

Queenwood Oxford Falls Sporting Precinct

SSDA Architectural Design Report

1100 Oxford Falls Road

Rev B, 14/10/25

Prepared for:
Queenwood School for Girls
October 2025



Acknowledgment of Country



We acknowledge that the proposed Queenwood Sporting Precinct in Oxford Falls is located on the land of the Garigal or Caregal peoples who have a continuing connection to the land, water and sky.

We pay our respects to the Elders and the knowledge holders - past, present and emerging and express our gratitude for sharing of knowledge and culture.

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01 Introduction

1.1 INTRODUCTION

This Architectural Design Report for the **Oxford Falls Sporting Precinct** has been prepared for Queenwood School for Girls (Queenwood) by TKD Architects; and has been prepared in support of a State Significant Development Application (SSDA) - SSD-73688210.

1.2 DESIGN REPORT

This Architectural Design Report has been prepared to describe the Design Process and Design Response for the Oxford Falls Sporting Precinct and includes the following:

- Description of the Site
- Connecting with Country
- Site Analysis
- Project Brief
- Site Planning
- Design Options
- Design Proposal
- Design Details
- Response to Northern Beaches Council Comments
- Response to DPHI and Government Architect NSW (GANSW) Comments

02 Project Background

2.1 PROJECT BACKGROUND

Queenwood School for Girls (Queenwood) is a multi-campus independent non-denominational Christian Primary and Secondary school for girls, located in the suburb of Mosman on the Lower North Shore of Sydney.

The school was established in 1925 and currently caters for approximately 900 students from Kindergarten to Year 12.

Queenwood currently do not have their own outdoor sports fields or indoor sports courts, and are required to lease facilities from external providers so that their students can train and compete in various sports. This arrangement reduces flexibility, limits the availability of these facilities year round and represents a significant ongoing cost for the school.

Opportunities to develop large scale sporting facilities in proximity to the school's existing campuses in Mosman are extremely limited and not practical or feasible.

The school currently lease tennis facilities at the nearby Oxford Falls Raquet Club and are very familiar with this locality and the local community.

In 2024, the school commenced investigations into the purchase of land for the purpose of owning and developing their own permanent sport and recreational facilities.

The site at 1100 Oxford Falls came up for sale and following a detailed Feasibility Study the school decided to purchase the land in July 2024.

2.2 SPORT AT QUEENWOOD

Promoting life-long enjoyment of physical activity and the development of each individual's skills and talents.

Sport is an important part of a Queenwood education. Physical Education lessons are timetabled from Kindergarten to Year 10 and virtually all girls opt to participate in extra-curricular sport.

With over 15 sports offered, Queenwood students have the widest opportunity to learn new skills, develop friendships, improve fitness and participate at representative level. Training sessions and competitions vary from sport to sport, with the majority of team sport played on Saturday morning.

The Queenwood ethos is one of participation and enjoyment. Queenwood have the expertise to develop athletes of all levels, and both novice and elite players can experience the intrinsic joy of movement, the satisfaction of acquiring new skills and the inspiration of team spirit. For all players, the focus is on self-improvement and realising individual potential.

Girls are encouraged to try new sports and all are given the opportunity of match play. At the elite level, Queenwood work with individuals to support them as they compete at state, national, international and even Olympic level.

In recent years, Queenwood students have competed at national and international level in sports such as Rowing, Skiing, Water Polo, Gymnastics, Equestrian and Sailing.

Queenwood compete in the following sports and Independent Girls Schools Association (IGSA) competitions:

- IGSA Basketball
- IGSA Netball
- IGSA Hockey and SIHA Indoor Hockey
- IGSA Tennis, Tildesley Shield Tennis, and Queenwood Tennis Championships
- IGSA Football (Soccer)
- IGSA Touch Football
- IGSA Athletics, IGSA Cross Country, Athletics/Cross Country Club, and Queenwood Athletics Carnival
- IGSA Waterpolo, IGSA Swimming and Diving, and Queenwood Swimming Carnival
- Interschools Snowsports, and Regionals, State and National Championship Snow Sports
- Dance
- Taekwondo
- Rowing
- Queenwood Surfing Championships

2.3 PROJECT AIMS

The project aim is to develop new permanent sport and recreation facilities for Queenwood, and enhance opportunities for students to train and compete in sports all year round.

- The facilities primary use is to meet Queenwood's sporting and recreational needs. Sporting needs include sports training, games and school-level competitions, including inter-school IGSA competition on weekends.
- The facilities may be used to accommodate secondary school functions, such as exams, professional learning, PDHPE classes such as dance and fitness, and other learning activities.
- The facilities will allow for shared community use with the local community and other neighbouring schools.

2.4 PROJECT OBJECTIVES

Critical to achieving the Project Aims is the requirement to accommodate:

- A two court multipurpose **Indoor Sports Hall** that can accommodate basketball, netball, volleyball and Futsal.
- A multipurpose **Outdoor Sports Field** for hockey, tennis and football (soccer).
- Associated shared amenities across the site.
- Car and bus parking and drop off areas.

The facilities will be used during school hours, as well as after hours and at weekends, and will accommodate changing rooms, spectator areas, canteen, store rooms, a maintenance and sports equipment storage shed. The outdoor facilities are to be provided with lighting.

The focus for the development is to provide the best multi-functional sporting facilities that can be accommodated on the site which are appropriate to school level and local community sport.

Additional facilities such as multipurpose adaptable General Learning Areas (GLA's) will also facilitate additional functional requirements including exams, professional learning, and PDHPE classes such as dance and fitness.

03 Description of the Site

3.1 SITE CONTEXT

Queenwood is a multi-campus school located in the suburb of Mosman on the Lower North Shore of Sydney, with existing campuses currently located at:

- Senior School Campus (7-12) - 47 Mandalong Road, Mosman
- Junior School Campus (K-6) - 6 Queen Street, Mosman
- Science and Sport Campus - 44 Mandalong Road, Mosman
- Art and Design Campus - Corner of Esther Road and The Esplanade

The site for the Oxford Falls Sporting Precinct is located at 1100 Oxford Falls Road and is approximately 10km north of Queenwood's Mosman Campuses.

The site has a tributary of Middle Creek that flows south to north and drains into the Narrabeen Lagoon located to the north-east of the site.



Location Plan
Source: Nearmaps with Overlay



03 Description of the Site

3.2 SITE LOCATION

The site is defined as Lot 1100 in DP 814628, and is located at the corner of Dreadnought Road and Oxford Falls Road in Oxford Falls. Oxford Falls is within the Northern Beaches Local Government Area.

Wakehurst Parkway is located directly to the west and is the major arterial road connecting the site to the north and south.

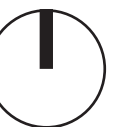
The site is in close proximity to other school and sporting facilities, including Oxford Falls Grammar School to the north, Oxford Falls Racquet Club to the south and St Pius X College Playing Fields and Oval to the west.

Oxford Falls Peace Park is a local community park located to the immediate west of the site. There are residential dwellings on large land blocks located to the east and south of the site. There is also a commercial use to the east of the site.

A large area of bushland lies to the north east of Oxford Falls Road and the site lies within a valley with higher ground to the south, east and west.



Site Plan
Source: Nearmaps with Overlay



03 Description of the Site

3.3 SITE DESCRIPTION

The site is approximately 21,403m² in area, and is 110m in length between the north and south boundaries and varies from 144m - 232m between the east and west boundaries.

The site is bounded by Dreadnought Road to the north, Oxford Falls Road to the east, detached residential properties to the south and a private driveway and Oxford Falls Peace Park to the west.

The site is divided via a south to north running watercourse which flows towards Narabeen Lagoon, a tributary of Middle Creek. The western portion of the site is currently occupied by a single detached residential property with swimming pool and tennis court. The eastern portion contains a small horse stable and small paddocks. The vegetation and ground cover on this side of the site has been degraded by horse grazing and hoove impacts.



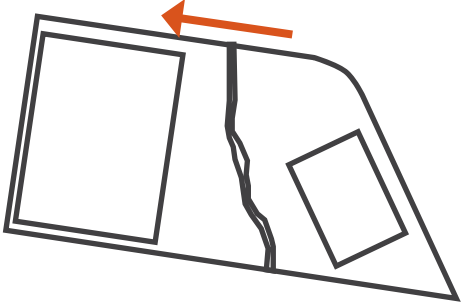
Site Plan
Source: Nearmaps with Overlay



Site Context - Dreadnought Road



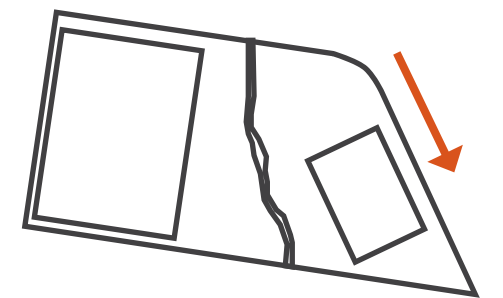
View Looking West along Dreadnought Road towards Wakehurst Parkway - Site on the Left. Oxford Falls Grammar on the Right



Site Context - Oxford Falls Road



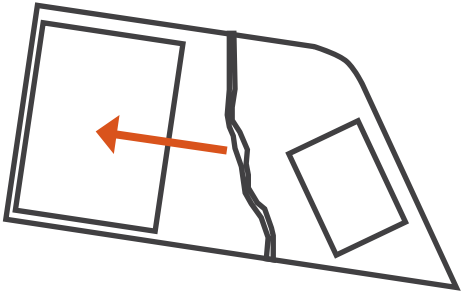
View Looking South along Oxford Falls Road - Site on the Right



Existing Site Character - Western Side



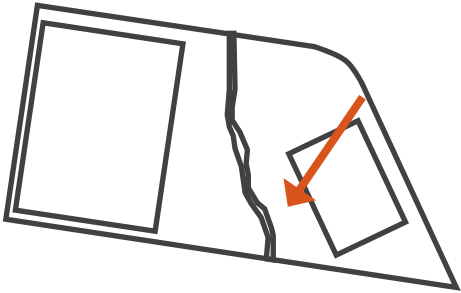
View Looking West towards the existing Residence located within Large Cleared Areas and Exotic Gardens



Existing Site Character - Eastern Side



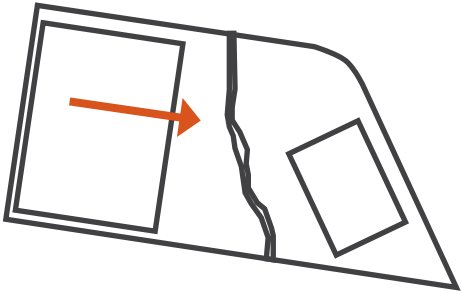
View Looking South towards the existing Watercourse through Large Cleared Areas with Largely Exotic Plants and some Remnant Native Trees



Existing Site Character - Watercourse



Watercourse overgrown with Weeds and Exotic Plant Species



04 Connecting with Country

4.1 MAKING CONNECTION

Oxford Falls is located on the traditional land of the **Garigal** or **Caregal** People.

