS shall address the existing capacity and any augmentation requirements of the development for the provision of utilities including staging of infrastructure shall be addressed. Arrangements to protect or relocate easements should be identified.</p>	Section 6.9	-
<p><b>13. Staging</b></p> <p>Details regarding the staging of the proposed development (if proposed).</p>	Not applicable. No staging of the project is required or proposed.	
<p><b>14. Contributions</b></p> <p>Address the Sydney Olympic Park Infrastructure Contribution Framework and / or details of any Voluntary Planning Agreement.</p>	Not applicable. The <i>SOP Infrastructure Contributions Framework 2030</i> as adopted by the Minister for Planning in March 2010 specifically exempts Sporting Venues from contributions.	
<p><b>15. Drainage</b></p> <p>Drainage associated with the proposal, including stormwater and drainage infrastructure, shall be designed in consultation with Sydney Olympic Park Authority and must avoid any adverse impacts on downstream properties, streams or ecosystems. The proposal shall address the impact of any flooding or stormwater flows on the site from other catchments, overland flow paths and include a detailed hydraulic assessment (including catchment modelling).</p>	Section 3.7	<b>Appendix 14</b>
<p><b>16. Waste</b></p> <p>Identify, quantify and classify the likely waste streams to be generated during construction and operation and describe the measures to be implemented to manage, reuse, recycle and safely dispose of this waste.</p>	Sections 3.11 and 6.11	<b>Appendix 16</b>
<p><b>17. Acid Sulphate Soils</b></p> <p>Prepare a detailed Acid Sulphate Soils Management Plan.</p>	Not applicable. Coffey Environments has undertaken an ASS risk assessment which indicates that ASS is unlikely to be present on the subject site (refer Section 2.2.3 and <b>Appendix 6</b> ).	
<p><b>Plans and Documents</b></p> <ul style="list-style-type: none"> <li>• Stormwater Concept Plan</li> <li>• Detailed Earthworks Plan</li> <li>• Shadow Diagrams</li> <li>• Photomontages</li> <li>• Landscape Plan</li> <li>• Draft Construction Management Plan, inclusive of a Construction Traffic Management Plan</li> <li>• Geotechnical and Structural Report</li> <li>• Arborist Report</li> <li>• Acid Sulphate Soils Management Plan</li> <li>• Noise Report (construction and operation)</li> </ul>	<p><b>Appendix 14</b> Bulk Earthworks <b>Appendix 11</b> Architectural Package <b>Appendix 8</b> Architectural Package <b>Appendix 8</b> Architectural Package <b>Appendix 8</b> <b>Appendix 15</b></p> <p><b>Appendices 4</b> (Geotech) &amp; <b>11</b> (Structure) <b>Appendix 7</b> Not Required (refer <b>Appendix 6</b>) <b>Appendix 20</b></p>	

## 6.0 Environmental Assessment

This section of the Statement identifies, assesses and provides a response to the potential environmental impacts associated with the proposed development. It addresses the matters for consideration set out in the Director General's Requirements (see Section 5.0).

A series of mitigation measures (refer Section 8.0 of this Statement) complement and support the findings of the environmental assessment.

### 6.1 Statutory Considerations

The DGRs require the following legislation, strategies and planning instruments, which are relevant to the proposal, to be addressed:

- SEPP (State & Regional Development) 2011
- SEPP (Major Development) 2005
- SEPP 55 – Remediation of Land
- SEPP (Infrastructure) 2007
- SREP (Sydney Harbour Catchment) 2005
- NSW State Plan
- Metropolitan Plan for Sydney 2036
- West Central Subregion Draft Subregional Strategy
- Development Near Rail Corridors and Busy Roads – Interim Guideline
- Sydney Olympic Park Master Plan 2030
- Sydney Olympic Park, Guidelines for Outdoor Advertising, Identification and Promotional Signage
- Sydney Olympic Park Access Guidelines 2011
- Sydney Olympic Park Major Event Impact Assessment Guidelines
- Environmental Guidelines for Sydney Olympic Park 2008
- Sydney Olympic Park Authority – Remediated Lands Management Plan.

#### 6.1.1 Environmental Planning and Assessment Act 1979

Consideration and determination of a development application must be consistent with the relevant provisions of the EP&A Act, including the objects set out in Section 5 of the Act, which are as follows:

- (a) *to encourage:*
- (i) *the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment,*
  - (ii) *the promotion and co-ordination of the orderly and economic use and development of land,*
  - (iii) *the protection, provision and co-ordination of communication and utility services,*
  - (iv) *the provision of land for public purposes,*
  - (v) *the provision and co-ordination of community services and facilities, and*
  - (vi) *the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats, and*
  - (vii) *ecologically sustainable development, and*
  - (viii) *the provision and maintenance of affordable housing, and*
- (b) *to promote the sharing of the responsibility for environmental planning between the different levels of government in the State, and*

- (c) *to provide increased opportunity for public involvement and participation in environmental planning and assessment.*

The proposed development is demonstrably consistent with the objects of the EP&A Act.

## **6.1.2 Environmental Planning and Assessment Regulation 2000**

Clauses 6 and 7 in Schedule 2 of the EP&A Regulation set out the information which must be contained in an Environmental Impact Statement, as follows.

### **6 Form of environmental impact statement**

*An environmental impact statement must contain the following information:*

- (a) *the name, address and professional qualifications of the person by whom the statement is prepared,*
- (b) *the name and address of the responsible person,*
- (c) *the address of the land:*
  - (i) *in respect of which the development application is to be made, or*
  - (ii) *on which the activity or infrastructure to which the statement relates is to be carried out,*
- (d) *a description of the development, activity or infrastructure to which the statement relates,*
- (e) *an assessment by the person by whom the statement is prepared of the environmental impact of the development, activity or infrastructure to which the statement relates, dealing with the matters referred to in this Schedule,*
- (f) *a declaration by the person by whom the statement is prepared to the effect that:*
  - (i) *the statement has been prepared in accordance with this Schedule, and*
  - (ii) *the statement contains all available information that is relevant to the environmental assessment of the development, activity or infrastructure to which the statement relates, and*
  - (iii) *that the information contained in the statement is neither false nor misleading.*

### **7 Content of environmental impact statement**

*(1) An environmental impact statement must also include each of the following:*

- (a) *a summary of the environmental impact statement,*
- (b) *a statement of the objectives of the development, activity or infrastructure,*
- (c) *an analysis of any feasible alternatives to the carrying out of the development, activity or infrastructure, having regard to its objectives, including the consequences of not carrying out the development, activity or infrastructure,*
- (d) *an analysis of the development, activity or infrastructure, including:*
  - (i) *a full description of the development, activity or infrastructure, and*
  - (ii) *a general description of the environment likely to be affected by the development, activity or infrastructure, together with a detailed description of those aspects of the environment that are likely to be significantly affected, and*
  - (iii) *the likely impact on the environment of the development, activity or infrastructure, and*
  - (iv) *a full description of the measures proposed to mitigate any adverse effects of the development, activity or infrastructure on the environment, and*
  - (v) *a list of any approvals that must be obtained under any other Act or law before the development, activity or infrastructure may lawfully be carried out,*
- (e) *a compilation (in a single section of the environmental impact statement) of the measures referred to in item (d) (iv),*
- (f) *the reasons justifying the carrying out of the development, activity or infrastructure in the manner proposed, having regard to biophysical, economic and social considerations, including the principles of ecologically sustainable development set out in subclause (4).*

*(2) Subclause (1) is subject to the environmental assessment requirements that relate to the environmental impact statement.*

*(3) Subclause (1) does not apply if:*

- (a) *the Director-General has waived (under clause 3 (9)) the need for an application for environmental assessment requirements in relation to an environmental impact statement in respect of State significant development, and*
- (b) *the conditions of that waiver specify that the environmental impact statement must instead comply with requirements set out or referred to in those conditions.*

(4) *The principles of ecologically sustainable development are as follows:*

- (a) *the **precautionary principle**, namely, that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. In the application of the precautionary principle, public and private decisions should be guided by:*
  - (i) *careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment, and*
  - (ii) *an assessment of the risk-weighted consequences of various options,*
- (b) ***inter-generational equity**, namely, that the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations,*
- (c) ***conservation of biological diversity and ecological integrity**, namely, that conservation of biological diversity and ecological integrity should be a fundamental consideration,*
- (d) ***improved valuation, pricing and incentive mechanisms**, namely, that environmental factors should be included in the valuation of assets and services, such as:*
  - (i) *polluter pays, that is, those who generate pollution and waste should bear the cost of containment, avoidance or abatement,*
  - (ii) *the users of goods and services should pay prices based on the full life cycle of costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any waste,*
  - (iii) *environmental goals, having been established, should be pursued in the most cost effective way, by establishing incentive structures, including market mechanisms, that enable those best placed to maximise benefits or minimise costs to develop their own solutions and responses to environmental problems.*

Similarly, the EIS has addressed the principles of ecologically sustainable development through the precautionary principle (and other considerations), which assesses the threats of any serious or irreversible environmental damage.

### 6.1.3 SEPP (State and Regional Development) 2011

State Environmental Planning Policy (State and Regional Development) 2011 came into effect on 28 September 2011. The SEPP establishes two separate assessment frameworks for State Significant Development (SSD) and State significant infrastructure (SSI). Projects that fall within these categories are assessed by the Department of Planning and Infrastructure (the Department) and determined by either the Minister for Planning and Infrastructure, the Planning Assessment Commission (PAC) or senior staff of the Department.

The SSD assessment system has been established to guide planning decisions on:

- large-scale industrial, resource and other proposals in 24 different development classes; or
- development in precincts identified as important for the State by the NSW Government.

Schedule 2 of the SEPP identifies a number of sites as being of State significance, one of which is Sydney Olympic Park. All developments on these sites with a capital investment value (CIV) of more than \$10 million are assessed as SSD.

A copy of the Quantity Surveyor's Certificate of Cost prepared by Rider Levett Bucknall, which confirms the CIV of the proposed development at \$28.27 million is included at **Appendix 1**.

#### **6.1.4 SEPP (Major Development) 2005**

Part 23 (Schedule 3) of State Environmental Planning Policy (Major Development) 2005 sets out the zoning and development controls applicable within the land within Sydney Olympic Park. As detailed in Section 2.3 of this Statement, the subject site is zoned B4 Mixed Use and the proposed development is permissible with consent.

##### **Consent Authority**

Clause 3 of Schedule 6 of the SEPP provides that the Minister is the consent authority under Part 4 of the Act for any development requiring consent under that Part within Sydney Olympic Park.

##### **Public Utility Infrastructure**

Clause 23 provides that development consent must not be granted unless the consent authority is satisfied that any public utility infrastructure (water, electricity etc) that is essential for the proposed development is available or that adequate arrangements have been made to make that infrastructure available when required.

The site has access to a full range of utility services, including potable water, sewer and gas.

Electricity is also available to the site. Ausgrid has advised that in order to accommodate the additional load a new substation will be required to be installed. This aspect is discussed in further detail in Sections 3.9.3 and 6.9 of this Statement.

##### **Major Events Capability**

Clause 24(2) of the SEPP provides that the consent authority must be satisfied that during major events held within the Sydney Olympic Park site:

- (a) *traffic generated by the development is likely to cause the local road network and connections to the regional road network to become saturated or otherwise fail, and*
- (b) *the development is likely to prevent the effective management of crowd movement and transport services, and*
- (c) *the development is likely to compromise the effective functioning of major event infrastructure, and*
- (d) *the development conflicts with the emergency management plans of government agencies or the emergency evacuation plans of major event venues.*

The proposed development represents an extension to / expansion of Sydney Olympic Park's event capabilities. The operation of the facility in event mode will be undertaken in consultation with SOPA and is not expected that it will have any substantive impact on the operation / capacity of SOP to accommodate major events. This aspect is discussed in further detail in Section 6.1.14 of this Statement.

##### **Transport**

Clause 25 requires the consent authority to consider and be satisfied that the development includes measures to promote public transport use, cycling and walking. In this regard, the provision of bicycle parking for both staff (8 spaces) and visitors (15 spaces) will serve to encourage the use of bicycles as an alternate form of transport.

Whilst the proposed netball facility does not actively promote the use of public transport, it does not preclude its use to visit the venue and the other facilities within Sydney Olympic Park.

## Master Plan

Clause 26 requires the consent authority to consider the relevant provisions of a master plan. Further discussion in this regard is provided in Section 6.1.11 of this Statement.

## Design Excellence

Clause 30 provides that consent must not be granted for development that involves the erection of a new building or external alterations to an existing building unless the consent authority has considered whether the proposed development exhibits design excellence.

The specific requirements of Clause 30 are addressed in the following Sections of this Statement:

- Section 6.1.11 which provides a detailed analysis regarding the manner in which the proposed development responds to the development controls, including height, embodied in the SOP Master Plan 2030;
- Section 6.2.2 which provides a discussion in relation to the architectural design quality;
- Section 6.2.3 which documents the issues raised by SOPA's Design Review Panel at the three (3) presentations to Panel meetings; and
- the Architectural Statement prepared by Scott Carver Architects, included in the Architectural Package at **Appendix 8**.

## Exempt and Complying development

The proposed works do not constitute exempt development or complying development under the provisions of Section 76 and 76A of the EP&A Act respectively.