Queenwood are committed to a developing a genuine connection and engagement with local Indigenous communities on which land this project is located. Queenwood are keen to integrate Indigenous knowledge and cultural heritage into the design and incorporating their insights into the project.

Following the purchase of the land in July 2024, the school held a **Smoking Ceremony and Welcome to Country** conducted by Uncle Laurie on 19 September 2024. Uncle Laurie is a descendent of the local Indigenous community. The ceremony acknowledged and paid respect to the traditional owners of the land and welcomed Queenwood onto the land. The ceremony was attended by the Chair of Council, the Principal, the Property Committee, the school Executive, Director of Sport, and student leaders.

On 24 June 2025, the school conducted a **Walk on Country** with Uncle Dean Kelly. Uncle Dean Kelly is a Wailwan man from Yuin Country working as a Community Liaison Officer for NSW National Parks and Wildlife Service.

The Walk on Country was very insightful and greatly informed and reinforced the overall site strategy.

Uncle Dean noted that the site is highly disturbed but retained important running water and some remnant native trees.

The main insights and strategies gathered from Uncle Dean are described on the following page.



Smoking Ceremony and Welcome to Country conducted by Uncle Laurie on 19 September 2024 following the purchase of land on 12 July 2024.



Walk on Country held with Uncle Dean Kelly on 24 June 2025.

04 Connecting with Country

4.2 INSIGHTS FROM COUNTRY

The main insights and strategies gathered from from Uncle Dean for developing the site are summarised below and integrated in to the design.

Water 'Lifeblood'

- Restoration of the watercourse and riparian corridor to improve water quality and the environment.
- Placement of buildings and structures so that they allow water to flow around them and do not restrict flood waters.

Bush and Environment

- Maximising the retention of the remnant native trees where possible.
- Elevating pedestrian access through the site above the natural features to protect the restored environment.
- Design buildings in response to the risk from bushfires from the surround bushland.
- Reuse of the native trees removed in landscape seating and the creation of aboriginal boomerangs and clapping sticks.

Sport and Exercise

- Sport and exercise is important for health and well being.
- Sporting facilities are important for the health and learning of Queenwood students but also for the wider community who would be able to share these facilities.

Gathering and Learning

- Provide facilities and opportunities on the site for gathering for sport and educational purposes.
- Providing controlled and guided access into the restored natural environment as a means for learning about the environment and idigenous culture.
- Integration of educational signage.



Bush & Environment



Water 'Lifeblood'



Sport & Exercise



Fire



Flood



Learning



People & Gathering

05 Site Analysis

5.1 SITE ASSETS AND OPPORTUNITIES

The primary main assets and opportunities provided by the site include:

Bush and Environment

Whilst the majority of the sites vegetated understorey has been cleared, there are patches of remnant native forest trees, primarily in the eastern portion of the site.

The majority of these remnant trees have been identified as representative of the following Plant Community Types (PCT): *Sydney Coastal Sandstone Gully Forest*.

The site has largely been cleared and any remnant native vegetation is highly degraded. These remnant trees provide the opportunity to be retained as much as possible, protected and rehabilitated through the planting of a new native plant understorey.

Water

The site is bisected by an unnamed Strahler 1st order stream, that flows into Middle Creek and eventually drains into the Narrabeen Lagoon to the north-east of the site.

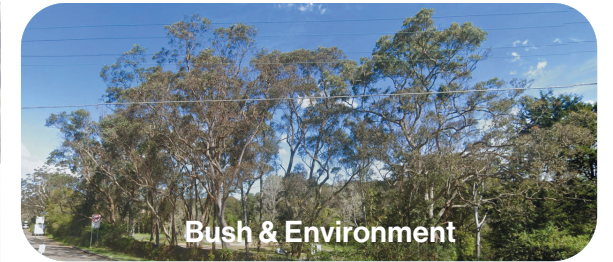
The riparian area is highly degraded and is dominated and overgrown with exotic plant species.

Water is considered a 'lifeblood' for all living things and was identified as a key element from the Walk on Country.

There as a significant opportunity to remove the existing plant species and restore / rehabilitate the existing watercourse and riparian corridor, through the planting of a new native plant understorey.

Sport and Exercise

A significant feature of the site is that it contains large cleared areas that are of a sufficient size to accommodate the requirements of an outdoor sports playing field and an indoor sports hall, without significant impacts to the sites natural features.



Bush & Environment

A Opportunity to Protect and Rehabilitate the Remnant Native Forest



Water 'Lifeblood'

B Opportunity to Rehabilitate the Watercourse and Riparian Corridor



Sport & Exercise

C Large Site Size is able to Accommodate Sporting Facilities

05 Site Analysis

5.2 SITE CONSTRAINTS

The primary constraints affecting the site include:

Flooding

The site is bisected by an unnamed Strahler 1st order stream that is subject to flooding when heavy rainfall occurs within a 144 ha catchment to the south of the site.

The site has been modelled to determine the extent of flooding, with the majority of flooding confined to the centre of the site during a 1 in 100 year flood event. The site is also subject to overland flow flooding to the east of the site across Oxford Falls Road from a 5 ha catchment.

Bushfire

The site is identified as Bushfire Prone Land and is surrounded by Category 1 vegetation, primarily to the north-east and south-west, being comprised of heaths and dry sclerophyll forests.

The bushfire consultant has determined that a rating of BAL 12.5 shall apply to the site subject to the vegetation and fire loads on the site being managed.

Vegetated Riparian Zone

A Vegetated Riparian Zone (RPZ) is required to be maintained and kept clear within 10m from the top of bank.

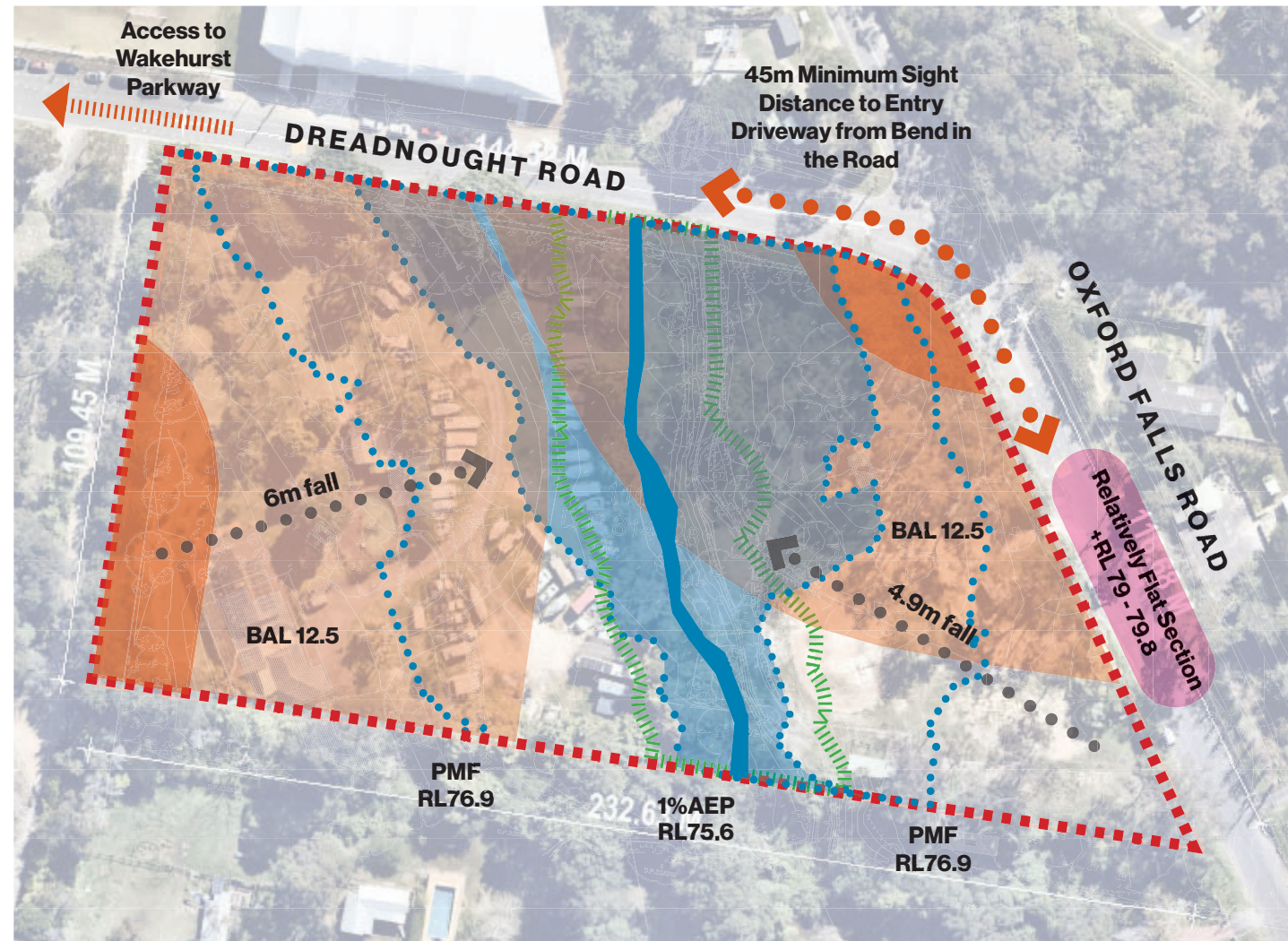
Traffic

The site is located in proximity to the Wakehurst Parkway, which is a major north-south arterial link between the Northern Beaches and the lower North Shore.

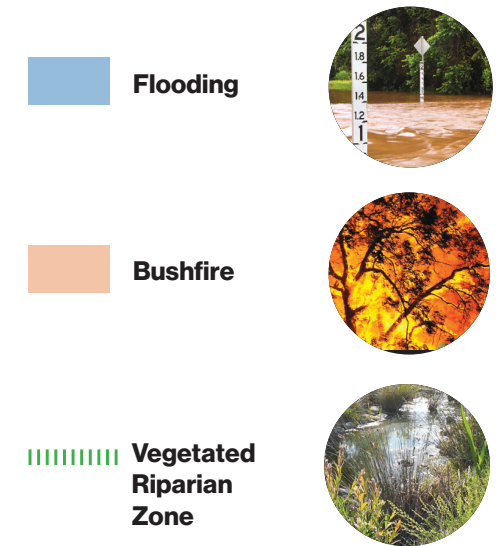
Both Dreadnought Road and Oxford Falls Road are local roads with a 50km/hr speed limit and 40km/hr school zone speed limit to the frontage of Oxford Falls Grammar School. Both roads carry one lane traffic in each direction with parking generally available on both sides of the street.