### 6.1.5 SEPP 55 – Remediation of Land

As described in Section 2.3.3 of this Statement, a Phase 1 Preliminary Environmental Assessment (copy at **Appendix 5**) has been prepared by Coffey Environments Pty Ltd which includes a preliminary investigation of the site. The report found that:

- the concentrations of contaminants in the soil samples analysed were reported either below the laboratory limits of reporting or below the adopted assessment criteria;
- the landfill site (under the Golf Driving Range to the east) encroaches into the south eastern corner of the site; and
- asbestos fibres were detected in the soil in the south eastern corner and the northern portion of the site.

Based on these findings, the report concludes that the site is suitable for the proposed development subject to certain recommendations being implemented.

Coffey Environments has also prepared a Remediation Action Plan (copy included at **Appendix 10**) which details the methodology to be applied in the remediation of the site. The Proponent will ensure that all works are conducted in accordance with the processes and procedures set out in the RAP.

### 6.1.6 SEPP (Infrastructure) 2007

The aim of this Policy is to facilitate the effective delivery of infrastructure across the State, including providing for consultation with relevant public authorities about certain development during the assessment process.

The SEPP establishes NSW Roads and Maritime Services (RMS) as the sole traffic management authority to be consulted and ensures that it is given the opportunity to make representations in respect of

development proposals over the nominated size. Schedule 3 of the SEPP (Traffic generating development to be referred to the RMS) provides that:

**Table 6.1** Extract from Schedule 3 SEPP (Infrastructure) 2007

Column 1	Column 2	Column 3
<b>Purpose of Development</b>	<b>Size or capacity – site with access to any road</b>	<b>Size or capacity – site with access to classified road or to road that connects to classified road (if access within 90m of connection, measured along alignment of connecting road)</b>
Tourist facilities, recreation facilities, showgrounds or sportsgrounds	200 or more motor vehicles	50 or more motor vehicles

Clause 5 of the SEPP provides that a word or expression used in the Policy has the same meaning as it has in the Standard Instrument unless it is otherwise defined in the Policy.

It is considered that the Netball Central facility falls within the definition of either recreation facility (indoor) or recreation facility (major), which are defined in the Standard Instrument as follows:

**recreation facility (indoor)** means a building or place used predominantly for indoor recreation, whether or not operated for the purposes of gain, including a squash court, indoor swimming pool, gymnasium, table tennis centre, health studio, bowling alley, ice rink or any other building or place of a like character used for indoor recreation, but does not include an entertainment facility, a recreation facility (major) or a registered club.

**recreation facility (major)** means a building or place used for large-scale sporting or recreation activities that are attended by large numbers of people whether regularly or periodically, and includes theme parks, sports stadiums, showgrounds, racecourses and motor racing tracks.

Based on the traffic assessment prepared by Arup (refer **Appendix 12**) it is considered that the proposed development does trigger the need for consultation with the Roads and Maritime Services (RMS) under the provisions of Schedule 3 of the SEPP as the proposed development is expected to generate 1,600 vehicles in the event peak.

### 6.1.7 SREP (Sydney Harbour Catchment) 2005

As of 1 July 2009, Regional Environmental Plans (REPs) were removed from the hierarchy of environmental planning instruments in NSW in an effort to simplify the State’s planning system. All existing REPs are now deemed State Environmental Planning Policies (SEPPs) and remain a matter for consideration in the assessment of a development application under Section 79C of the Act.

Sydney Regional Environmental Plan – Sydney Harbour Catchment 2005 commenced in September 2005 and provides a planning framework to achieve better environmental outcomes for Sydney Harbour and its catchment. Although the Plan applies to the whole of the Sydney Catchment Area, including the subject site, it primarily provides planning provisions relating to the foreshore and waterways area as identified under the SREP. The site is not included within the foreshores and waterways area and therefore such provisions do not apply to the subject proposal.

The SREP contains provisions relating to biodiversity, ecology and environmental protection as well as provisions concerning the maintenance, protection and enhancement of views. These matters have been considered in this Statement. The stormwater and drainage systems will maintain the existing drainage regime and will integrate with the existing stormwater systems for SOP.

### 6.1.8 NSW State Plan (NSW 2021)

The NSW State Plan 2021 is a 10 year plan developed by the State government to set directions for NSW to rebuild the economy, return quality services, renovate infrastructure, strengthen our local environment and communities and restore accountability to Government. It establishes key visions and goals across a broad range of issues relevant to the state. The nominated sections outlined below are considered relevant to the proposed development:

*Chapter 1 – Better Transport and Liveable Cities* has a focus on transportation and its links with land use and development. The chapter indicates that, *‘transport underpins our access to jobs, services and facilities, and has a major impact on our quality of life. We are integrating the planning of our cities and transport systems to improve quality of life, boost the economy and help us face the challenges of the future’*

A key focus of this chapter relates to ‘increasing the number of jobs closer to home’. The proposed development supports this goal by providing a new sporting facility and associated administrative functions (employment) in an existing centre outside of the Sydney CBD. Sydney Olympic Park provides a more centralised location (in the context of the Sydney Metropolitan Area) for businesses with access to a well-established transportation network.

*Chapter 2 – Supporting Business and Jobs* looks at growth and prosperity across NSW. This chapter considers various actions such as supporting business and jobs growth, speeding up planning decisions and cutting red tape as ways of encouraging growth and development. The proposal will result in jobs growth for the design, construction and operation phases of development. The building will also provide a new sporting facility and associated administrative function to establish within an existing, centralised and well-served locality in the context of the Sydney Metropolitan Area.

The proposed development is therefore considered suitable and appropriate in the context of the NSW State Plan 2010.

### 6.1.9 Metropolitan Plan for Sydney 2036

The NSW Government released its Metropolitan Plan for Sydney 2036 in December 2010. This document supersedes the 2005 Metropolitan Strategy - City of Cities. The Metropolitan Strategy establishes a vision for Sydney over the next 25 years and provides a framework for growth and development throughout the region on the basis of key areas such as employment and economy, housing, transport, environment etc.

The most relevant objectives in relation to the proposed development broadly relate to the creation of employment opportunities and the development of existing centres and corridors, particularly in Western Sydney. As outlined in the Strategy, ‘Sydney’s growth will require 760,000 more jobs, with half in Western Sydney where the greatest population growth will occur’. The proposed development will provide a new sporting facility with associated administrative function at the heart of Western Sydney. The development will result in the creation of employment opportunities ranging from construction-related jobs in the short term, to ongoing, office-based employment, event co-ordination and maintenance roles.

The Metropolitan Plan recognises the role of Sydney Olympic Park, identifying it as a Specialised Centre due to its importance as a sports and recreation location with opportunities for significant growth in commercial and residential development. The proposed Netball Central development is therefore consistent with the strategy, representing one more step in contributing to a mix of land uses within Sydney Olympic Park. Such land uses will significantly enhance the vitality and vibrancy of the existing locality.

The proposed facility is considered to be consistent with the Strategy in that it will:

- contribute to important social and sporting infrastructure within the region; and
- will address the current needs of Netball NSW and future projected demand.

### 6.1.10 Draft West Central Subregional Strategy

The draft West Central Subregional Strategy was released in December 2007 and forms a key component of implementing the objectives of the 2005 Metropolitan Strategy. The Subregional Strategy guides land use planning in the local government areas of Parramatta, Bankstown, Auburn, Fairfield and Holroyd. Sydney Olympic Park is included within this strategy.

The draft Subregional Strategy acknowledges the vital economic role played by Sydney Olympic Park in providing significant higher skilled employment opportunities close to transport. It also provides an important economic role within the subregion through the provision of town centre functions and employment opportunities.

The proposed development is consistent with the relevant directions of the Draft Subregional Strategy, which include:

- providing local employment opportunities within the Auburn LGA;
- providing new sporting facility and administrative headquarters for Netball NSW within a well-connected and well established locality; and
- represents growth in sporting facilities within the 'Specialised Centre' in Sydney Olympic Park.

### 6.1.11 Sydney Olympic Park Master Plan 2030

Master Plan 2030 (MP 2030) was adopted by the Minister for Planning on 10 March 2010, and supersedes the previous Master Plan for Sydney Olympic Park which dates from 2002. MP 2030 aims to both ensure Sydney Olympic Park becomes an active and vibrant town within Metropolitan Sydney, and to protect the role of SOP as a premier destination for cultural, entertainment, recreation and sporting events.

MP 2030 provides specific design controls regarding sustainability, public domain, event controls, land use and density, building form and amenity, access and parking, transport strategies and infrastructure, landscaping and community infrastructure.

The Major Development SEPP requires that, except in certain circumstances, the consent authority (in this case, the Minister for Planning and Infrastructure) may only grant consent to development at Sydney Olympic Park if it has first considered this Master Plan. It is also noted that Section 1.3 of the Master Plan states that:

*A development proposal that contains a variation to any provision in this master plan may still be considered to be consistent with this master plan if the variation is justified in terms of the principles, strategies and intent of this master plan.*

The Netball Central proposal results in a number of minor departures from the development controls for Site 107 as set out in the Master Plan. These are discussed in the following sections of this Statement.

#### Site Area / Site Boundary

As indicated previously in this Statement, Site 107 was identified by the Office of Communities – Sport and Recreation in conjunction with SOPA as an appropriate location for a Netball Centre of Excellence.

MP 2030 identifies Site 107 as a “Venue Expansion Zone”, as illustrated in **Figure 10**. However it should be noted that the Netball Central facility will be a separate, independent structure sited immediately adjacent to the existing Sports Centre, rather than an extension to that building.

SOPA has confirmed that the development sites identified in MP 2030 are indicative only and are intended to provide flexibility to both the Authority and developers to achieve economically viable development with optimal design integrity.

Figure 5.56 Southern Sports Precinct Land Uses Plan



Figure 10 Designated land use for Site 107 (Source: Master Plan 2030)

The land to which this application applies has an area in the order of 18,813m<sup>2</sup> and encompasses the proposed changes to the access arrangements to the P7 Car Park in the south and the shared forecourt immediately to the north of the proposed building. However, it should be noted that this application also seeks approval for land subdivision to create a discrete parcel of land which will be reflected in the commercial lease arrangements with SOPA. At 10,338m<sup>2</sup>, this parcel is significantly smaller than the land to which the application applies. A copy of the draft plan of subdivision prepared by Hard and Forester, is included at **Appendix 17**.

## Floor Space Ratio

Master Plan 2030 stipulates a floor space ratio (FSR) of 2:1 for Site 107. The floor space ratio of buildings on a site is the ratio of the gross floor area (GFA) of all buildings within the site to the site area<sup>3</sup>. The total GFA of the Netball Central facility is 10,003m<sup>2</sup>, broken down as follows:

Show Court- Level 1	1,095 m <sup>2</sup>
Court Halls (including Show court seating)- Level 2	6,182 m <sup>2</sup>
Hub- Level 1	751 m <sup>2</sup>
Hub- Level 2	697 m <sup>2</sup>
Hub- Level 3	632 m <sup>2</sup>
Hub- Level 4	646 m <sup>2</sup>
<b>TOTAL GROSS FLOOR AREA</b>	<b>10,003m<sup>2</sup></b>

In determining the site area of proposed development for the purpose of applying a floor space ratio, the site area is defined in Clause 4.5(3) of the Standard Instrument – Principal Local Environmental Plan as follows:

- (a) *if the proposed development is to be carried out on only one lot, the area of that lot, or*
- (b) *if the proposed development is to be carried out on 2 or more lots, the area of any lot on which the development is proposed to be carried out that has at least one common boundary with another lot on which the development is being carried out.*

As described in Section 2.2 of this Statement, the subject site is legally described as Lot 201 in DP 1041756, which is a much larger parcel, covering an area of approx. 27 hectares and encompassing the Sports Centre, Hockey Centre and the P4 and P7 Car Parks. Using the area of Lot 201 as the basis for calculation of FSR is meaningless in the context of the definition of the site area and corresponding calculation of FSR for the Netball Central project.

The purpose of the allotment created by the proposed subdivision (refer **Appendix 17**) is required to support the commercial lease agreement with SOPA and whilst it does not reflect the extent of the proposed development it does satisfy the definition of site area and enables the calculation of a meaningful FSR for the development.

The gross floor area of the proposed Netball Central facility, calculated by Scott Carver Architects in accordance with the definition of same is 10,003m<sup>2</sup>, which translates to an FSR of 0.97:1. Whilst the FSR is significantly less than the maximum permitted under Master Plan 2030, it is considered appropriate both in terms of the context of the site and the relationship of the built form to the monumental scale of Olympic Boulevard.

## Height

Figure 5.57 (Building Heights Plan) of Master Plan 2030 identifies the following height controls for Site 107:

- AHD 24 for the area to the north of the existing Sports Centre’s barrel canopy; and
- AHD 19 for the remainder of the site.

<sup>3</sup> Clause 4.5 Standard Instrument – Principal Local Environmental Plan

It is assumed that these controls reflect the Master Plan’s identification of Site 107 as being an extension of the existing Sports Centre, rather than as an independent building.

Proposal

The configuration and levels of the proposed development have been set to complement the Olympic Boulevard and the existing Sports Centre. The netball Courts along Olympic Boulevard have been stepped to follow the fall of the land from north to south along the Boulevard. This arrangement enables the lower levels of the building facade to have a direct interaction with pedestrians passing along Olympic Boulevard. Particular effort has been made to introduce glazing at this lower level, with angled blade walls allowing clear visual links between the exterior and interior, without the penetration of direct sunlight on to the court surface. This approach is consistent with the aspiration of Section 4.3 Public Domain (MP 2030), which in relation to ‘Ground Floor of Non- Residential Buildings’ states that “to ensure ground floor facades appeal to pedestrians and contribute to the town’s liveliness and security ... (developments should) ... activate ground floor levels ...”

The Netball Courts have been designed to comply with international standards in order to accommodate the elite standard games to be played at this venue. These standards require a minimum clear height of 8.3m above the court, and a minimum clear run-off zone of 3.05m around all four sides of the courts. This equates to an overall clear length for the courts of 37m.

In order to achieve these large, clear spans, large LVL (Laminated Veneered Lumber) portal frames have been selected. These portal frames provide a structurally efficient, cost effective, and sustainable solution.

The breach of the height controls set out in MP 2030 for Site 107 is the result of:

- i. the extension of the site to the south;
- ii. the creation of a direct interaction between pedestrians on the Boulevard with the interior;
- iii. providing the required clear height on the Netball Courts to satisfy international standards, and
- iv. providing a roof structure capable of the required spans.

**Figure 11** illustrates the relationship of the proposed development to the height controls specified in MP 2030.

**Colonnade**

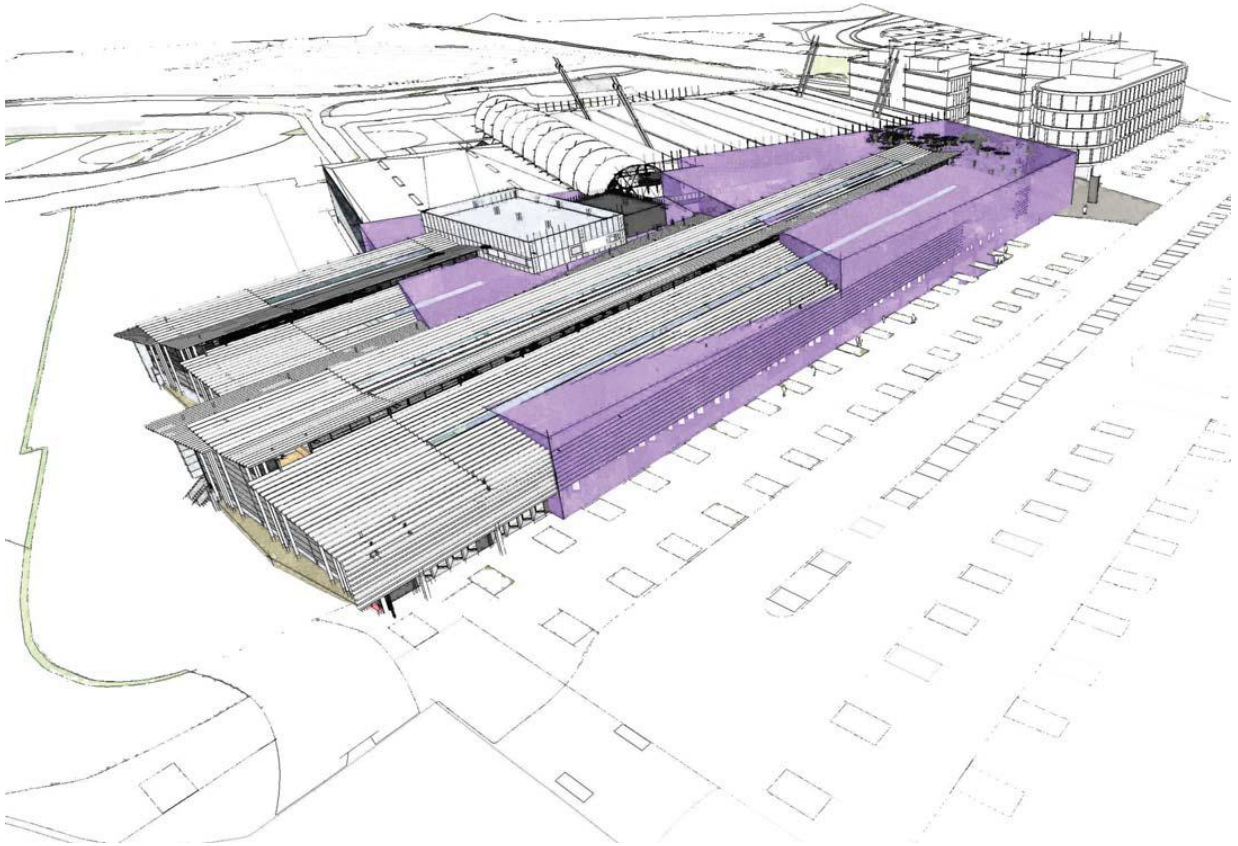
Section 4.3 of the Master Plan 2030 sets out the general controls and guidelines for the Public Domain at Sydney Olympic Park. Of particular relevance to this proposal:

- 22. *The colonnade width is to be 4m except for the colonnades to Sites 20, 21 and 22, which are to be 3m.*
- 23. *For continuity, the height of the colonnade soffit is to be consistent along the entire block.*

The Awnings and Colonnades Plan (Figure 4.2) in the Master Plan, indicates that the Olympic Boulevard frontage of Site 107 is required to provide a 1 storey street colonnade (minimum 4.2m high).

Proposal

The colonnade to Olympic Boulevard achieves a minimum width of 2.8 metres measured from the external wall of the Standard Court Hall to the eastern face of the sunshading louvres, which aligns with the paving line on the ground immediately below. This does not comply with requirements of Item 22 of Section 4.3 Public Domain.



**Figure 11** Relationship of Netball Central to Master Plan Height Controls (Source: Scott Carver Architects)

### Justification for Departure

The non-compliance is the result of a combination of factors, including:

- the physical constraints of the site;
- Netball Central's Centre of Excellence Brief which requires that the International Standards for Netball courts<sup>4</sup> be satisfied;
- the separate identity and architectural language appropriate for a shared public approach to the Sports Centre and Netball Central;
- the extensive egress requirements of the existing Sports Centre;
- the egress requirements to the north western corner of the Show Court in order to ensure safe egress of occupants in an emergency; and
- the need to maintain daylight access to the Administration offices in the adjacent Sports Centre.

While the colonnade width does not comply with the requirements of Item 22 of Section 4.3 Public Domain, the columns supporting the sun shading louvres have been designed with a concrete base immediately below the louvres and a steel column at high level. This enables the dimension at pedestrian level between the colonnade columns and the building facade to be increased, rather than bringing the steel column all the way to the ground. This ensures that there is sufficient space to enable pedestrians, wheelchair users, and prams to negotiate the space without conflict.

<sup>4</sup> Court Playing Surface: 15.25m(w) x 30.5m(l) x 8.3m(h);  
 Minimum Clear Run-off to all 4 sides of Court: 3.05m (Note: No encroachment is permitted into this space. It is required to provide the Line Umpires with a clear space to run safely along the side line while watching play, in the knowledge that no obstructions will be in their path.)  
 Sponsorship Signage Zone to all 4 sides of court: 500mm (Note: This Signage Zone is to be provided around the Show Court only)

Consideration was given to whether the concrete column could be relocated to sit immediately adjacent to the site boundary however this has not been incorporated into the design due to:

- concern regarding the proximity (and therefore potential impact) of the column footing to the root zones of the existing Hoop Pines in Olympic Boulevard; and
- a perceived weakening of the clear volume of the form of the colonnade.

The Master Plan indicates that the western side of the Olympic Boulevard is to be more mixed in character<sup>5</sup>. This will be achieved having regard to the nature of the development approved for Site 13 (4 and 5 storey commercial building), the shared forecourt designed to serve both the Sports Centre and the proposed development and the Netball Central facility.

The significant physical separation between the Netball Central building and any future building on Site 13 across the throat of the shared forecourt (potentially in the order of approx. 40 metres) provides a distinct break between colonnades on Sites 13 and 107, thereby minimising the perception of the non-compliance.

### 6.1.12 Guidelines for Outdoor Advertising, Identification and Promotional Signage

The SOPA Guidelines for Outdoor Advertising, Identification and Promotional Signage establish development controls to encourage well designed and well positioned signs, which contribute positively to the vitality and vibrancy of Sydney Olympic Park. The key objectives of the guidelines are to ensure that signage for outdoor advertising, identification and promotion:

- *is compatible with and contributes to the desired character of Sydney Olympic Park;*
- *provides effective communication and way finding in suitable locations; and*
- *is of high quality design and finish.*

The Guidelines relate to the following types of outdoor signage:

- **Advertising** signage used for the promotion of businesses, products and activities and that may be:
  - advertising signage unrelated to its location (“third party”); or
  - advertising related or ancillary to its location (ancillary);
- **Identification** signage used for the identification and naming of sites, buildings, building uses and tenants. These signs are also used to promote businesses and buildings and to help people navigate their way; and
- **Promotional** signage used to provide key and distinctive information to the public of particular events, activities and facilities at Sydney Olympic Park.

The site is located within the Southern Events Precinct. The following specific objectives must be considered for all new signage within this precinct:

- *To assist in the identification and promotion of the venues and their uses;*
- *To provide individual design solutions for signage to ensure integration with the unique architecture of each of the venues;*
- *To protect important vistas along Olympic Boulevard;*
- *To encourage signage that is sympathetic to the local landscape; and*
- *To respect public art projects in this precinct.*

No specific signage is proposed as part of this application. However, it is anticipated at this stage that external signage will be confined to venue / building identification, which will be fully documented and will be the subject of a separate application.

<sup>5</sup> Master Plan 2030 Street 2 Olympic Boulevard South [Appendix C - Street Plans and Sections]

### 6.1.13 Access Guidelines 2011

The purpose of SOPA's Access Guidelines is to provide information concerning the requirements for an accessible built environment that enables independent, equitable and inclusive access for people with disabilities.

As indicated in Section 3.6 of this Statement, iAccess Consultants has undertaken a review of the proposed development (refer **Appendix 11**) and has confirmed that the accessibility requirements of the current legislation and the SOPA Access Guidelines have been or will be satisfied. The report notes that further design resolution through the tender and construction documentation will address the detail required for accessibility compliance.

### 6.1.14 Major Event Impact Assessment Guidelines

The Sydney Olympic Park Major Event Impact Assessment Guidelines provide SOPA with necessary tools to consider new development in the context of major events throughout the year.

SOPA's role in considering new development in the context of major events is difficult and will often require interpretation of requirements; balancing of conflicting issues; searching for innovative solutions; and recognition of commercial or common law rights.

The Guidelines include a requirement for all development applications to include an Events Information Statement which is required to address a range of matters, as set out in the Table below.

**Table 6.2** *Event Information Statement*

Issue	Construction Phase	Operational Phase
<p><b>Number of residents and / or workers to be accommodated</b></p>	<p>The construction phase is estimated to be completed over a period of 55 weeks.</p> <ul style="list-style-type: none"> <li>• Site establishment and removal of hazardous materials – 4 weeks</li> <li>• Shared forecourt – 6 weeks</li> <li>• Bulk Earthworks – 6 weeks</li> <li>• Main Construction works – 39 weeks</li> </ul> <p>It should be noted that this will be confirmed by the successful contractor engaged to undertake the Project.</p>	<p><b>Staff</b> Existing Netball NSW staff is 40. In event mode, an additional 15 casual staff are engaged to assist in event management. Three or four people are also required to clean the premises post-event.</p> <p>The new facility makes provision for a permanent staff of up to 60. This will not occur immediately, but is broadly projected to occur within 5 years of occupancy.</p> <p><b>Events</b> The peak operating times for event-based activities at Netball Central will generally be as follows:</p> <p>Monday – Friday 5.00pm – 10.00pm Saturday 8.00am – 5.00pm</p> <p>It is reasonable to expect up to 450 patrons on weeknights and up to 600 patrons during the course of Saturday. During these periods the facility will be staffed by operational personnel (as opposed to administrative staff). The number of personnel at these times is in the order of 15 people.</p>

Issue	Construction Phase	Operational Phase
		<p><b>Off-Peak Operational Characteristics</b> Off-peak operating times are:</p> <p>Monday – Friday 9.00am – 5.00pm</p> <p>During this period the facility will attract school-based user groups, students, community groups and localised employees from SOPA-based businesses which could result in approximately 150 people attending the centre during the course of the day.</p>
<b>Number of car-parking spaces required / provided</b>	<p>It is predicted that during the peak of Construction activities, a maximum of 50 vehicles will require parking spaces.</p> <p>It is expected that the vehicles associated with construction personnel will be accommodated either within P7 or P3 Car Parks.</p>	<p><b>Staff</b> It is understood that Netball NSW has entered into a car park licence with SOPA which makes provision for 28 reserved spaces in the P7 Car Park and 80 unreserved spaces in the P4 Car Park (located to the west of the Sports Centre and Hockey pitches).</p> <p><b>Events</b> The facility can host approx. 1500 patrons in the building at one time, however this would potentially only occur about 3-4 times per year.</p> <p>Expectations of the number of patrons for all other operating times are as detailed above.</p> <p>It is reasonable to assume that patrons will utilize those parking areas situated in closest proximity to the entrance to the facility. In order of preference, it is assumed that this would be – P3, P7 and P4.</p>
<b>The location and capacity of entry and exit points to the premises, including delivery areas and car parks</b>	<p>The loading and unloading of construction material from trucks, associated with the overall construction activity will be carried out on-site whenever possible.</p> <p>Construction material will be stored on-site or immediately adjoining the site within designated work zones / material handling areas. Due to site restrictions, construction vehicles will be required to park in surrounding streets, requiring temporary relaxation of on-street parking restrictions.</p>	<p><b>Relocation of P7 Access Driveway</b> The access to / from the P7 Car Park has been relocated approx. 25m to the south of its existing location on Olympic Boulevard. The relocated driveway will effectively function as an additional “arm” of the existing roundabout.</p> <p>The new access (which also services the loading dock at Netball Central and the existing dock at the Sports Centre) has been designed to accommodate a 19m long articulated vehicle.</p> <p>It is understood that the proposed configuration of the new access will mean that heavy vehicles seeking to exit the car park and travel north on Olympic Boulevard will be required to make a right hand turn into the roundabout and make a full circuit to effect that manoeuvre.</p>