There are very few opportunities for traffic to turn around once they are on Dreadnought Road and Oxford Falls Road.

The primary vehicular access into the site should be located away from the busier Wakehurst Parkway to prevent any traffic backlog that could be caused by vehicles waiting to turn into the site. Vehicular access should also be located away from the bend in the road to maintain a minimum 45m sight line.



1%AEP = 1% Annual Exceedance Probability (1 in 100 year flood)
 PMF = Probable Maximum Flood Level (1 in 10 million year flood)



07 Site Planning

7.1 SITE PLANNING PRINCIPLES

Based on the **Site Analysis** and **Insights from Country**, the following **Site Planning Principles** were developed to guide and determine the overall site plan and configuration of buildings:

- Restore and rehabilitate the water course and **Vegetated Riparian Zone**. No development is permitted within this zone.
- Locate the **Outdoor Sports Field** on the western portion of the site, as this is the only area of land able to accommodate the sports field dimensions. This area of land also allows the sport field to be orientated in the optimum north-south orientation.
- Locate the **Indoor Sports Hall** on the remaining eastern portion of the site whilst maximising the retention of the remnant native forest. This area of the site also provides the safest and most functional area of the site for vehicles to enter and exit the site.
- Incorporate an **Elevated Pedestrian Walkway** to connect the two main facilities whilst protecting the restored water course, Vegetated Riparian Zone and remnant native forest. The pedestrian walkway will also facilitate the efficient and timely movement of people on and off of the site and between the facilities.



08 Design Options

8.1 DESIGN OPTIONS

Given the constraints on the site there was only limited opportunities to develop alternative design options for the **Indoor Sports Hall** on the eastern portion of the site. 4 x main options were developed in order to determine the optimum design solution for the site:

All of the options were required to not maintain a 10m wide Vegetated Riparian Zone (VRZ).

Option 1

Option 1 orientates the indoor sports courts so that they are side-by-side.

Option 2

Option 2 orientates the sports courts so that they are end-to-end. This option results in a much larger street frontage facing Oxford Falls Road and a significant reduction in the number of remnant forest trees that can be retained. Due to the shape of the water course and VRZ, this option does not allow the building to be set back any further than Option 1.

Option 3

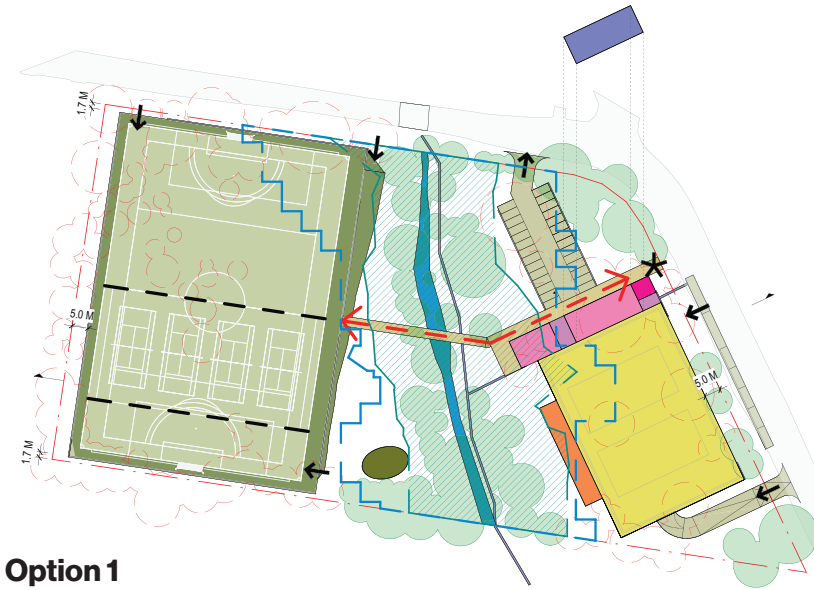
Option 3 rotates the sports courts so that they are at 90 degrees to each other. Similar to Option 2, this option results in a larger street frontage facing Oxford Falls Road and a sizeable reduction in the number of remnant forest trees that can be retained. The orientation of the sport courts is also not preferred as it is less operationally functional and results in reduced surveillance of occupants on the courts.

Option 4

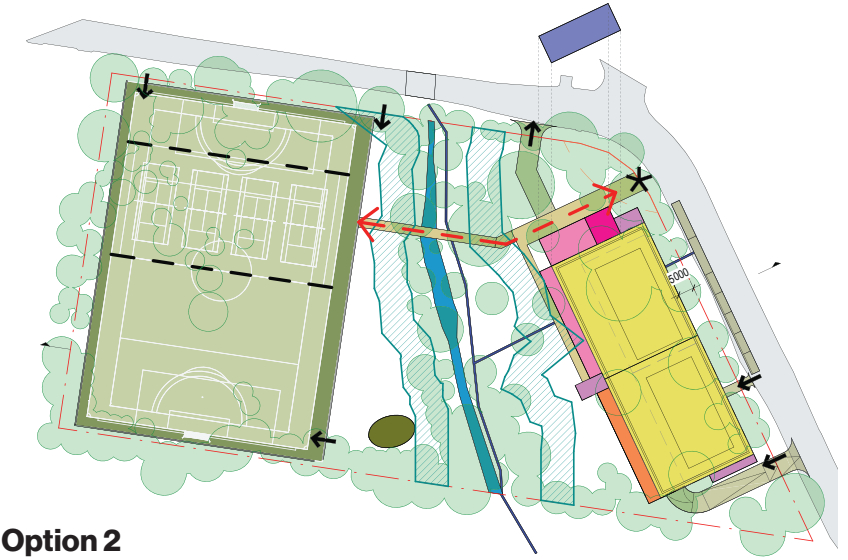
Option 4 locates the sport courts on top of each other in a two-storey configuration. This option results in a smaller building footprint but in an unacceptably high and visible building.

Option 1 for the **Indoor Sports Hall** was selected as the optimum design solution for the site for the following reasons:

- It maintains the 10m wide Vegetated Riparian Zone.
- It maximise the retention of the Remnant Native Forest.
- It results in the smallest street frontage facing Oxford Falls Road.
- It provides the most compact and functional layout. The orientation of the sports courts provides the most functional and flexible layout and maximises surveillance and supervision of occupants on the courts.



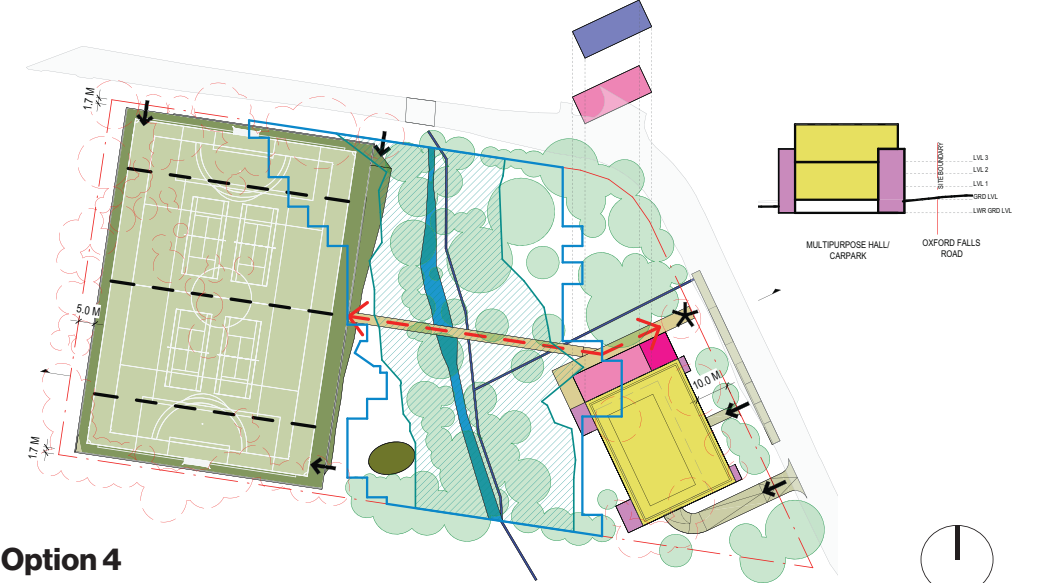
Option 1



Option 2



Option 3



Option 4

09 Design Proposal

9.1 KEY DESIGN CONCEPTS

The final design proposal has been carefully considered through a thorough **Site Analysis**, the development of **Site Planning Principles**, and the consideration of alternative **Design Options** for the site.

The design proposal is based upon the following Key Design Concepts:

Protect and Rehabilitate the Watercourse and Riparian Corridor

The design proposal allows for the protection and rehabilitation of the watercourse and riparian corridor. The existing exotic plant species and weeds that have overgrown the existing watercourse will be removed and replaced with native plant species that will act to stabilise the ground and restore the watercourse back to its natural condition.

A 10m wide Vegetated Riparian Zone (VRZ) has been established and Outdoor Sports Field and Indoor Sports Hall have been located outside of this zone. The elevated pedestrian bridge connecting the facilities will span across this area to ensure that the VRZ is protected from pedestrian traffic.

Protect and Rehabilitate the Remnant Native Forest

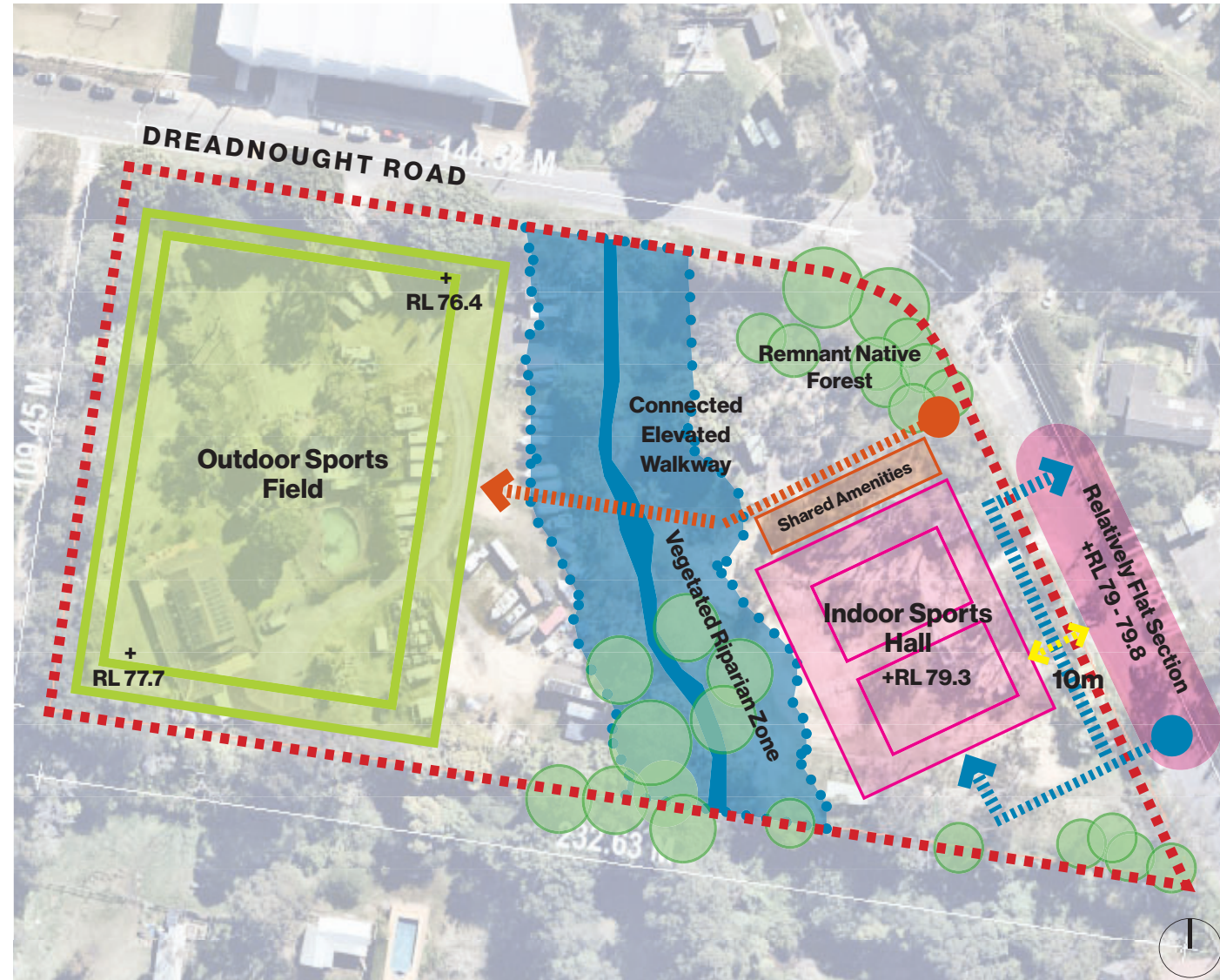
The design proposal retains as many of the remnant native forest trees as possible. A number of options were considered for the shape and form of the Indoor Sports Hall and the selected design maximises the retention of these trees compared to other layouts.

Accommodate the Required Sporting Facilities

Importantly, the site is relatively clear and is large enough to accommodate the size of the required sporting facilities.

The western portion of the site is able to accommodate a full size hockey field, soccer field and 12 x tennis courts, which are required for both the school and local sporting groups to train and host competitions in these sports.

The eastern portion of the site is able to accommodate a two court Indoor Sports Hall whilst minimising the removal of trees.



- Accommodates Full Size Hockey Field on Western Side
- Maximises Tree Retention
- Rehabilitates the Riparian Corridor
- Compact Layout
- Maximises Student Supervision
- Reduces Street Frontage



Bush & Environment



Water 'Lifeblood'



Sport & Exercise

10 Design Details

10.1 SITE ACCESS AND VEHICULAR MOVEMENT

Outside of school hours, the primary mode of transport to the site will be by private car, whilst private buses will generally be used by the school to ferry students to the site during school hours. At present, the nearest public bus stop is approximately 1.5km to the south (30minute walk).

The primary vehicular access into the site is provided in the south eastern corner of the site, which allows cars to enter the site away from the busier intersection at Wakehurst Parkway, away from the bend in the road (which has reduced sightlines) and locates it on the flatest area of the site.

Upon entering the site, cars are able to drive directly into a 83 x carparking space basement carpark or drop off students and participants in a Porte Cochere located parallel to Oxford Falls Road. The car parking and drop off areas have been designed to separate pedestrian routes from vehicle access and movements.

The Porte Cochere is important as it facilitates the efficient movement of participants into and off the site but it also allows for vehicles to change their direction of travel onto Oxford Falls Road. Presently there are very few safe opportunities for vehicles to turn around on Oxford Falls Road.

The following car and bus parking is proposed:

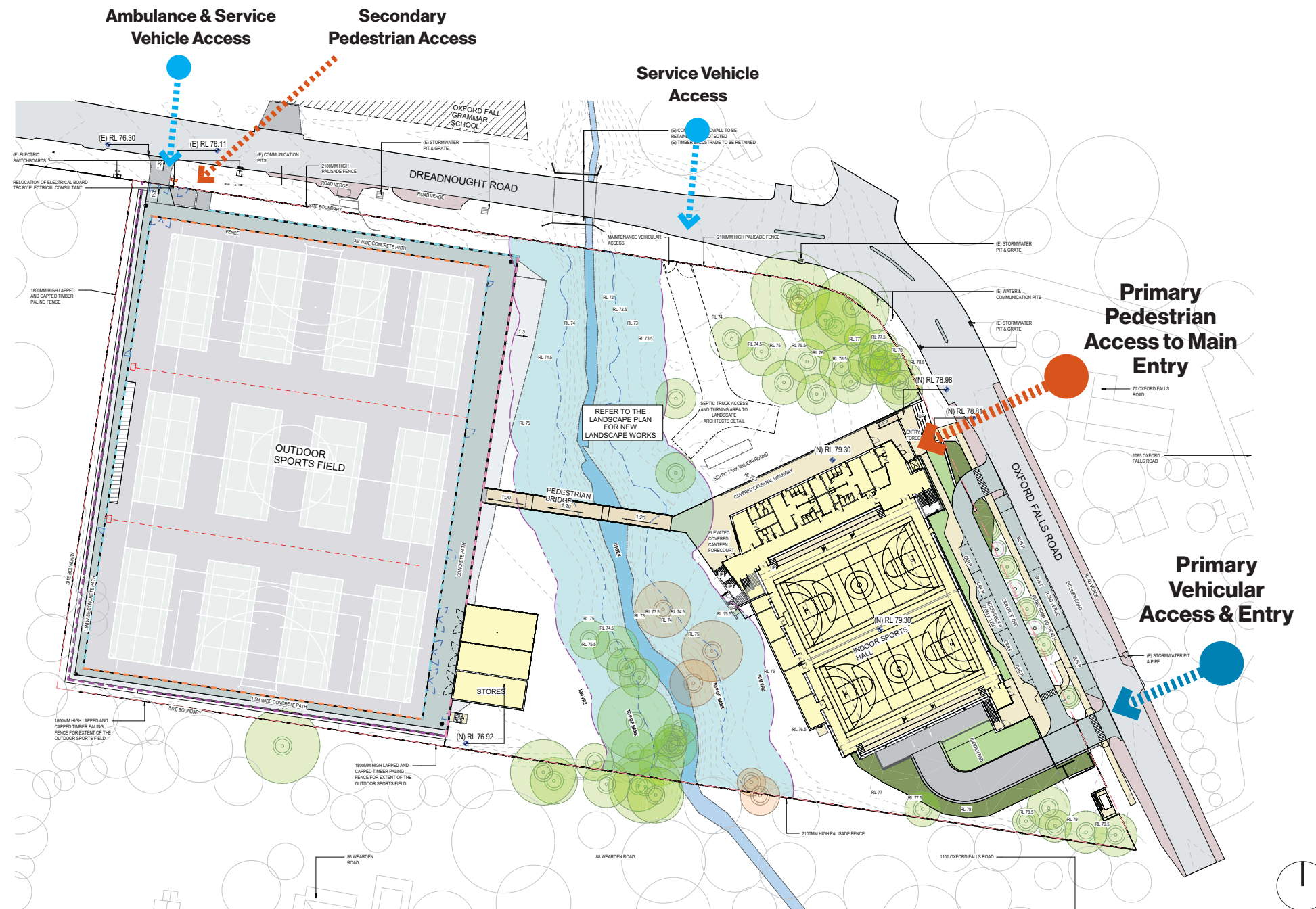
- Basement parking - 83 x carparking spaces (including 2 x accessible car spaces)
- Oxford Falls Road roadside parking - 3 x coach / bus parking spaces (which provided 6 x carparking spaces when not being used for bus)

In addition to the above, the Porte-Cochere allows pick-up and drop-off for 5 cars within the site boundary.

The basement carpark combined with the Porte Cochere have been carefully designed to facilitate the efficient movement of participants into and off the site and minimise any impacts on the surrounding road network. The basement carpark has been designed to accommodate the proposed peak carparking demand entirely within the site and does not rely on additional street side carparking, other than the proposed 3 x coach / bus parking spaces.

Additional points of vehicular access have been provided on Dreadnought Road to allow for very limited service vehicle access and ambulance access to the Outdoor Sports Field.

As the bulk of participants will be arriving by vehicle, there are expected to be very few pedestrians entering the site. Any pedestrians arriving from outside the site are able to enter the site at the main building entry on Oxford Falls Road and at a secondary entry to the Outdoor Sports Field on Dreadnought Road.



10 Design Details

10.2 INTERNAL SITE ACCESS AND PEDESTRIAN CIRCULATION

The majority of people will arrive by car and park in the basement carpark below the Indoor Sports Hall.

From the basement carpark, entry into the **Indoor Sports Hall** will primarily be through the Main Entry Lobby, located at the northern corner of the building adjacent to Oxford Falls Road. A main stair and lift will provide access to this space from the basement carpark. Main entry doors will provide access from Oxford Falls Road and the pick-up and drop-off Porte-Cochere. The Main Entry Lobby will be surveilled by the adjacent Staff Office, providing a point of control for entry into the building.