Issue	Construction Phase	Operational Phase
		<p>The alternative to this arrangement would be to adjust the kerblines to the roundabout however this would result in insufficient deflection in the travel path of a bus entering the roundabout from Shirley Strickland Avenue west. This would present a safety issue as those vehicles would accelerate through the roundabout.</p> <p><b>Loading Dock</b>          Notwithstanding the above, the Netball Central facility is expected to be serviced primarily by vans and rigid trucks, with a maximum size of up to 12.5m Heavy Rigid Vehicle.</p> <p>The proposed loading dock is located on the south western side of the building, accessed via the P7 Car Park and located immediately adjacent to the existing loading dock of the Sports Centre. It has been designed to accommodate 12.5m Heavy Rigid Vehicles, which is considered to be the worst case, when a large delivery is occurring simultaneously with garbage collection. The area will be "hatched out" with linemarking signifying that this area is to be kept clear unless loading operations are underway.</p> <p>The area will be separated from the adjacent Sports Centre loading dock and the car park by a 1300mm wide nature strip with upright kerbs.</p> <p><b>Bus and Coach Pick up / Drop Off</b>          Patrons competing in Netball NSW events during peak operating times primarily travel to the venue via private vehicle.</p> <p>There are often times throughout the day where school and community groups will travel to the centre by coach or bus. Having regard to this behaviour, there may be a demand for a bus drop off / pick up area.</p> <p><b>Taxis</b>          The nearest permanent taxi rank is in Herb Elliott Avenue adjacent to the Novotel and Pullman Hotels, some 700m to the north of the site.</p> <p>It is not anticipated that any formal temporary arrangement for taxis associated with the Netball facility will need to be put in place in event mode.</p>

Issue	Construction Phase	Operational Phase
		<p><b>Other Transport/Traffic Requirements</b>            Whilst public transport (bus and rail) is available to SOP, it does not directly service the Netball site. Additional services could potentially be negotiated with Transport for NSW in the future, but this is predicated on there being sufficient demand.</p> <p>Based on discussions with SOPA's Executive Manager - Events and Precinct Coordination it should be noted that even major events at Netball Central would not generate sufficient numbers to trigger special event bus services.</p>
<p><b>Number, frequency, and timing, of service vehicle movements into and out of the premises</b></p>	<ul style="list-style-type: none"> <li>• Site Establishment and Hazmat removal (4 weeks) - 6 to 8 truck movements / day</li> <li>• New Forecourt (6 weeks) - 4 to 16 truck movements / day</li> <li>• Bulk Earthworks (6 weeks) – 6 to 25 truck movements / day</li> <li>• Construction phase (39 weeks) - 4 to 8 truck movements / day</li> </ul>	<p>Netball NSW currently receives a variety of deliveries during normal business hours of 9.00am – 5.00pm Monday to Friday.</p> <p>On average it would be reasonable to expect up to 5-6 deliveries per day and up to 20-30 deliveries per week.</p>
<p><b>The extent and location of any encroachment into the Public Domain</b></p>	<p>The works will impact the following areas:</p> <ul style="list-style-type: none"> <li>• western footpath and verge of Olympic Boulevard between Sarah Durack Avenue and Shirley Strickland Avenue; and</li> <li>• P7 Car Park.</li> </ul>	<p>The shared forecourt which will ultimately serve the pedestrian access needs of both the Sports Centre (alternative point of access) and Netball Central (primary access) is part of the public domain at SOP and will be managed and maintained by SOPA.</p> <p>Service vehicle access to the loading dock will be via the relocated driveway on Olympic Boulevard and through the P7 Car Park.</p>
<p><b>Details of all requirements for works within the Public Domain</b></p>	<p>Upon completion of the works the shared forecourt at the northern end of the site will be handed back to SOPA as part of the public domain.</p> <p>The works will have some impact on the western footpath and the existing trees within the verge of Olympic Boulevard. A total of 14 Hoop Pines in the vicinity of the proposed shared forecourt at the northern end of the site will be removed and replanted further to the south in the western verge of the Boulevard to “back fill” the current gap which corresponds with the existing pedestrian forecourt.</p> <p>It is understood that the relocation of these specimens is required to occur outside the growing season (ie. Winter). Given the likely timeframe for determination of the development application, it is anticipated that all existing trees in the verge on the Olympic Boulevard frontage of the site will need to remain insitu until Winter 2013. In the intervening period, tree protection measures will be applied to each of these specimens (as well as to those which</p>	<p>Not applicable.</p>

Issue	Construction Phase	Operational Phase
	<p>remain unaffected by the works but are within the sphere of influence of the Project) throughout the construction phase (until such time as they can be relocated) in accordance with the recommendations of the Arborist's report (refer <b>Appendix 7</b>).</p> <p>In general, pedestrian access will be maintained along the western footpath of the Boulevard throughout the Construction Phase. There will however be occasions when the flow of pedestrians may be interrupted during site deliveries and other times when an OH&amp;S risk may be present due to construction activities. This will be managed to ensure that these instances do not coincide with Major Events at the Sports Centre.</p> <p>Safe pedestrian passage will be maintained for users of the P7 Car Park to the Sports Centre at all times. This will be more specifically described in the Contractors Construction Management Plan but will be achieved via both physical and directional means which will ensure that safe, level, well lit and universally accessible routes are maintained throughout the stages of the works.</p>	
<p><b>An overview of the scale, timing, and nature of the Development in construction activity terms</b></p>	<p>It is anticipated that the Construction Phase of the works will commence in November 2012. The Construction Program is estimated at 13 months.</p> <p>The Contractor (when appointed) will establish the main site office and facilities. At this stage it is envisaged that these facilities will be located within or adjacent to the P7 Car Park as shown indicatively on Drawing No SK01 in the Draft Construction Environment Management Plan at <b>Appendix 15</b>, although SOPA is currently investigating the possibility of utilising Site 13 immediately to the north of the subject site.</p> <p>It should be noted that the P7 Car Park is required to remain operational and accessible for use by the general public and the Sports Centre throughout the construction period.</p> <p><b>Site Accommodation</b></p> <p>The main site accommodation, located within the existing SOP Sports Centre car park will comprise a compound incorporating a number of demountable structures sited to achieve maximum efficiency and comfort. They will include offices, site reception and meeting rooms, amenities, lunch room and first aid facilities along with weather protection linking the structures.</p> <p>Space for sub-contractor offices and specialist storage containers will be made available along with minor car parking facilities for senior staff and visitors.</p>	<p>Not applicable.</p>

Issue	Construction Phase	Operational Phase
	<p><b>Perimeter Fencing</b>            The Contractor will provide site security fencing together with entry gates and removal of same on completion of the works.</p> <p><b>Site Security</b>            Site Security will meet the following criteria:</p> <ul style="list-style-type: none"> <li>• The major construction area and accommodation compound will be secured with perimeter fencing and locked outside working hours.</li> <li>• Minor works areas will have either temporary fencing or the appropriate level of barricading.</li> <li>• All site accommodation sheds and containers will be locked outside of working hours.</li> <li>• There will be only one entrance into the construction area and all persons must enter via here with only specialist equipment and delivery trucks permitted to use an alternative entry.</li> </ul> <p><b>Demolition and Remediation</b>            Any potentially injurious materials are to be identified prior to commencement of demolition. The means of construction and structural support of all elements to be demolished are to be identified before works commence, in order to inform the demolition process. The methods and means of demolition are to be controlled in accordance with AS 2601-2001. Safety of neighbouring properties and the public is paramount, and measures must be put in place to ensure safety is maintained at all times. Similarly, demolition techniques must be appropriate to the task, and worker safety must be ensured.</p> <p>Selected methods must be appropriate to the task and the circumstances, and selected machinery must be tested on-site for potential vibration effects at the rail line north of Sarah Durack Avenue; noise is to be kept as low as possible; the effect of vibration and concussion on the railway cutting and on nearby buildings and their occupants is to be minimised and work is only to be carried out during approved working hours. No burning off is permitted.</p> <p><b>Stockpiling</b>            All demolition work is to be stockpiled into appropriate stockpiles, depending upon its destination for recycling or for disposal in accordance with ESD principles and realistic opportunity. Dust control measures are to be put in place, and no refuse or waste shall be allowed to enter public sewers, drains, watercourses, or public roads or walkways. In the event that were to occur, action to clean up that refuse or waste is to be taken immediately.</p> <p><b>Excavation</b>            Particular care will need to be exercised during excavation and site works to ensure that the risk of nuisance is kept to a minimum. Areas of potential nuisance include noise, vibration, dust, erosion and</p>	

Issue	Construction Phase	Operational Phase
	<p>siltation. The site works must be designed to ensure that appropriate control measures are in place every evening to safeguard against the possibility of off-site impacts caused by any storm event during the night. The site manager or his nominee is to have sole responsibility and authority for ensuring that all such measures are in place at all times.</p> <p>The methods of excavation will be established by the contractor in conjunction with the geotechnical engineer, and will be dependent upon site conditions and the amount of excavation required.</p> <p><b>Construction</b>            The construction methodology will be determined by the selected Contractor. General site operations are expected to be mostly contained on-site with crane location to be agreed with SOPA. All construction operations will comply with WorkCover requirements.</p> <p>The safety of the neighbours and the public is paramount, and is not to be compromised in any way by development works. Appropriate hoarding is to be agreed with SOPA for that purpose and the Contractor is to ensure full compliance with WorkCover requirements, conditions of consent, and industry best practice in all areas of OH&amp;S measures.</p>	
<p><b>The normal hours of business operations</b></p>	<p>Monday – Friday 7.00am to 6.00pm            Saturday 7.00am to 1.00pm            Sun / Public Hol. Nil</p>	<p>Netball Central will potentially operate 6-7 days per week from 8.00am – 10.00pm. The peak operational times for Netball NSW will be Monday – Friday 5.30pm – 10.00pm and all day Saturday.</p>
<p><b>Emergency evacuation routes and meeting places</b></p>	<p>Existing emergency evacuation routes from the Sports Centre will be largely unaffected during the construction works.</p> <p>Suitable Meeting Places will be agreed between Netball NSW and Sydney Olympic Park Authority during the construction phases of the Netball Central development.</p>	<p>Emergency evacuation routes from the internal areas of Netball Central are:</p> <ul style="list-style-type: none"> <li>• from the Standard Court areas egress is via five (5) sets of double doors, on-grade which provide direct access to Olympic Boulevard;</li> <li>• from the Show Court egress is achieved via either:             <ul style="list-style-type: none"> <li>➢ 3 sets of double doors, on-grade an opening out to the west out towards the Loading Bay;</li> <li>➢ a single door at Level 2 from the rear of the northern spectator seating;</li> <li>➢ via a set of double doors on-grade to the south; or</li> <li>➢ via a set of double doors at the southern end of the spine (internal street), accessed via the rear of the southern spectator seating.</li> </ul> </li> <li>• from the Hub, egress is primarily via the Western egress stair, with secondary routes via the Main Entrance at Level 3 and across Court 3 to Olympic Boulevard.</li> </ul>

Issue	Construction Phase	Operational Phase
		A Meeting Place will be agreed between Netball NSW and SOPA upon completion of the Netball Central development.

It is also noted that the proposed Netball Central facility is located immediately adjacent to the Event Transport Zone and Event Traffic Zone on Olympic Boulevard (as described in SOPA's Major Event Impact Assessment Guidelines).

In order to address the manner in which Netball Central will operate when the precinct is in Major Event mode (in particular when the Major Event buses are operating), Netball NSW is willing to accept a Condition on any Consent issued in respect of this application which requires the preparation of a Venue Operations Plan for submission to SOPA for approval prior to an Occupation Certificate being issued.

### 6.1.15 Environmental Guidelines for Sydney Olympic Park 2008

The Environmental Guidelines are the framework through which SOPA guides its own and others activities at Sydney Olympic Park into "thinking globally and acting locally". They are the evolution of the 1993 Environmental Guidelines for the Summer Olympic Games (1993) which were integral to Sydney's successful bid to host the Games in 2000. In 2008 SOPA amended and updated the parent document to guide the longer term environmental issues associated with place management and the development of a vibrant urban centre.

The following table provides an assessment of the proposed development against the key sustainability issues and their respective objectives.

**Table 6.3** Sustainability Objectives

Issue	Objectives	Response
<b>Water Conservation</b>	<p>(a) Minimising overall public domain water use at SOP (potable and non-potable water) using best practice environmental design principles, innovative technology, water sensitive urban design, water efficient landscaping and other demand management practices;</p> <p>(b) Requiring all new developments to maximize opportunities for building and infrastructure design to incorporate water collection and recycling systems;</p> <p>(c) Avoiding adverse impacts on water quality or quantity in local streams, wetlands and groundwater from operations, developments and major event activities at SOP; and</p> <p>(d) Working with lead agencies in the promotion of sustainable water resource management practices through integration of water infrastructure, sharing knowledge and experience and supporting education and research programs.</p>	<p>Conservation measures to be incorporated into the hydraulic services design include:</p> <ul style="list-style-type: none"> <li>• Minimisation of the use of potable water as far as possible through: <ul style="list-style-type: none"> <li>➢ Low flow shower heads and hand basins.</li> <li>➢ Timed flow taps in general areas to shut off showers and hand basins to prevent excessive usage or taps being left running.</li> </ul> </li> <li>• Reducing water usage in toilet amenities by providing: <ul style="list-style-type: none"> <li>➢ Sanitary WCs will be dual flush 3/4.5 litre pans.</li> <li>➢ Sanitary urinals to be low flush.</li> </ul> </li> <li>• Provision for future solar hot water system.</li> <li>• Utilisation of recycled water main supply for landscaping and toilet flushing.</li> <li>• Air cooled air-conditioning units which eliminate the use of water by the air conditioning system.</li> </ul> <p>Although the primary water use will be for showers, sustainability measures have been investigated to reduce water usage in toilet amenities and landscape irrigation.</p>

Issue	Objectives	Response
		<p>The proposed development will be connected to the centralized distribution of WRAMS making reclaimed water available for irrigation, toilet flushing, and wash down.</p>
<p><b>Energy Conservation</b></p>	<p>(a) Minimising overall public domain energy and peak load demand levels;</p> <p>(b) Prioritizing in developments the use of passive solar design, natural ventilation and selection of energy efficient materials to enhance thermal performance;</p> <p>(c) Requiring energy-efficient heating and cooling systems, building management systems, lighting, and energy consuming appliances to be incorporated in all new building projects;</p> <p>(d) Adapting and applying best available environmental design principles, technology, demand management and procurement practices to progressively and significantly reduce greenhouse gas emissions.</p>	<p>Various strategies and initiatives will be employed in different parts of the building, as follows:</p> <p><b>Courts</b> Natural ventilation, combined with passive design measures has been incorporated to eliminate the need for any conditioning systems to heat or cool the standard court areas.</p> <p>The use of heating systems to temper winter conditions for spectators is being investigated for the show court seating where air based or radiant system types are currently being assessed.</p> <p>An adaptive comfort criterion has been set to assess comfort within the netball court areas where openable elements on all facades orientations at high and low level will promote air movement through the area in shoulder and peak summer seasons. Sealing the façade will provide comfortable conditions through the winter. Fans may be incorporated to further promote comfort.</p> <p>The internal lighting systems will incorporate energy-saving technology to monitor and improve building performance in operation. The feasibility of incorporating the following energy-efficient electrical systems and lighting strategies will be pursued during the next stage of design:</p> <ul style="list-style-type: none"> <li>• High-efficiency lighting systems, including energy efficient lamps and ballasts.</li> <li>• A lighting control system based on smart zoning, occupancy profiles and operational hours.</li> <li>• Control of lighting systems based on available daylighting, photo sensors and motion sensors for individual zones.</li> </ul> <p><b>The Hub</b> This element of the building comprises changing rooms, education and training facilities, a café and administration areas.</p> <p>The sustainability strategy focuses on minimising the energy impact of comfort conditioning and water heating, while delivering a cost effective and user-friendly environment.</p> <p>Passive design measures including shading, glazing selection, orientation, insulation, material selection, surface finishes and planting will be utilised to improve user comfort inside and outside the building while simultaneously reducing heating and cooling demand.</p>

Issue	Objectives	Response
		<p>Where provided, air conditioning will be delivered via ducted VRV system which will include controls to limit out of hours operation, and where appropriate, occupancy sensors will be used to limit unnecessary operation.</p> <p>Change rooms will be mechanically ventilated with the potential for heat reclamation being explored based on annual energy payback.</p> <p>As many of these spaces are used intermittently, a controls strategy with either occupancy sensors or timers will be included to control both lighting and ventilation.</p> <p>Provision for solar thermal water heating will be included as a future option to offset heating demand minimising the use of the gas fired boilers. The heating system will be used for both space heating and hot water heating.</p> <p>Natural light will be used to supplement electric lighting within the central hub, where low energy lighting systems linked with timers and occupant sensing will be used to minimise energy use while providing user amenity and a safe environment.</p>
<p><b>Materials Selection</b></p>	<ul style="list-style-type: none"> <li>(a) Considering whole-of-life impacts on the environment when selecting materials for development and operations;</li> <li>(b) Prioritizing the selection of natural non-toxic materials such as natural fibre insulation, and non-toxic paints, glues, varnishes, polishes, solvents and cleaning products;</li> <li>(c) Maximize the use of recycled and recyclable materials in developments and operations including for consumer packaging;</li> <li>(d) Encouraging material re-use for major event overlay (design for disassembly and re-use);</li> <li>(e) Prioritizing non-use of chlorine, fluorine and hydrogen based carbon gases and promote as alternatives the use of non-ozone depleting, non-greenhouse warming gas refrigerants in construction, major events and other operations;</li> <li>(f) Minimising the need for use of chemical control of weeds, pests and diseases – maximizing opportunities for integrated control methods;</li> <li>(g) Minimising the use of known environmentally damaging or unhealthy products such as chlorine based products including poly-vinyl chloride (PVC) and chlorine bleached paper and completely avoiding products that include toxic substances such as Copper Chromium Arsenate treated timber products; and</li> <li>(h) Prioritizing use of low impact timber products including low emission composite timber in construction and major event overlay and</li> </ul>	<p>Environmentally sustainable materials will be given priority in the selection of materials.</p> <p>The use of untreated, exposed surfaces is being investigated to reduce ongoing maintenance and embodied energy costs.</p> <p>Where paints or sealants are needed, low VOC and formaldehyde content products will be given preference for internal spaces.</p> <p>Preference will be given to carpet and floor coverings which do not contain PVC, fitted with low VOC adhesives.</p> <p>Air supply ductwork will be cleaned prior to use and access will be provided to all areas where dust and debris is likely to collect, allowing ease of future cleaning.</p> <p><b>Timber Structure</b></p> <p>As the netball courts will be operating under natural ventilation, the construction material is the most significant contributor to the overall carbon footprint of the building. To address this, the court areas will use timber in the main structural elements.</p> <p>Studies comparing the embodied energy of timber construction to other systems typically show that:</p>

Issue	Objectives	Response
	<p>timber from managed sustainable sources ensuring no imported or local rainforest timber is used in developments or other activities.</p>	<ul style="list-style-type: none"> <li>• Timber schemes excel in the fabrication and construction stages.</li> <li>• There is similar energy use throughout the operational lifetime of the building.</li> <li>• The total lifetime embodied energy has the potential for great carbon savings.</li> </ul> <p>This assumes that the timber is not taken to landfill at the end of life but used as biomass for energy production.</p> <p>To capitalise on the timber design and to facilitate the demolition of the building, information on the design intent and the end of life process will be transferred to the building owners and operators.</p>
<p><b>Waste Management</b></p>	<p>(a) Maximising appropriate opportunities to increase the proportion of recycling for waste produced in the public domain including green waste collection, re-use and composting;</p> <p>(b) Requiring waste management performance and recycling targets for all development through design , construction and operational activities with a minimum 80% of construction and demolition waste to be recycled or re-used for each development;</p> <p>(c) Encouraging public domain concessionaires and service providers to minimise where practical the packaging of foodstuffs for visitor consumption and otherwise use non-toxic, recyclable and biodegradable packaging and materials for their products;</p> <p>(d) Educating visitors, workers and residents regarding waste minimisation and management issues, and working in cooperation with venues and businesses to minimise waste generation and maximize recycling of materials; and</p> <p>(e) Maximizing appropriate opportunities to improve the sustainability of leachate treatment and disposal methods.</p>	<p>The building is located on a sloping site with a maximum level variation of approx. 5m.</p> <p>The proposed building has incorporated staggered levels for the netball court areas, which results in a step change in floor levels from one court to the next. This approach helps to balance the volume of cut and fill for the site and results in less waste material transported off site to landfill and less clean fill brought to site during construction.</p> <p>Operational waste storage facilities will be provided within the building, with sufficient area to allow the separate storage of recyclable, non-recyclable and food waste streams.</p>
<p><b>Transport Management</b></p>	<p>(a) Establishing SOP as a destination where the option for travel by public transport is well supported for event patrons and commuters and transport plans include strategies to reduce car dependency;</p> <p>(b) Applying demand management techniques that encourage public transport use and discourage excessive road based private transport particularly during peak commuter times and major event periods;</p> <p>(c) Coordinating appropriate road traffic and public transport infrastructure improvements to reflect changes in the form and function of SOP and evolving community attitudes to more sustainable transport options;</p>	<p>The development will encourage future users to make travel choices that support the State Plan targets of increased public transport mode share and doubling the active transport mode share.</p> <p>The site is located within close proximity to a rail station and bus stops with connections to western Sydney, making these targets achievable.</p> <p>The design includes opportunities to encourage staff and visitors to use bicycles through the incorporation of:</p> <ul style="list-style-type: none"> <li>• bicycle parking spaces for staff</li> <li>• 10 bicycle parking spaces for visitors in the north forecourt</li> </ul>

Issue	Objectives	Response
	(d) Promoting and supporting innovative transport modes, sustainable transport technologies, and the use of alternative fuels; (e) Designing new developments to be as walkable as possible, connecting transport nodes to walkways and cycleways and ensure cycleways accommodate the needs of recreational cyclists, pedestrians and workplace commuters.	<ul style="list-style-type: none"> <li>• End-of-trip facilities easily accessible provided by the players changing rooms.</li> </ul>
<b>Pollution Control</b>	(a) Complying with all relevant statutes and regulatory requirements; (b) Minimising light pollution by limiting use of lights at inappropriate times, location and intensities and avoiding loss of habitat values or natural ambience for open spaces; (c) Promoting the design and physical construction of new buildings so that they mitigate environmental impacts associated with major events; (d) Managing remediated landfills and leachate systems to ensure their integrity is maintained, human health and the environment is protected and statutory compliance is achieved; (e) Ensuring development, operations and event activities do not adversely impact on the water quality of wetlands and watercourses; (f) Validating all soils and fill materials proposed to be imported into SOP and reject those that are not free from contamination.	<p>The use of low VOC paints and sealants will be targeted throughout the construction process for use in all internal spaces. Similarly, low formaldehyde wood products will be targeted where wood has been specified.</p> <p>The use of refrigerant charge monitoring within the packaged air-conditioning units will be investigated to identify any potential refrigerant leaks within the units.</p>
<b>Biodiversity</b>	(a) Protecting and enhancing the natural heritage and ecological integrity of SOP targeting priority species and communities, places of high biodiversity value and biodiversity generally; (b) Applying an adaptive management approach to stewardship of SOP's biodiversity assets' (c) Ensuring conservation of biological diversity and ecological integrity is a fundamental consideration for new development, activities, levels or types of use or management practices that affect the ecosystems at SOP; (d) Promoting the ecological, aesthetic and educational value of an urban site with high species diversity and abundance; (e) Conserving and enhancing the remnant woodland and wetland habitats of Newington Nature Reserve in accordance with the Newington Nature Reserve Plan of Management and managing adjoining lands in sympathy with the Reserve; and (f) Maximizing the habitat values of native plantings by promoting priority species and communities, providing structural complexity and plant species diversity, avoiding habitat fragmentation, promoting habitat linkages and large core areas and prioritizing the use of indigenous species in landscape planting.	<p>Native plant species will be given preference when designing the landscaping with due consideration for water use, building protection, improving and promoting the biodiversity.</p> <p>Furthermore, sixteen (16) existing Cabbage Palms will be temporarily removed from the site and re-used in the landscape treatment within the shared forecourt at the northern end of the development.</p> <p>The location of a number of the existing Hoop Pines located in the western verge of Olympic Boulevard will also be adjusted to accommodate the proposed development, in particular the shared forecourt and the adjustment to the location of the access point to the P7 Car Park.</p>

Issue	Objectives	Response
<b>Public Open Space</b>	<ul style="list-style-type: none"> <li>(a) Promoting and increasing the recreational, historical, scientific, educational and cultural values of the parklands while recognizing the intrinsic values of public open space in addition to its utility services values;</li> <li>(b) Encouraging the appropriate use, benefit and enjoyment of the parklands by the public, facilitating opportunities to improve physical health and well-being, social cohesion, cultural expressing and a diversity of leisure experiences;</li> <li>(c) Maintaining public access to the parklands whilst ensuring the protection, restoration and improvement of the environmental features, heritage items and ecological elements;</li> <li>(d) Ensuring wherever possible that spaces area used and managed in such a way that both the land and its natural resources are sustained in perpetuity;</li> <li>(e) Protecting and enhancing the natural and cultural (Aboriginal / non-Aboriginal) heritage of the park, particularly the Parklands; and</li> <li>(f) Giving priority to multi-use of places and spaces and avoiding where possible the occupation or disposal of public open space for purely private purposes.</li> </ul>	<p>The proposed development has no direct relationship to or impact on the Parklands at SOP.</p> <p>It will not impede public access to the Parklands, nor will it compromise the integrity of the natural environment, heritage items of ecological elements at SOP.</p> <p>The shared forecourt to be created at the northern end of the development will provide a passive area of public space for patrons of either the Sports Centre or Netball Central to gather.</p>

### 6.1.16 Remediated Lands Management Plan

SOPA has responsibility for the day-to-day and long term management of ten (10) engineered remediated landfills which were constructed between 1983 and 2001, and covering 105 hectares of land at Sydney Olympic Park.