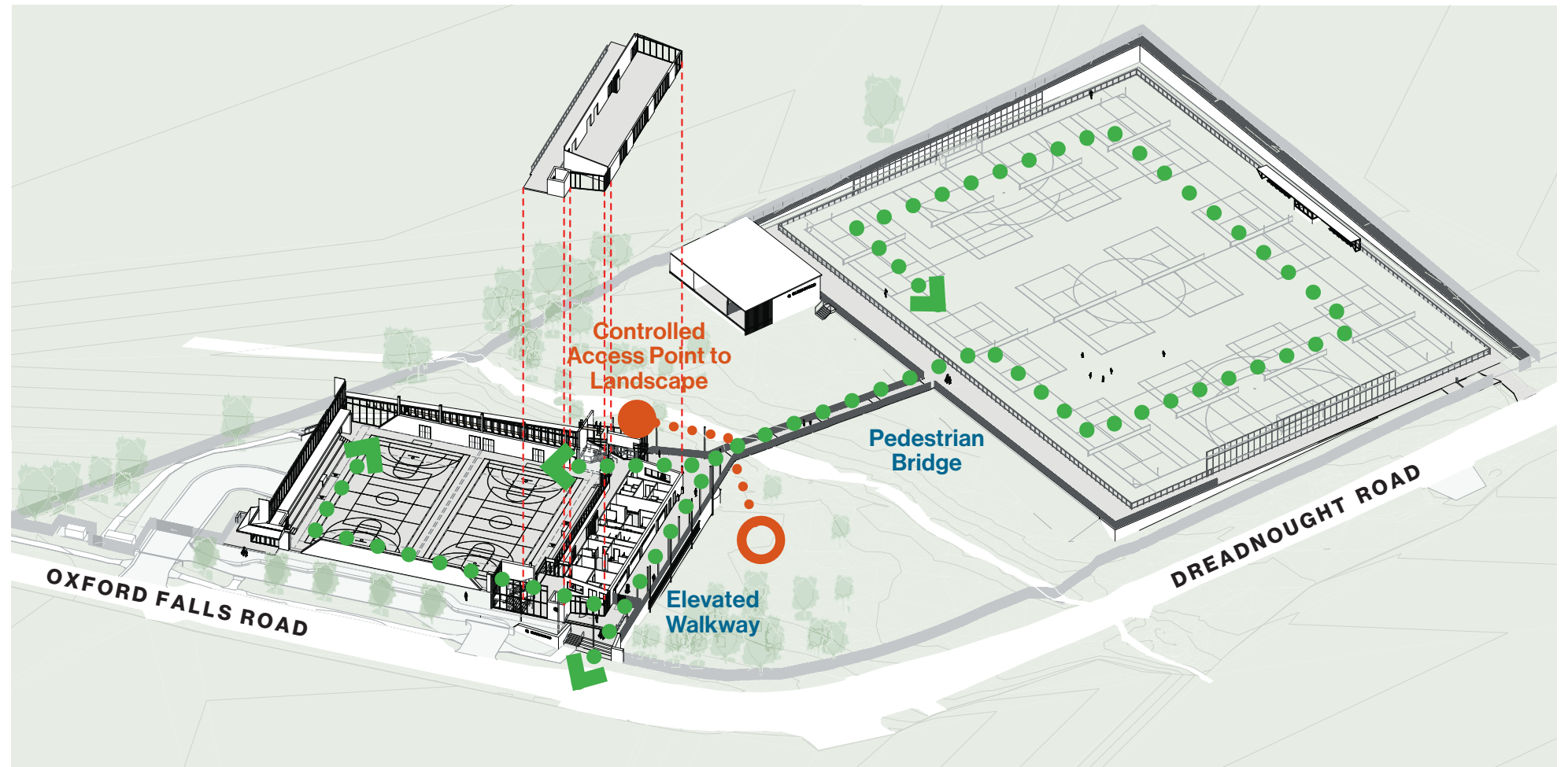
A secondary entry has been provided at the south-east corner of the Indoor Sports Hall with access from Oxford Falls Road. This entry provides external access to the southern side of the sports hall, particularly if the sports courts are in use.

From the basement carpark, entry to the **Outdoors Sports Field** will primarily be from a main external access stair located on the western side of the Indoor Sports Hall, providing the most direct access and shortest distance to the Outdoor Sports Field. This external stair allows users of the Outdoor Sports Field to walk to the sports field without the need to enter into the Indoor Sports Hall.

The Canteen, Changerooms and Toilets have all been located at the north-west corner of the Indoor Sports Hall so that they are central to the site and are able to serve the majority of people on site. The Changerooms and Toilets will be double sided and service both the users of the Indoor Sports Hall and Outdoor Sports Field.

An elevated **Pedestrian Bridge** has been provided to provide pedestrian access between the Indoor Sport Halls and the Outdoor Sports Field. The walkway has been made 3m wide to accommodate two-way pedestrian traffic. The Pedestrian Bridge ensures that the watercourse and riparian corridor remain protected from foot traffic and allows for the efficient movement of people across site and between the sporting facilities.

The Indoor Sports Hall, Outdoor Sports Field and all connecting paths will be fully accessible and compliant with AS1428.1. Circulation paths are clear and easy to navigate and allow occupants and users to efficiently move around the site.



● ● ● ● Elevated Internal Site Access

● ● ● ● Controlled Landscape Access

10 Design Details

10.3 BULK AND SCALE

The height limit applicable to the site from the Northern Beaches LEP is 8.5m.

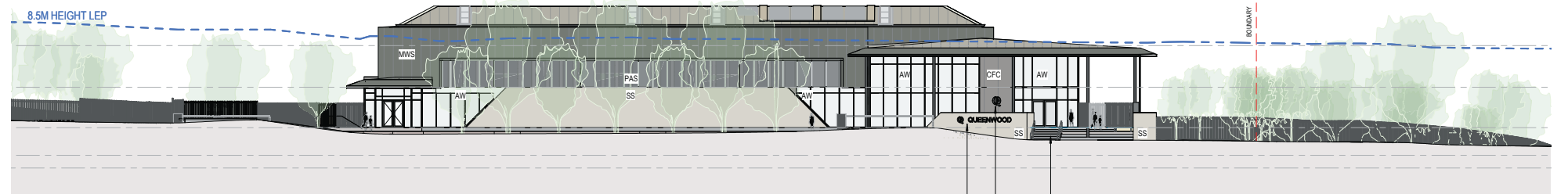
The proposed Indoor Sports Hall marginally this height limit on the Oxford Falls Road frontage.

The height of the building has been determined by the following requirements:

- The proposed indoor sports require minimum clear heights for sports competition which are mandated by the relevant sporting bodies. Basketball requires a 7m clear height and netball requires 8.3m clear height.
- The building needs to be located above the flood levels determined by the Probable Maximum Flood (PMF) level of RL 76.9.
- The ground floor level needs to be located at RL 79.3 or higher in order to ensure that flooding water coming across Oxford Falls Road from the east can be directed away and is not able to enter the building.
- The roof requires a certain depth in order to accommodate the large spanning roof structure, retractable basketball backboards, and large ceiling fans as part of the natural ventilation systems.

In order to mitigate the impact of the buildings bulk and scale, the following strategies have been incorporated into the design:

- The school has elected to provide a clear height of only 7m above the sports courts required for basketball, rather than the higher 8.3m height required for netball. This has reduced the overall building height by 1.3m.
- The basement carpark has been lowered below the PMF by 1.1m in order to lower the overall building height whilst maintaining the ability for the carpark to be naturally ventilated. The perimeter of the carpark will include 1.1m high walls and barriers to ensure protection from flood waters upto the PMF level.
- The indoor sports courts have been located side-by-side and the building orientated to minimise the extent of building frontage facing Oxford Falls Road.
- The building facade has been articulated on Oxford Falls Road using lower projecting roof forms and sunshades and quality sandstone cladding, which are located below the 8.5m height limit. The facade areas above this height are clad in dark recessive neutral colours. The overall effect is that the lower portions are expressed and articulated, and this gives the overall impression of a reduced bulk and scale.



Front elevation of the Indoor Sport Hall facing Oxford Falls Road showing the use of lowered verandahs, sunshades, and varied materials below the 8.5m height limit, with dark recessive neutral colours located above.



View of the front elevation of the Indoor Sport Hall facing Oxford Falls Road showing the use of lowered verandahs, sunshades, and varied materials to break up the extent of facade and lower the perceived bulk and scale of the building.

10 Design Details

10.4 BUILDING SETBACKS AND LANDSCAPE SETTING

The Northern Beaches LEP requires a 20m setback from the front boundary and 10m from the side.

The Indoor Sports Hall complies with the 10m side setbacks but is unable to achieve a 20m front setback due to the environmental constraints of the site.

The Indoor Sports Hall is not permitted to intrude into the 10m wide Vegetated Riparian Zone (VRZ) on the west side of the building. This means that it cannot be setback any further away from Oxford Falls Road without compromising the riparian corridor that is to be restored.

Numerous options were explored for reconfiguring the indoor sports courts and internal planning to improve the front setback (Refer to 08 DESIGN OPTIONS). Alternative options were not able to increase the street frontage setback and resulted in greater additional impacts, including much wider street frontages or increased scale, and required a far greater removal of the remnant native forest.

To ameliorate the impacts of the reduced setback directly in front of the Indoor Sports Hall, a considered landscape design has been proposed to provide appropriate screening of the building and to ensure that it sits comfortably within a landscape setting. The frontage to Oxford Falls Road will be provided with a number of large native canopy trees, that are in character with the remnant native trees being retained and protected at the north-eastern corner of the site.

The frontage to Oxford Falls Road includes a Porte Cochere for the dropping off of participants into the site. This could be removed to increase the extent of soft landscaping, however we believe that the Porte Cochere is an important element of the traffic solution for the site. It allows for the rapid and efficient dropping off and collection of participants to and from the site. It also provides the opportunity for cars to turn around within the site, as there are very limited opportunities for safely turning a vehicle around on Oxford Falls Road.

By way of context, the Indoor Sports Hall represents less than 25% of the total street frontage and the majority of the street frontage to the site will have significant setbacks and will be significantly landscaped. The significant areas of landscaping will include native trees and plants that will restore the native environment and substantially contribute to maintaining the desired character of the local area.

Taken in context with the overall site, it can be seen that the design proposal meets the intent of the 20m setback - which is to ensure that the building is located within a significant landscape setting.

Taking into consideration the environmental constraints of the site, consideration of numerous alternative planning options and the significant contribution of restored native landscaping, we believe that the reduced setback to Oxford Falls Road provides an acceptable compromise that has been mitigated through a comprehensive landscape proposal.



View looking south along Oxford Falls Road showing the landscape treatment within the front setback to the Indoor Sports Hall



View looking south from Dreadnought Road towards the north elevation of the Indoor Sports Hall showing the significant landscape setting that is being provided in character with the local area.