**Figure 12** shows the location of the landfills in the vicinity of Site 107. It is noted that the subject site is located in the vicinity of a substantial area of landfill centred on the Golf Driving Range, and that the area of fill extends across the Boulevard and impacts on a small area in the south eastern corner of the site.

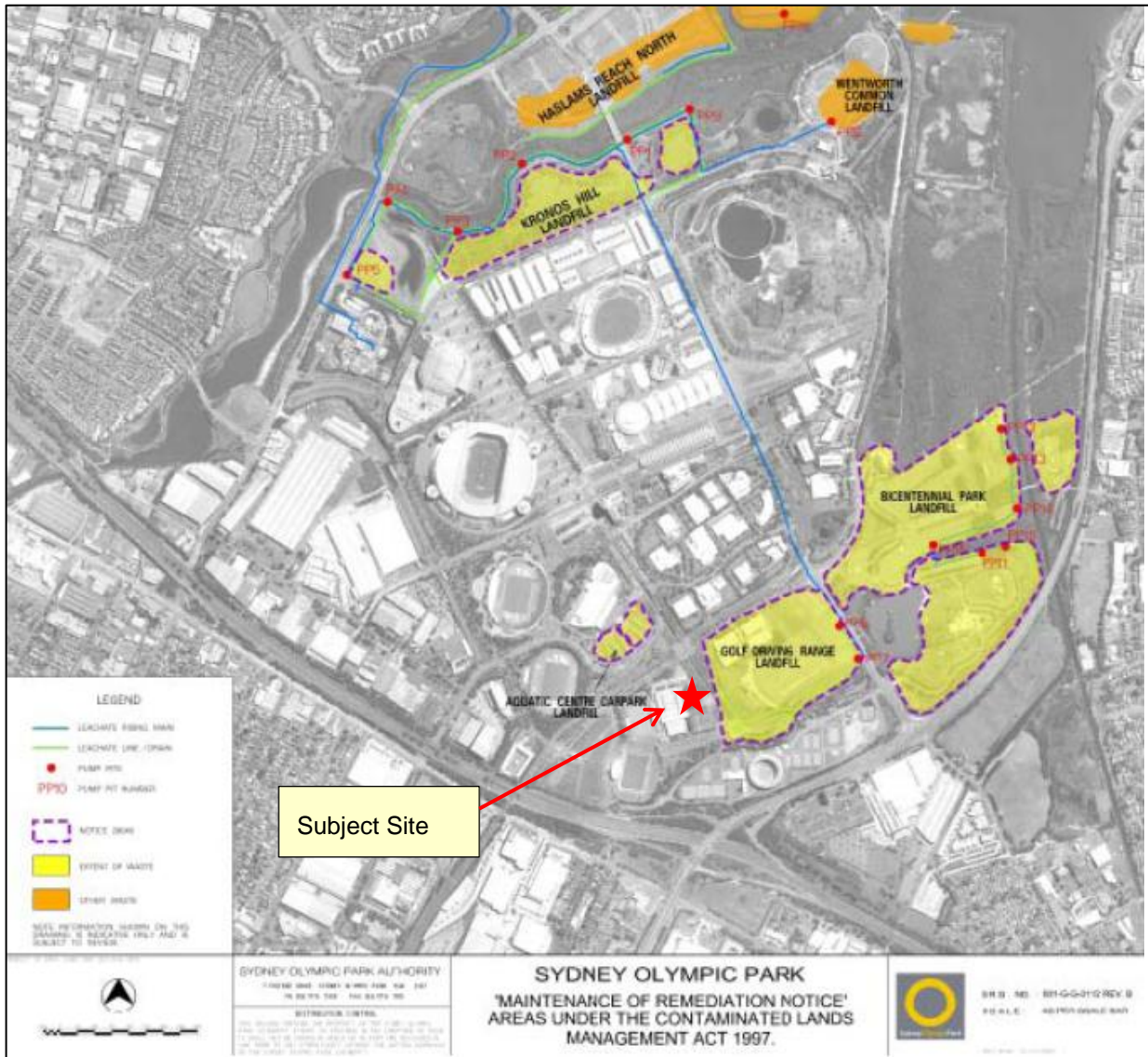
The Remediated Lands Management Plan describes how the Authority will manage the remediated landfills and their associated infrastructure. It establishes the use, management and monitoring of the landfills based on landfill design, legislation, risks, community needs, and corporate requirements.

### 6.1.17 Development Near Rail Corridors and Busy Roads – Interim Guideline

Major roads and rail operations generate noise and vibration, and people living and working near major transport corridors can be adversely affected. In addition, major roads can impact on air quality due to the volume of traffic they carry.

An aim of the Guideline is to assist in reducing the health impacts of rail and road noise and adverse air quality on sensitive adjacent development.

Development near rail corridors and busy roads can also impact on the structural integrity of the transport infrastructure and its engineered structures.



**Figure 12** Areas of landfill in the vicinity of Site 107 (Source: SOPA)

The Guideline assists in the planning, design and assessment of development in, or adjacent to, rail corridors and busy roads. It supports specific rail and road provisions of the Infrastructure SEPP. The key objectives of these provisions are to:

- protect the safety and integrity of key transport infrastructure from adjacent development; and
- ensure that adjacent development achieves an appropriate acoustic amenity by meeting the internal noise criteria specified in the Infrastructure SEPP.

**Potential Impact on or from the Rail Corridor**

The proposed Netball Central building on Site 107 is located approx. 120 metres to the south of the existing railway line. The relevant provisions of the Infrastructure SEPP in relation to Rail Corridors are as follows:

**Clause 85**

*Any development on land that is in or immediately adjacent to a rail corridor, if the development is:*

- (a) likely to have an adverse effect on rail safety;
- (b) involves the placing of a metal finish on a structure and the rail corridor concerned is used by electric trains, or;
- (c) involves the use of a crane in air space above any rail corridor.

**Clause 86**

Any development (other than development to which clause 88 of the Infrastructure SEPP applies) that involves the penetration of the ground to a depth of at least 2m below ground level (existing) on land that is:

- (a) within or above a rail corridor; or
- (b) within 25m (measured horizontally) of a rail corridor; or
- (c) within 25m (measured horizontally) of the ground directly above an underground rail corridor

In view of the physical separation between the proposed development and the rail corridor, it is considered that no further assessment is required in this regard.

In terms of the likely impacts of noise generated by the operation of the rail line on the proposed development, the sporting facility is not generally recognized as a sensitive receiver (usually confined to residential uses, places of public worship, educational establishments, childcare centres and hospitals)

**Potential Impact on or from the M4 / Homebush Bay Drive**

At its closest point, the proposed building at Netball Central is approximately 320 metres to the north east of the M4 Motorway and approximately 250 metres to the north west of Homebush Bay Drive.

A **busy road** is defined as:

**Roads specified in Clause 102 of the Infrastructure SEPP:** a freeway, tollway or a transitway or any other road with an average annual traffic (AADT) volume of more than 40,000 vehicles (based on the traffic volume data provided on the website of the RTA).

**Any other road** – with an average annual daily traffic (AADT) volume of more than 20,000 vehicles (based on the traffic volume data published on the website of the RTA)

**Any other road** – with a high level of truck movements or bus traffic.

Whilst both the M4 and Homebush Bay Drive would satisfy the criteria for busy roads, it is considered that the proposed development is sufficiently removed and not of a nature that would either be adversely impacted by or have any substantive impact on, the operation of these roads.

**6.2 Built Form & Urban Design**

**6.2.1 Height, Bulk and Scale**

As documented in the Architectural Package at **Appendix 8** and discussed in Section 6.1.11 of this Statement, the proposed development has been designed in cognisance of the requirements and development controls embodied in the Sydney Olympic Park Master Plan 2030 as they relate to the Southern Sports Precinct and specifically, to Site 107.

There are a number of minor non-compliances with the controls pertaining to Height and the dimension of the colonnade to Olympic Boulevard. However the proposal is demonstrably consistent with the objectives of the Master Plan and the design has been developed in close consultation with SOPA design personnel and the Design Review Panel (refer discussion at Section 6.2.4).

## 6.2.2 Design Quality

The design response for the proposed Netball Central facility is the result of a detailed site analysis and addresses an array of issues relevant to its location, siting and appearance whilst also satisfying the functional brief for the operation of the facility. Significant agendas which have informed the design include:

- to ensure the facility stands the test of time, such that operation and functionality remain optimal into the future and that the Netball NSW brand is enhanced;
- the need to create a building of architectural excellence appropriate to its location on Olympic Boulevard;
- the need to satisfy urban design standards required under the provisions of the Sydney Olympic Park Master Plan 2030 and other relevant design requirements set out in SOPA's Urban Design Elements Manual;
- the need to create a shared address for the Sports Centre and Netball Central on a site that precludes both buildings having individual entries onto Olympic Boulevard; and
- the need to deploy a demanding budget to design resolution that appropriately balances priorities to the requirements of Netball NSW.

The facility has been designed to provide innovative, sustainable design, to enhance the occupants' and users enjoyment of the facility and minimise the impact on the environment as a whole.

## 6.2.3 Design Review Panel

The Proponent has presented to SOPA's Design Review Panel on three (3) occasions (21 July 2011, 22 September 2011 and 16 February 2012) during the course of the design development.

The issues raised during the course of those discussions are summarised in Table 6.3 below, together with a summary of the design response.

**Table 6.3** *Design Review Panel Comments*

Issue	Response
<b>Meeting of 21 July 2011</b>	
The Master Plan envelope identified for the project is better suited to expansion of the existing Sports Centre venue, than it is for a new venue.	Noted. However Site 107 was allocated as a development site for a Netball Centre of Excellence by NSW Office of Communities – Sports and Recreation and SOPA.
The overall strategy for the Netball Centre is not suited to the identified site area, nor does it complement the character of the existing building.	As above.
As the combined venues are compacted into such a tight area, the proposal lacks an openness and informality to encourage community use.	Noted. The indicative boundaries of Site 107 as shown in SOP Master Plan 2030 have been extended to the south to enable the creation of a shared public forecourt to serve both the Sports Centre and the proposed Netball facility.
Retention of existing surface parking area to the south is at the expense of the new venue design.	This issue has been resolved through the variation of the site boundaries.
The proposed Boulevard access to the Sport Centre is too small, severely compromising the present entry and making the entry to the new Netball facility unclear.	The repositioning of the Netball Central footprint further to the south, has enables the Boulevard access for both facilities to be increased. This has allowed the shared forecourt to be created, providing an Olympic Boulevard for both facilities.

Issue	Response
	<p>Early in the design process it was determined that the entrance to Netball Central should stand alongside the barrel canopy of the Sports Centre. This ensures that the new facility engages with the Sports Centre and presents an activated facade to the Sports Centre.</p> <p>The shared forecourt performs an essential role for both the Sports Centre and Netball Central by providing break-out space.</p> <p>The shared forecourt has been located at the northern end of Site 107 in response to pedestrian desire lines from the railway station to the north, and P3 Car Park on the opposite side of Olympic Boulevard. The forecourt design has been developed to ensure that it also addresses the breakout areas associated with the cafe in the south eastern corner of the future development on Site 13.</p>
<p>The opportunity for a better address to Olympic Boulevard is limited by the constrained configuration of the site, denying the potential for an open space to better address both venues.</p>	<p>As above.</p>
<p><b>Matters for Consideration</b> The DRP recommends that the above issues be addressed and presented to DRP for review of work in progress:</p> <ul style="list-style-type: none"> <li>• SOPA to investigate adjusting the Master Plan boundary to open up the site and better complement the Sports Centre. In particular: <ul style="list-style-type: none"> <li>- Consider extending the footprint area to the south, if necessary into the existing car park.</li> <li>- If the venues could be “opened up”, then height controls could be relaxed.</li> <li>- Consider a shared forecourt for both venues.</li> </ul> </li> </ul>	<p>Noted. Refer comments above.</p>
<p><b>Meeting of 22 September 2011</b></p>	
<p>Design may be proceeding with a development envelope that is still unclear.</p>	<p>The development envelope has been resolved.</p>
<p>The proposed envelope expansion towards the south is too small to relieve constraints on the conflicting venue entries.</p>	<p>The development envelope has been resolved as part of the design resolution in relation to the design and configuration of the shared forecourt.</p>
<p>A lower value asset (eg. surface parking) is adversely impacting on the design of a new high value asset.</p>	<p>The extent of the encroachment of the Netball Central development into the P7 Car Park was largely determined by the configuration of the shared forecourt, which has now been resolved.</p> <p>The appropriate siting for the relocated access driveway to the Car Park has also been a key consideration in the design development.</p>
<p>The opportunity to elevate the structure over the car park has not been considered. Combining the two functions would potentially achieve the best value and better environmental and visual outcomes for the site, with a relatively marginal extra cost for the proposed new venue.</p>	<p>Relative height levels between Court 5 and the P7 Car Park meant that car parking beneath Court 5 was not possible. In addition, Geotechnical investigations regarding the capacity of the existing fill and budget constraints have resulted in a slab-on-ground solution in this area.</p>