10 Design Details

10.5 BUILDING FORM

The form of the Indoor Sports Hall has been developed to be carefully articulated and respond to the functional requirements of the building and building users.

The building utilises covered verandahs at the building entries and around the northern changeroom and toilet amenities. These verandahs provide important weather and sun protection for users of the venue but also articulate and modulate the facade to reduce the perceived overall scale and mass of the building.

The building is further articulated using carefully placed windows and sunshading to breakdown the overall expanse of facade and provide good levels of natural light into the building.

The main entry has been signified through the use of a projecting verandah roof, large areas of glazing, a low sandstone entry wall gateway with school signage and entry stairs and ramps. The entry is welcoming and readily identifiable for people arriving at the site for the first time.

The sports courts have low level windows located towards to corners of the courts to reduce the potential impact of glare on the users of the sports courts but permits view from inside the building out into the landscape. Full height windows to the main circulation stairs, lobbies and the first floor classrooms will afford good views over the site.



View looking south from Dreadnought Road towards the north elevation of the Indoor Sports Hall showing the significant landscape setting that is being provided in character with the local area.

10 Design Details

10.6 EXTERNAL MATERIALS AND FINISHES

The proposed external materials respond to the site and incorporate a palette of earthy and neutral materials that will sit comfortably and be recessive within the natural environment.

The base of the building will be finished in an earthy face brick that relates to the colours of the site and will provide a robust and grounding finish.

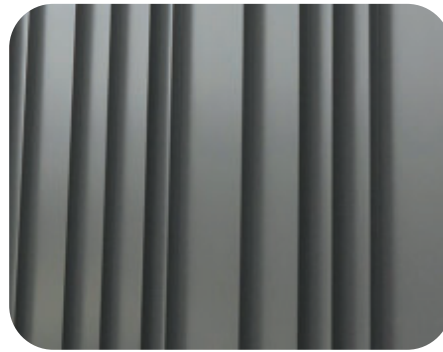
Sandstone clad walls are proposed to the lower levels of the main street facade facing Oxford Falls Road. This stone finish provides a higher level of finish adjacent to the main entry and approaching the building but also relates the finish that the school use at the main entry to all of their campuses.

Above the face brick the building is primarily clad in a neutral grey coloured fibre cement and ribbed metal wall cladding that will provide a dark and recessive backdrop to the surrounding landscape. The fibrecement will use expressed joints and the metal cladding will use expressed ribs to provide a subtle texture to these facades.

The facade areas are broken up by expanses of windows and perforated aluminium sunshade screens.

A polished concrete block is proposed to be used externally around the toilet and changes rooms to provide a harder wearing surface.

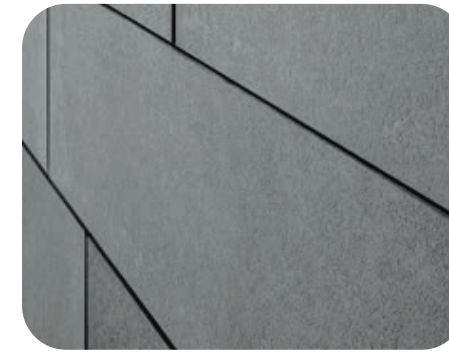
A timber grain soffit panel is proposed to the underside of the verandah roof areas. This material will provide a warmth and contrast to the neutral colour palette. Timber will also be extended internally for wall and ceiling finishes.



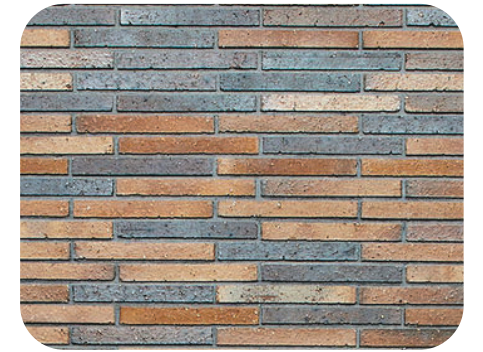
Ribbed Metal Wall Cladding in Various Widths



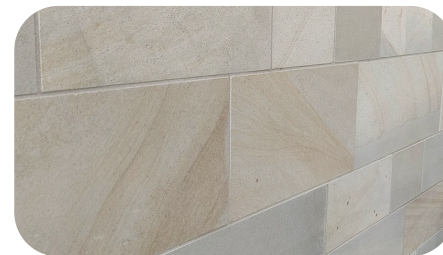
Timber Grain Aluminium Soffits



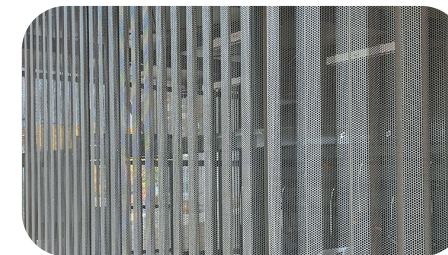
Coloured Fibre Cement Cladding with Expressed Joints



Face Brick



Smooth Face Sandstone



Perforated Aluminium Sunscreens



Polished Concrete Block

10 Design Details

10.7 AMENITY OF NEIGHBOURS

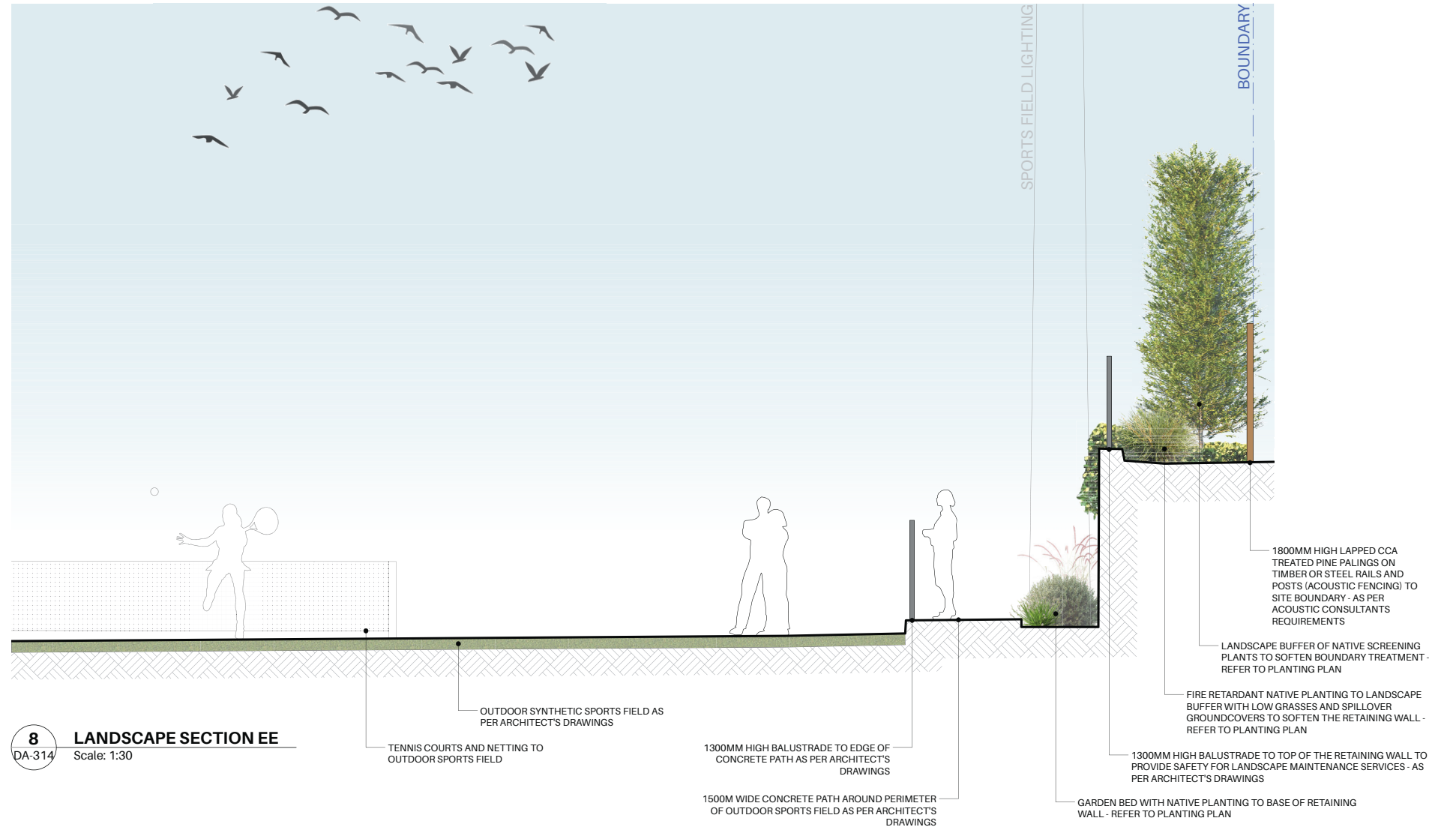
The proposed design includes a number of strategies for minimising any impacts to neighbours:

Indoor Sports Hall:

- The bulk of the activities within the Indoor Sports Hall will be contained within the building envelope, where noise can be contained and the sports activities will be screened from view.
- The proposed canteen, toilets and changerooms have been located towards the centre of the site to minimise their impacts to surrounding neighbours. These facilities are largely screened and hidden away from neighbours located along the southern boundary.
- Native trees will be planted along the eastern and southern boundaries of the site to provide screening to neighbours.

Outdoor Sports Field

- Due to the slope of the land, the Outdoor Sports Field will be sunken down at the south-west corner by approximately 3m. This sinking down provides a natural screen and acoustic barrier between the sports field and neighbours.
- The edge of the sports field is setback 5m from the southern and western boundaries.
- A 1.8m high timber lapped and capped fence will be provided along the southern and western boundaries of the sports field. This will provide a physical visual and acoustic barrier between the sports field and neighbours.
- Substantial screen planting will be grown within the 5m setback to form a 4m high screening hedge.