Issue	Response
Other options for service access to the venue could be considered.	The loading bay has been positioned to the west of the Show Court, to conceal it from views from the Olympic Boulevard.
The strategy proposed by Colin Still (architect of the adjacent Sports Centre) is a strong response to the existing building but doesn't address the significance of the Boulevard as a new factor in the urban character of the precinct.	Noted. The design for the shared forecourt as documented in this application presents a strong Olympic Boulevard address for both the Sports Centre and Netball Central. The Forecourt also provides a gathering space for people arriving / leaving the Sports Centre, Netball Central, and the Approved development on Site 13, achieving a new urban character to the precinct.
<p><b>Matters for Consideration</b>            The DRP recommends that the above issues be addressed and in particular:</p> <ul style="list-style-type: none"> <li>• Develop clear and workable operational and urban design parameters for the new venue</li> <li>• The feasibility of elevated structure over car parking should be tested.</li> <li>• The extended footprint should address the Boulevard alignment.</li> </ul>	Noted. Refer comments above.
<b>Meeting of 16 February 2012</b>	
Complications arising from the placement of the new facility, particularly the resolution of the bridge and forecourt in relation to the three surrounding buildings (including future development on Site 13).	The forecourt design and pedestrian access arrangements have been resolved in consultation with SOPA.
Suitability of Aramax channels as external louvres, particularly on the Boulevard, as they are largely inaccessible, creating future maintenance difficulties with accumulated dust, litter and possible bird roosting.	The majority of the louvres on the eastern (Olympic Boulevard) elevation have been inverted in order to prevent the collection of debris. The louvres to the southern and northern ends of the Olympic Boulevard elevation (where they are more accessible for maintenance) have been retained in their 'trough' orientation in order to maintain the Architectural concept of the end facades (i.e. the louvres are presented as the roof profiles cascading down the façade). The louvres which were originally proposed for the western elevations have been omitted.
Impact of high volume of roof water runoff on southern end of the site.	The southern 'water wall' to which these comments relate, has been omitted from the scheme.
Southern elevations are unresolved: these are highly visible and critical to the presentation of the facility.	Revised design illustrated on current Architectural Elevations.
<p><b>Matters for Consideration</b></p> <ul style="list-style-type: none"> <li>• Consider use of baffles or interim gutters to control runoff from the major roofs. Alternatively, innovative solutions such as cascading water display or detention ponds integrated into the landscape could be considered.</li> <li>• Consider alternative colonnade cladding materials, or explore other strategies such as inverting the proposed Aramax channels for use on vertical screen walls.</li> </ul>	<p>Noted. Refer comments above.</p> <p>Rainwater from major roofs is now collected adjacent to the walls, rather than cascading over the ends of the roof sheeting.</p>

Issue	Response
<ul style="list-style-type: none"> <li>• Review forecourt design to:               <ul style="list-style-type: none"> <li>- Resolve level changes,</li> <li>- Resolve scales of 3 adjoining buildings</li> <li>- Integrate with the Site 13 external works.</li> </ul> </li> </ul>	

Copies of the Minutes of the aforementioned Design Review Panel meetings are included in the Consultation documentation provided at **Appendix 18**.

### 6.3 Ecologically Sustainable Development

The environmental performance of the development has been assessed by using Clause 7(4) of Schedule 2 of the EP&A Regulation; Environmental Performance Guide for buildings; and Section J of the Building Code of Australia 2011. The initiatives and targets relate to the following aspects of the proposed development:

- Energy efficient electrical services;
- Mechanical services;
- Hydraulic services;
- Improved indoor environmental quality;
- Extended life through inherent flexibility and ‘future-proofing’;
- Electrical services with efficient lighting, lighting control and energy metering;
- Structural design; and
- Initiatives during construction and operation.

The fundamental ESD features considered in the proposed design include:

- Energy – conservation and on-site generation;
- Materials – reuse, recycle and possess low embodied energy;
- Indoor environmental quality – adequate ventilation, day lighting and reduction of volatile organic compounds;
- Water – use of non-potable water from the WRAMS<sup>6</sup>; and
- Waste minimisation – during construction and operation, waste management strategies will be implemented to reduce the amount of waste going to landfill.

Furthermore, the proposed development is consistent with the five accepted principles of ESD described below.

#### 6.3.1 Precautionary Principle

If there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.

The proposal is supported by environmental studies and technical reports which conclude that there are no environmental constraints that preclude the development of the site in accordance with the proposal, subject to appropriate management in future planning, design, construction and operational stages.

It is considered that through adherence to the mitigation measures outlined in Section 8.0 of this Statement the proposal will not result in serious impact to the environment.

<sup>6</sup> It is noted that the site cannot contribute to the WRAMS due to its location. All rainwater collected from the roof will be collected in a well located at the southern end of the building and will ultimately flow to Boundary Creek.

### **6.3.2 Integration Principle**

The integration principle holds that decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations. The design of the building has been development to integrate the short and long term effects of economic, environmental and social considerations for the current and project future needs of Netball NSW and the wider sporting precinct at Sydney Olympic Park.

### **6.3.3 Intergenerational Equity**

The principle of inter-generational equity holds that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations. The proposal has been development to directly benefit current and future generations in that it contributes to the sporting facilities available to the local and regional community without causing significant impact to the environment.

### **6.3.4 Biological Diversity**

Under the biodiversity principle, the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making.

The subject site does not contain any threatened or vulnerable species, populations, communities or significant habitats. Construction and ongoing operations of the facility will be managed in accordance with the mitigation measures, ensuring no significant indirect impacts on the surrounding environment.

### **6.3.5 Valuation and Pricing of Environmental Resources**

Under this principle, improved valuation, pricing and incentive mechanisms and environmental factors should be included in the valuation of assets and services.

The cost of infrastructure and measures to ensure an appropriate level of environmental performance on the site has been incorporated into the cost of development. In addition, the level of waste will be appropriately managed during the construction and the operation of the development. These measures have been incorporated into the cost of development.

## **6.4 Amenity Considerations**

### **6.4.1 Solar Access and Overshadowing**

The penetration of direct sunlight into the Netball Central facility has been a key design consideration.

At low level on the eastern facade, glazing is inserted between fixed angled blades to allow visual permeability between the facility interior and pedestrians on Olympic Boulevard, whilst preventing the penetration of early morning sun onto the court surfaces which would disrupt play.

At high level on the eastern facade, the installation of sun shading screens will prevent the penetration of early morning sun through the cellular polycarbonate cladding. The screens comprise metal profiles that match the roof sheeting, positioned on the outside of the colonnade, thereby also enhancing the dramatic scale of this thoroughfare.

On the northern facade LVL timber louvres are positioned inside the polycarbonate cladding, again preventing the penetration of direct sun onto the court surfaces. However, in this situation the broad eaves keep the hot summer sun off the facade, while the winter sun is directed into the building to provide a beneficial warming effect through solar heat gains.

The western elevation of the Hub element of the building which accommodates the administration offices is particularly vulnerable to late afternoon sun at all times during the year. Metal perforated screens will be installed to restrict the penetration of this low level sunlight into the offices to minimise disruption to the occupants.

### **Impacts on the Sports Centre**

Shadow analysis (refer Architectural Package at **Appendix 8**) illustrates that the proposed development will cast shadows on the eastern elevation of the Sports Centre in the early morning during winter. This impacts the existing windows which serve the offices in this part of the Sports Centre. It is noted that the angle of this early morning sun may cause glare problems for the occupants of these spaces. Indeed it has been observed that internal blinds are currently used extensively on the existing office windows in this elevation, suggests that this is the case. The shadowing effect of the proposed Netball Central building could potentially be perceived as being beneficial to the occupants of these offices by reducing the nuisance of this low level, early morning sun.

### **Potential Impacts on Approved Development on Site 13**

It should be noted that the proposed Netball Central development will have no effect on Site 13 solar access. However, the impact of the Site 13 development on the proposed shared forecourt has been considered in the design process. The battered grass area to the southern side of the lower forecourt has been located to enable those gathering in the forecourt at lunchtime to enjoy the winter sun, rather than be overshadowed by the Site 13 development.

#### **6.4.2 Acoustic Impacts**

The nearest residential receivers to the subject site are located to the south of Parramatta Road (in Courallie Avenue), approximately 490 metres to the south.

Norman Disney and Young Consulting Engineers has prepared an acoustic assessment to accompany this application which includes an unattended noise survey conducted to define acoustic criteria in accordance with relevant statutory guidelines. The report also makes recommendations in relation to:

- criteria for noise generated by use of the netball facilities to limit noise impacts at sensitive receivers; and
- traffic noise criteria for vehicle movements generated by the proposed development.

A computer noise model of the site was generated which was used as the basis for noise predictions at the nearest receivers due to determine noise impacts from mechanical services, traffic noise and netball-related activities.

The report concludes that no considerable measures are required to achieve compliance with the acoustic criteria detailed in Section 5 of the report.

A copy of the Acoustic Report is included at **Appendix 20**.

#### **6.4.3 Wind Impacts**

Cermak Peterka Petersen Pty Ltd has assessed the likely wind impacts on the local pedestrian environment associated with the proposed development. The assessment is undertaken in the context of:

- prevailing wind directions;
- existing development in the immediate vicinity (Sports Centre);
- the approved built form on the adjacent Site 13 to the north of the subject site; and
- an examination of the proposed built form and patterns of pedestrian activity.

The report notes that existing wind conditions at the site are known to be acceptable for pedestrians walking and the inclusion of the proposed relatively low-rise structure will not significantly affect the existing wind environment.

A copy of the Wind Impact Assessment report is included at **Appendix 21**.

## 6.5 Transport and Accessibility

As described previously in this Statement, Arup has prepared a Traffic Impact Assessment in respect of the proposed development (refer **Appendix 12**). The scope of the Assessment includes:

- a description of existing transport conditions in and around the site;
- documentation of the findings of AM and PM surveys of the site to estimate the existing traffic generation from the site;
- an estimation of the critical peak hour traffic volumes generated by the proposed development;
- calculation of the number and distribution of trips (on the surrounding road network) likely to be generated by the proposed development during the critical peak hour period/s;
- an analysis of the impacts of the proposed development on the surrounding road network during the critical peak periods;
- identification of any traffic related safety implications and treatments associated with the proposed development; and
- identification of any external road works or contributions expected as a result of the proposed development.

### 6.5.1 Traffic

The Traffic Impact Assessment concludes that traffic generated by the proposed development can be accommodated on the existing road network with negligible impact.

### 6.5.2 Access

A new car park access has been designed into the roundabout of Olympic Boulevard and Shirley Strickland Avenue which is likely to improve the level of safety for vehicles entering and exiting the P7 Car Park.

### 6.5.3 Parking

The development reduces the capacity of the adjacent P7 Car Park by 97 spaces. Arup has concluded that adequate parking is available in the vicinity of the site to service the demand generated by the proposed development.

It is also noted that Netball NSW has entered into a car park licence with SOPA which makes provision for 28 reserved spaces in the P7 Car Park and 80 unreserved spaces in the P4 Car Park (located to the west of the Sports Centre and Hockey pitches).

### 6.5.4 Sustainable Transport

The site is well-served by pedestrian facilities which provide connections to the greater Sydney rail network via Olympic Park Station.

The development will provide adequate secure bicycle parking, shower facilities and locker facilities for staff.

## 6.6 Sediment, Erosion and Dust Controls

Erosion and sedimentation controls will be installed and maintained in accordance with SOPA’s requirements and EPA Guidelines.

A copy of the Soil and Water Management Control Plan is incorporated in the Civil Works Package prepared by Arup, a copy of which is included at **Appendix 14**.

## 6.7 Tree Removal

The Arborist engaged to prepare the Tree Survey and make an assessment of the impact of the proposed development on existing vegetation on and in the immediate vicinity of the site only inspected those specimens that will potentially be affected by the proposed development construction footprint. It should be noted that this did not include the eastern row of some 16 *Araucaria cunninghamii* (Hoop Pines) planted adjacent to the kerbline in Olympic Boulevard.

The information presented in Table 6.4 has been derived from the Arborist’s Report (refer **Appendix 7**), and also considers the aforementioned 16 *Araucaria cunninghamii* immediately adjacent to the Olympic Boulevard.

Of the 28 trees to be relocated:

- 16 are *Livistonia australis* (Cabbage Palms) which will be used in the landscape treatment of the shared forecourt;
- 7 of the *Araucaria cunninghamii* (Hoop Pines) will be relocated further south along the Boulevard; and
- the ultimate relocation of the remaining 5 Hoop Pines will be determined in consultation with SOPA.

Nine (9) of the 16 Hoop Pines will be retained and seven (7) will be relocated further to the south on the Boulevard frontage to fill the gap adjacent to the existing pedestrian forecourt to the Sports Centre.

**Table 6.4** Summary of trees to be removed

Trees Detailed in Arborist’s Report	Total number
Trees on site	124
Trees to be retained in existing location	28
Trees to be removed	68
Trees to be relocated / re-used	28

## 6.8 Infrastructure and Utilities

All relevant utilities are available and have capacity for connection to the proposed development. These include power, water, recycled water drawn from the WRAMS<sup>7</sup> for toilet flushing and irrigation, sewer and telecommunication infrastructure. Necessary consultation will take place with Sydney Water, Ausgrid and Telstra during the construction phase to ensure that all necessary approvals are obtained and works are undertaken in accordance with relevant standards and any specific requirements.