10 Design Details

10.8 ESD AND ENVIRONMENTAL INITIATIVES

The following environmental initiatives have been incorporated into the design:

- Design for net zero cut and fill so that no additional excavation is required to be removed or delivered to site
- Maximum retention of trees and restoration of the natural landscape in order to support biodiversity and amenity of the site
- PV Panels on the roof for power generation
- Energy efficient LED lighting
- Smart lighting sensors and controls
- Rainwater capture and reuse for toilet flushing
- Water efficient fittings and fixtures
- Energy efficient hot water heat pump
- High levels of daylighting through skylights and high-level windows
- Natural ventilation provided to the main sports hall through motorised glass louvres, assisted by HVLS ceiling fans
- High levels of thermal insulation

11 Better Placed - Design Objectives

The following table outlines how the design proposal meets the Design Objectives contained within the NSW Government Architects **Better Placed Guidelines**:

| Design Objective | Design Response |
|---|---|
| <p>Better Placed Objective 1: Better Fit</p> <p>Contextual, local and of its place</p> | <ul style="list-style-type: none"> - The proposed sporting facilities development is a much-needed addition to the existing sports facilities available at Queenwood. The proposal will provide the school community with both internal and external sport courts and training areas for various activities including basketball, tennis, hockey and netball. The proposed development will offer state of the art facilities for members of the school and the wider community. - Contextually, locating all the sports facilities in an area of Sydney, Oxford Falls where there is an agglomeration of sporting and educational facilities, is considered a suitable response, ensuring the site is suitable for the proposed educational and sporting activity uses. - The proposed built form seeks to preserve existing mature native trees where possible, rehabilitate the existing riparian corridor, and avoid overshadowing to neighbouring properties, respecting amenity of surrounding developments as well as the existing natural environment. - The materiality of the buildings was selected to be compatible with the bushfire risk associated with the site whilst ensuring the proposed design will still remain compatible with the surrounding streetscape and surrounding uses. - The building facade has been articulated on Oxford Falls Road using lower projecting roof forms and sunshades and rich sandstone cladding, which are located below the 8.5m height limit. The facade areas above this height are clad in dark recessive neutral colours. The overall effect is that the lower portions are expressed and articulated, and this gives the overall impression of a reduced bulk and scale. |
| <p>Better Placed Objective 2: Better Performance</p> <p>Sustainable, adaptable and durable</p> | <ul style="list-style-type: none"> - Solar analysis was undertaken as part of the initial investigations to inform the building's energy efficiency / comfort levels, and to ensure the solar amenity of neighbouring residents remains unaffected with no additional overshadowing. - Environmental initiatives have been integrated into the design including photovoltaic panels on the roof, energy efficient LED lighting, rainwater capturing and reuse and provision of natural ventilation to the main sports hall through motorised glass louvres assisted by ceiling fans. - The multipurpose design supports various sports and some educational activities. Durable materials such as brick, sandstone, fibre cement and metal wall cladding will ensure the building is low maintenance. - Retention of existing significant trees where possible is also sought along with embellished and replacement planting and landscaping across the site. |

| Design Objective | Design Response |
|--|---|
| <p>Better Placed Objective 3: Better for Community</p> <p>Inclusive, connected and diverse</p> | <ul style="list-style-type: none"> - The facilities are proposed to not only be used by the school but also the wider community, which will allow for greater access to facilities for Oxford Falls and wider Northern Beaches residents. - The design prioritises accessible and equitable access across the site. The Indoor Sports Hall, Outdoor Sports Field and all connecting paths will be fully accessible and compliant with AS1428.1. Circulation paths are clear and easy to navigate and will allow occupants and users to efficiently move around the site. - The proposed development seeks to diversify the number of sporting facilities that may be held on the site allowing for the facilities to be used by various sporting groups within the school as well as the wider community, seeking to address a lack of available sporting facilities within the LGA. |
| <p>Better Placed Objective 4: Better for People</p> <p>Safe, comfortable and liveable</p> | <ul style="list-style-type: none"> - The arrangement of floor and basement levels across the sports precinct has enabled the separation between vehicles and students / pedestrians. - The proposed positioning of the access gate away from vehicle access to the site will increase safety for pedestrians using the Oxford Falls public footpath and improve safety between vehicle users accessing the driveway which has been located to the south of the site. - The design has considered the building orientation and facade treatments to maximise the benefits of natural ventilation and natural light on user wellbeing and comfort. The proposed external materials respond to the site and incorporate a palette of earthy and neutral materials that will sit comfortably and be recessive within the natural environment. - A suitable amount of transparency throughout the precinct and building planning has been provided allowing for active and passive surveillance. The outdoor courts have a high degree of visibility from the bridge and viewing areas. CPTED principles are applied to the basement carpark in the consideration of secure entry points, multiple egress points, safe levels of lighting, minimising blind spots and mechanical surveillance. |
| <p>Better Placed Objective 5: Better Working</p> <p>Functional, efficient and fit for purpose</p> | <ul style="list-style-type: none"> - The proposed development has been determined in consultation with the school community. Given the school currently has a limited number of spaces to hold regular sporting trainings and events, a weatherproof and purpose-built sports facility will provide a functional space anticipated to be highly valued by the school community in addition to the outdoor courts. - The size of the sports centre and outdoor courts has been deliberately designed to accommodate internationally recognised basketball and hockey field sizes. The multi-purpose approach results in an adaptable and highly functional venue supporting a multitude of activities. |

11 Better Placed - Design Objectives

| Design Objective | Design Response |
|--|--|
| <p>Better Placed Objective 6: Better Value</p> <p>Creating and adding value</p> | <ul style="list-style-type: none"> - The project has sought the careful balance economical and quality considerations. Investing in well-designed and high-quality sporting spaces will increase student and staff moral as well as the practicality of access for people wanting to use a good quality sporting facilities. The large footprint and height required for a multi court sporting centre venue necessitates an economical approach to manage budget constraints and enables a multi-use environment. - The design embraces and manipulates light and air into the interiors, which is both practical for optimising sporting performance and calming when in non-sporting modes. This also reduces operational costs due to the non-reliance on artificial lighting and mechanical cooling systems. The roof of the building allows for installation of a future PV solar array and rainwater storage and reuse which further lower ongoing operational costs for the school. - The proposed development seeks to introduce a use on a previously private residential site, to a use that can be used by the Queenwood students and staff, competing school students as well as the wider community allowing the school to create a deeper sense of community whilst addressing the need for more sporting facilities within the LGA. |
| <p>Better Placed Objective 7: Better Look and Feel</p> <p>Engaging, inviting and attractive</p> | <ul style="list-style-type: none"> - The proposed building has been designed with a selection of materials that are robust, low maintenance and refined. The buildings are visible to the public most prominently from Oxford Falls Road to the east of the site. - To ameliorate the impacts of the reduced setback directly in front of the Indoor Sports Hall, a considered landscape design has been proposed to provide appropriate screening of the building and to ensure that it sits comfortably within a landscape setting. The frontage to Oxford Falls Road will be provided with a number of large native canopy trees, that are in character with the remnant native trees being retained and protected at the north-eastern corner of the site. |

12 Design Guide for Schools - Design Quality Principles

The following table outlines how the design proposal meets the Design Quality Principles contained within the NSW Government Architects **Design Guide for Schools**:

| Design Objective | Design Response |
|--|---|
| Good Design for Schools Principle 1: Responsive to Context | <ul style="list-style-type: none"> - The proposed facilities have been designed with a Country-centred approach and responds to the site conditions. Refer to 04 CONNECTING WITH COUNTRY. - The design proposal includes the removal of introduced exotic plants and weed species to be replaced with endemic native plant species and the rehabilitation of the riparian corridor. - The design proposal includes a substantial and considered landscape design that has been fully integrated into the overall design to improve amenity and to mitigate negative impacts on the streetscape and neighbouring sites. Refer to 10.4 BUILDING SETBACKS AND LANDSCAPE SETTING. - The Outdoors Sports Field and Elevated Pedestrian Walkway provide opportunities to view out from and into the site. |
| Good Design for Schools Principle 2: Sustainable, Efficient and Resilient | <ul style="list-style-type: none"> - The proposed facilities have been designed to be durable and resilient in an evolving climate. - The proposed facilities have been designed to minimise the consumption of energy, water and other natural resources and reduce waste. Refer to 10.8 ESD AND ENVIRONMENTAL INITIATIVES. - The proposed Indoor Sports Hall uses operable glass louvres to naturally ventilate the main sports court areas. - Materials have been selected that are robust, durable and low maintenance. - The facilities have been located on the site to maximise the retention of the existing native trees. |
| Good Design for Schools Principle 3: Accessible and Inclusive | <ul style="list-style-type: none"> - The proposed facilities have been designed to be welcoming, easy to navigate, accessible and inclusive for people with differing needs and abilities. - The proposed facilities have been designed so that they can be shared with the community and accommodate activities outside of school hours. |
| Good Design for Schools Principle 4: Healthy and Safe | <ul style="list-style-type: none"> - The proposed facilities will support well being through active and healthy sporting activities. - The design provides for a safe and secure facility whilst maintaining a welcoming address and accessible environment. - The facility has been designed with adequate car parking spaces, pick-up and drop-off areas and bus parking to facilitate the safe travels of students, staff and spectators to the site. - Refer to 10.1 SITE ACCESS AND VEHICULAR MOVEMENT and 10.2 INTERNAL SITE ACCESS AND PEDESTRIAN CIRCULATION for further details. |

| Design Objective | Design Response |
|--|--|
| Good Design for Schools Principle 5: Functional and Comfortable | <ul style="list-style-type: none"> - The facilities have been designed with comfortable and engaging spaces that are accessible for a wide range of formal and informal educational and community activities. The Outdoor Sports Field and Indoor Sports Hall will facilitate a wide range of formal and informal sporting and exercise activities. The Elevated Pedestrian Walkway and landscaped areas of the site will facilitate informal education activities. - The location of buildings and the sports field have been located to minimise impacts to neighbours within suitable setbacks and with acoustic and visual privacy measures incorporated. The Indoor Sports Hall will not overshadow any neighbours. The main pedestrian activities have been located towards the centre of the site to minimise any noise disturbance and overlooking to neighbours. Refer to 10.7 AMENITY OF NEIGHBOURS. - The Indoor Sports Hall incorporates high level windows and translucent roof sheeting to provide high level of natural light. Operable glazed louvres and fans will promote natural ventilation of the sports hall. |
| Good Design for Schools Principle 6: Flexible and Adaptable | <ul style="list-style-type: none"> - The design for the Outdoor Sport Field has been sized to accommodate a wide range of sports, including soccer, hockey and tennis. This large open outdoor space provides flexibility in being able to accommodate most types of outdoor sporting and exercise activities. - The design for the Indoor Sports Hall incorporates two indoor sports courts side by side and can accommodate netball, basketball, Futsal, Volleyball and many other indoor sports and activities. This large space will allow for multiple functions and uses. - The Indoor Sport Hall incorporates a number of learning spaces, which are separated by operable walls, allowing these spaces to be adapted and serve multiple uses. - The design incorporates a number of environmental initiatives to minimise environmental impacts. Refer to 10.8 ESD AND ENVIRONMENTAL INITIATIVES. |
| Good Design for Schools Principle 7: Visually Appealing | <ul style="list-style-type: none"> - The building and landscape setting will be aesthetically pleasing through the considered use of building form and materials. - The Indoor Sports Hall will have a positive impact on the streetscape amenity and the quality and character of the neighbourhood. A considered landscape design has been proposed to provide appropriate screening of the building and to ensure that it sits comfortably within a landscape setting. The frontage to Oxford Falls Road will be provided with a number of large native canopy trees, that are in character with the remnant native trees being retained and protected at the north-eastern corner of the site. - Refer to 10.4 BUILDING SETBACKS AND LANDSCAPE SETTING, 10.5 BUILDING FORM and 10.6 EXTERNAL MATERIALS AND FINISHES for further details. |