<sup>7</sup> It should be noted that due to its location, the Netball Central development cannot contribute to the WRAMS at SOP.

Ausgrid has advised that a new substation is required to accommodate the proposed development. This has been located on the western side of the subject site, immediately to the north of the proposed loading dock. The siting was selected in consultation with Ausgrid to ensure that it satisfies that agency's specific siting and access requirements. Access to the western side of the new substation enclosure is provided from the P7 Car Park.

## 6.9 Drainage

Arup has prepared the Civil Works Package, a copy of which is included at **Appendix 14**. As discussed previously in this Statement, SOPA has been consulted in relation to the water management regime for the proposed development and has requested that further modelling be undertaken to determine the impact of the proposed development on the downstream system.

The proposed development will increase the impermeable area and will remove existing landscaping and grassed areas. The reduction in permeable surfaces will increase water discharge to Boundary Creek, above the peak 5 year ARI discharge. This could also potentially have a negative effect on the downstream flood levels.

In order to comply with SOPA's draft Development Control Policy for Water Sensitive Urban Design, the on-site detention of stormwater will be required. The size will be determined by a quantitative assessment of the development runoff to achieve SOPA's requirements for a 5 year ARI design storm. The location of the storage shall be determined during detailed design.

## 6.10 Waste Management

The following indicates the procedures to be implemented to manage waste through the construction and operational phases of the development. A detailed Waste Management Plan as part of a Construction Environment Management Plan will be prepared prior to the commencement of works, (as reflected in the Mitigation Measures at Section 8.0). It should be noted that that construction waste will be handled according to industry best practice and operational waste management will be incorporated into the building systems.

### 6.10.1 Operational Waste

JD MacDonald has prepared an Operational Waste Management Plan for the proposed development which outlines measures to:

- (i) avoid generation of unnecessary waste;
- (ii) minimise the quantity of wastes generated ending up as landfill;
- (iii) recover, re-use and recycle waste generated on site where possible; and
- (iv) comply with relevant codes and policies.

A garbage and recycling room has been provided adjacent to and accessed via the loading dock on the western side of the proposed development. This room will provide storage for garbage and recycling storage prior to disposal from site. It will also facilitate an opportunity for waste sorting however much of this is anticipated to occur throughout the building with different bins nominated for garbage and recycling.

All general and recyclable waste will be collected by a private waste contractor. The collection will occur from the loading dock accessed from the P7 Car Park via Olympic Boulevard.

A copy of the Operational Waste Management Plan is included at **Appendix 16**.

### 6.10.2 Construction Waste

No major demolition is required to accommodate the proposed development. Any material that cannot be recycled or reused will be disposed to an approved landfill facility. A detailed Construction Waste Management Plan will be prepared by the proponent prior to the commencement of construction works.

Waste will be minimised during construction and any waste generated will be separated to optimise recycling. The highest waste production period will be during the construction of the structure. This will be over a period of approximately 55 weeks.

## 6.11 Fire Engineering

Arup has reviewed the proposed development in the context of fire engineering and has advised that the fire safety design of the building will generally satisfy the Performance Requirements of the Building Code of Australia (BCA) 2012 by complying with the Deemed-to-Satisfy provisions. However there are some aspects of the design that are developed using performance based fire engineering to achieve compliance with the Performance Requirements of the BCA.

A copy of the Fire Engineering report is included at **Appendix 19** to this Statement.

## 6.12 Building Code of Australia

Davis Langdon has assessed the compliance of the proposed development against all relevant requirements of the Building Code of Australia, the principal objective being to identify any departures arising from the proposal.

A copy of the BCA Assessment report is included at **Appendix 22**.

## 7.0 Conclusion and Justification for the Proposal

### 7.1 Project Justification

This Environmental Impact Statement has been prepared to consider the environmental, social and economic impacts of the proposed Netball Central facility at Sydney Olympic Park. The EIS has addressed the matters outlined in the Director General's Requirements (**Appendix 2**) and accords with Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* in relation to consideration of relevant environmental planning instruments, above ground build form, social and environmental impacts including traffic, noise, construction impacts and stormwater.

The proposed development best meets the project objectives, but will still potentially result in some minor environmental impacts during the construction phase with regard to stormwater management, dust and erosion control, trees removal and pedestrian movement between the P7 Car Park and the Sports Centre. The implementation of the mitigation measures detailed in Section 8.0 of this EIS and as recommended by the various specialist reports (refer to Appendices) will serve to ameliorate or minimise these expected impacts.

It is considered that the project warrants approval, based on the following:

- it is permissible with consent in the B4 zone;
- it is a major sporting facility which is consistent with the form and nature of development to be encouraged at Sydney Olympic Park;
- the site is currently vacant and has been identified by SOPA as a development site under the terms of the Sydney Olympic Park Master Plan 2030;
- the Sydney Olympic Park Authority has indicated the proposed development is an appropriate use of Site 107;
- it is consistent with the objectives of the Sydney Olympic Park Master Plan 2030 for the Southern Sports Precinct and is generally consistent with the relevant development controls set out in the Master Plan;
- the development will not have a significant impact on traffic volumes or parking demands at SOP;
- construction traffic can and will be managed through the implementation of a Construction Traffic Management Plan which will form part of the Construction Environment Management Plan to be prepared by the building contractor in accordance with SOPA's requirements;
- the environmental investigations of the site and soil conditions demonstrate that the proposed use and design of the building is within the environmental capacity of the land;
- the project has been designed to achieve sustainability targets set out in SOPA's Environmental Sustainability Guidelines;
- all infrastructure and services are available for immediate connection to the facility. A new electricity substation is required to service the development which has been sited in accordance with the requirements of Ausgrid;
- the development will not generate a significant impact on volumes of general waste or construction waste;
- the proposed development can be constructed and operated with minimal impact on major events throughout the year. Ongoing management and liaison with relevant authorities will assist with the mitigation of possible impacts; and
- the provision of a new purpose-built headquarters for Netball NSW will reinforce the sports focus of Sydney Olympic Park.

Having regard to the planning merits of the proposal described above and the associated public benefit, it is requested that the Minister approve the application.

## 7.2 Conclusion

This Environmental Impact Statement has been prepared as part of a State Significant Development Application submitted to the Department of Planning and Infrastructure for the construction of a purpose-built headquarters for Netball NSW. The works comprise:

- bulk earthworks and excavation;
- remediation of minor sub-soil contamination;
- tree removal;
- construction and use of five (5) indoor netball courts of international standard, plus one (1) Show Court with seating for some 800 spectators;
- amenities for players, officials and the public;
- café;
- medical facilities – first aid, physiotherapy, massage etc;
- ancillary storage facilities and equipment areas;
- office / administration areas for occupation by Netball NSW;
- ancillary minor events including business-oriented occasions or cultural, social or sporting-related occasions occurring on one or more days throughout the year;
- utility services connections, which necessitates redirection / relocation of existing underground services;
- associated civil and landscape works, including relocation of the entry / exit to the P7 Car Park; and
- land subdivision.

The Statement aims to provide clear and concise information to assist the Department in its assessment and ultimate determination of the application.

The proposed development will result in a new sporting facility, constructed to satisfy international competition standards which will make a positive contribution to the Southern Sports Precinct and the wider Sydney Olympic Park.

The proposal is consistent with the NSW State Plan 2010 and the Sydney Metropolitan Strategy 2036 by allowing a purpose-built, international standard sporting facility within an area that is well serviced by existing infrastructure and within a designated Specialised Centre that is specifically designated to attract economic development, employment opportunities and sporting facilities.

The relevant environmental and legislative requirements, applicable to the site and proposed development have been documented and illustrate a generally compliant development.

On this basis, it is considered that the proposed development is worthy of favourable consideration by the Department of Planning and Infrastructure and should be supported.

## 8.0 Mitigation Measures

The collective measures required to mitigate the impacts associated with the proposed development are detailed in Table 8.1 below. These measures have been derived from the environmental assessment in Section 6.0 and the recommendations embodied in the Specialists Reports which are appended to the Statement.

**Table 8.1** Mitigation Measures

<p><b>Remediation</b></p> <p>The land will be remediated in accordance with the methodology and recommendations included in the Remediation Action Plan prepared by Coffey Environments Australia, a copy of which is included at <b>Appendix 10</b>.</p>						
<p><b>Sediment, Erosion and Dust Controls</b></p> <p>An Erosion and Sediment Control Plan shall be prepared, by an appropriately qualified civil engineer, and submitted to the Certifying Authority prior to the issue of a Construction Certificate. This plan should be prepared in accordance with the <i>'Managing Urban Stormwater-Soils and Construction Volume 1 (2004) by Landcom' (The Blue Book)</i>.</p>						
<p><b>BCA / Fire Statement</b></p> <p>The architectural drawings will be subject to review to enable compliance with the deemed-to-satisfy provisions of the BCA, or compliance with the relevant provision through an alternate solution.</p> <p>All works will comply with the provisions of the BCA either in terms of the deemed-to-satisfy provisions or by way of an alternate solution.</p>						
<p><b>Construction Management</b></p> <p>Prior to the commencement of construction, a Construction Environmental Management Plan (CEMP) will be prepared by the building contractor engaged to undertake the works, which will set out the methods and procedures which are to be implemented to manage construction activities to ensure that they do not lead to the generation of unacceptable levels of environmental or community disturbance for the duration of the works.</p> <p>The Plan will include:</p> <ul style="list-style-type: none"> <li>• A site specific Soil Erosion and Sediment Control Plan</li> <li>• Hours of Operation during Construction</li> <li>• Air quality / dust control procedures</li> <li>• Noise management procedures</li> <li>• Waste Management Plan for the Construction Phase</li> <li>• Storage and handling of materials procedures</li> <li>• Details of hoardings</li> <li>• Procedures to be implemented during events, including pedestrian movements, signage etc</li> <li>• Procedures associated with the management of the interface with the public domain</li> <li>• Environmental training and awareness</li> <li>• Emergency procedures</li> </ul> <p>General construction hours will be as follows:</p> <table border="0" style="margin-left: 40px;"> <tr> <td>Monday to Friday</td> <td>7.00am to 6.00pm</td> </tr> <tr> <td>Saturday</td> <td>7.00am to 1.00pm</td> </tr> <tr> <td>Sundays / Public Holidays</td> <td>Nil</td> </tr> </table> <p>Hours of work may be varied as required to minimize impacts on special events such as State of Origin, the Easter Show or other major events. It is noted that works may be undertaken outside the hours specified above in instances where:</p>	Monday to Friday	7.00am to 6.00pm	Saturday	7.00am to 1.00pm	Sundays / Public Holidays	Nil
Monday to Friday	7.00am to 6.00pm					
Saturday	7.00am to 1.00pm					
Sundays / Public Holidays	Nil					

- The delivery of materials is required outside these hours by the Police or other authorities;
- It is required in an emergency to avoid the loss of life, damage to property and / or to prevent environmental harm;
- The work is approved through the Construction Noise and Vibration Management Plan; and
- Residents likely to be affected by the works are notified of the timing and duration of these works at least 48 hours prior to the commencement of the works.

A Construction Traffic Management Plan will be prepared and submitted to SOPA for approval prior to commencement of works on site. The Plan will detail the means of controlling the flow of traffic throughout the construction phase.

The site management measures will be implemented prior to the commencement of any works associated with the construction of the built form and will be maintained throughout the works in order to maintain reasonable levels of public health, safety and amenity.

#### **Public Domain**

Any existing public domain infrastructure damaged due to construction works, will be replaced or repaired to the condition in which the infrastructure was found immediately prior to the commencement of works. The repair / replacement will be completed to the satisfaction of SOPA prior to the issue of the Occupation Certificate

#### **Tree Management**

An arborist experienced in tree retention on building sites will be engaged prior to the commencement of work on the site. The Site Arborist will be required to monitor the impact of the building works on the trees and provide quarterly reports to the PCA and the Proponent on the condition of the trees. Any recommendations in the quarterly reports relating to the protection and / or management of the trees will be implemented.

The Site Arborist will be present to supervise any excavation, trenching or tunnelling within the Primary Root Zone of any retained trees on adjoining properties. The Site Arborist will supervise the root mapping works required prior to commencement of site preparation works.

#### **Operation**

An Operational EMP will be prepared by Netball NSW and submitted to SOPA for approval. The OEMP must demonstrate that the building achieves appropriate environmental standards to no less than currently achieved by SOPA.

#### **Event Management**

Netball Central is located immediately adjacent to the Event Transport Zone and Event Traffic Zone on Olympic Boulevard (as described in SOPA's Major Event Impact Assessment Guidelines).

A Venue Operations Plan will be prepared by Netball NSW and submitted to SOPA for approval prior to an Occupation Certificate being issued, which details how Netball Central will operate when the precinct is in Major Event mode (in particular when the Major Event buses are operating).

#### **Other Approvals / Permits or Notifications**

The Proponent will seek the following approvals:

- Compliance Certificate from Sydney Water under Part 6, Division 9, Section 73 of the *Sydney Water Act 1994*;
- A Road / Asset Opening Permit from SOPA prior to carrying out any works within or upon a road, footpath, nature strip or in any public place in accordance with section 138 of the *Roads Act 1993*;
- All necessary permits required for the use of mobile cranes on or surrounding the site; and
- RMS will be notified of the truck route(s) to be followed by vehicles transporting waste material from the site.