13 Response to Northern Beaches Council Comments

Queenwood School meet with representatives of Northern Beaches Council on 26 June 2025 to present the design proposal and obtain any feedback and comments. The following table lists all of the comments provided and describes how each comment has been considered and responded too as the design has further developed.

| Northern Beaches Council Comments | Response to Comments |
|--|---|
| I would like to reiterate the concerns raise during the meeting primarily around the front setbacks to Oxford Falls Valley Rd and the potential for visual impact from the illuminated fields to adjoining properties. | Refer to comments below. |
| The LEP requires a 20m front setback which the illustrated plans indicated only a 10 metre setback, of which the majority was taken up with a pick up and drop off internal road and parking. The position, length and height of the indoor sports building within front setbacks would not, in the presented form be consistent with the DFC. The development standards calls for the setback to be densely landscaped free of any car parking, other than driveways, letter boxes and fences. The drop off and pick up internal road and parking does not meet the intention of the control as a driveways as it juxtaposes the expectation for the setback to be densely landscape, whilst maintaining a vehicular access through the front setback into the property. This needs to be carefully considered and addressed. | Refer to 10.4 BUILDING SETBACKS AND LANDSCAPE SETTING.. |

| Northern Beaches Council Comments | Response to Comments |
|---|--|
| The outdoor playing field in close proximity to side and rear boundaries and whilst light spill can be readily contained and demonstrated, the visual impact of the light glare needs to be considered on the amenity of adjoining residential properties. Obviously detailed site analysis has been undertaken of surrounding properties and more detailed plans will be presented with the application regarding setbacks and ameliorative measures to protect the amenity of the residential dwellings.. | <p>By way of context, the closest residences to the sports field are located to the south and are located on large 1.2 ha lots where the main residences are located between 40m and 60m from the sports field boundary. There are existing mature trees located along the southern separating boundary that range in height from 12m to 18m.</p> <p>The Outdoor Sports Field edge has been setback 5m from the southern and western boundaries, which allows the edge of the sports field to be generously landscaped and planted out with 4m high screening shrubs. In addition, the sports field is setdown approximately 3m below the existing ground level in the south-west corner and the perimeter will be screened by a 1.8m high lapped and capped timber fence, serving as an additional acoustic and privacy barrier.</p> <p>The landscape architect has confirmed that any additional setback is not likely to afford any genuine additional screening and will start to impact landscape screening and setbacks on Dreadnought Road.</p> <p>Refer to 10.8 AMENITY OF NEIGHBOURS for additional details.</p> <p><i>Response from Lighting Consultant:</i></p> <p>The external lighting for the sports field is provided by pole mounted LED lights located at each corner of the field at a height of 22m. The current design uses asymmetric floodlights with factory-fitted optics designed to direct light toward the playing surface while sharply cutting off above the horizontal plane.</p> <p>Deliberation and calculations have been undertaken in regard to the chosen luminaires and their positioning to achieve compliance with obtrusive lighting standards. Obtrusive lighting assessments have been completed and confirm compliance with the non-curfew A3 (medium district brightness) category.</p> <p>The proposed design has been assessed against AS 4282:2019 – Control of the Obtrusive Effects of Outdoor Lighting, which governs compliance for light spill (horizontal and vertical illuminance) and direct glare (luminaire intensity and viewing angles) as experienced from nearby residential properties.</p> <p>All luminaires have been selected and aimed to ensure:</p> <ul style="list-style-type: none"> - Maximum vertical illuminance at the southern boundary is within the prescribed residential limits (typically ≤ 10 lux pre-curfew and ≤ 2 lux post-curfew). - Direct glare control complies by maintaining the luminaire intensity below threshold levels defined by the standard's Table 2.2 for residential zones. <p>These compliance outcomes are described in the lighting report and photometric calculations.</p> <p>Given the extensive landscape screening, tree cover, and lowered field level (approx. 3 m below existing grade), the current configuration provides the best balance between optical performance, glare control, and neighbour amenity.</p> <p>In summary, the design satisfies the obtrusive lighting criteria of AS 4282:2019, with multiple additional passive measures - lowered field, perimeter fencing, dense vegetation - providing additional visual screening.</p> |

14 Response to DPHI and Government Architect NSW Comments

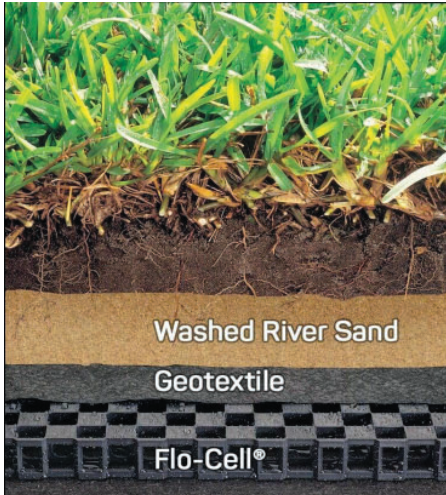
Queenwood School meet with representatives of DPHI and the Government Architect NSW on 7 August 2025 to present the design proposal and obtain any feedback and comments. The following table lists all of the comments provided and describes how each comment has been considered and responded too as the design has further developed.

| DPHI and Government Architect NSW Comments | Response to Comments |
|---|--|
| 1. The Applicant provided an outline of the vision for Queenwood, the need for the facilities and clarified some of the intended operation and management of the site – including use of the site by the school, outside of school hours, on Saturdays and for community sports. | Noted. |
| 2. The Applicant clarified that Queenwood has a history of leasing/using sporting facilities in Oxford Falls, despite the distance from the main school campus, and provided commentary around how students would get to and from the site. | Noted. |
| 3. The Applicant's architects from TKD and Inspired Exteriors gave a detailed presentation on the proposal and design development, including the different options considered and how the numerous site constraints had been considered in the design, siting of buildings, site functionality and landscaping. | Noted. |
| 4. The Department discussed and highlighted planning matters for consideration as design development continues, including: | |
| a. The bushfire management to be well explained and considered in any consultant report and the final design, particularly the decision to not manage vegetation on the site as an Inner Protection Area. | <p><i>Response from Bushfire Consultant:</i></p> <p>The condition of vegetation both upstream and downstream does not constitute a bushfire threat by virtue of the fact that not enough vegetation is present to meet the minimum requirements of Planning for Bushfire Protection 2019 (PBP) to be considered a hazard. To the north, the riparian corridor travels under Dreadnought Road through piping and to the south, the vegetation runs through adjoining properties through a concrete drain and managed lawn gutter.</p> <p>In effect, a "fire run" is not provided through the riparian vegetation and the required weed removal and ongoing vegetation management should be enough to ensure that the vegetation onsite does not need to be managed as an inner protection area.</p> <p>The construction of the Indoor Sports Hall and required fire protection measures (sprinklers, fire hose reels, etc) will provide a level of compliance, significantly beyond the basic construction of BAL-12.5.</p> <p>Refer to the Bushfire Report for further details and information on the management of the site for bushfire.</p> |
| b. The flooding affection to be well considered, ensuring that development conforms to flood planning requirements and that structures will not adversely impact flood behaviour, noting that the outdoor courts and some other structures may be within the PMF and/or 1% AEP flood areas. | <p>The Indoor Sports Hall and Outdoor Sports Field have been located away from the watercourse so as not to adversely impact flood behaviour. The basement carpark incorporates a solid barrier up to the PMF level of RL 76.9 so that floodwater is prevented from entering the carpark.</p> <p>Refer to the Flood Report for details.</p> |

| DPHI and Government Architect NSW Comments | Response to Comments |
|---|--|
| c. Biodiversity impacts to be well considered, ensuring that those areas of remnant bushland are adequately conserved or offset, noting that the proposal appears to include substantial tree removal and any potential conflict with bushfire requirements (such as any need to maintain APZs) would significantly impact biodiversity and the design and siting of buildings. | <p>The Indoor Sports Hall has been located to minimise the removal of remnant native forest. A number of alternative options were explored for the building layout and the design proposal allows for the least removal of the remnant native forest trees over other options considered.</p> <p><i>Response from Ecologist:</i></p> <p>Biodiversity values within the site, are considerably low, with vegetation existing in a Highly Degraded condition and no record of threatened species. Implementation of the avoid and minimise principles have primarily restricted impacts to cleared areas, planted vegetation and non-native vegetation. Minimisation of direct impacts has been applied within the riparian corridor to ensure connectivity of habitat through and outside the site.</p> |
| d. Any public domain works, including the extent of the works, to Oxford Falls Road (and other frontages) be discussed with Northern Beaches Council and conform to Council's design requirements, noting that the existing public domain has limited infrastructure and it is envisaged upgrades will be needed to facilitate the proposal. | Queenwood School met with Northern Beaches Council on 28 August 2025 to discuss the proposed public domain works. Council agreed to review the public domain further and come back with any comments. |
| e. Vehicle access to the site and the provision of bus parking within the public domain also be discussed with Council, noting that should bus parking outside the site not be suitable it will need to be provided on site. | Council agreed to review the public domain further and come back with any comments. |
| f. The accessibility arrangements, including the location of sanitary and other communal facilities to be well documented in any consultant report to demonstrate compliance with the relevant NCC standards and equitable access, noting the bridge access, the lack of facilities at the outdoor court and travel distances across the site. | The changeroom and toilet amenities have been purposely consolidated and designed so that they can be shared across the site and are accessible by both users of the Indoor Sports Hall and Outdoor SportsField. All sanitary and communal facilities comply with the NCC and all connecting paths will be fully accessible and compliant with AS1428.1. |
| 5. The Department acknowledged that the site was highly constrained and while it was clear that the affectations had been well considered by the design, given the specific needs of Queenwood and limited scope for design changes, it is strongly advised that all constraints are very well documented and suitable mitigations are proposed. | The constraints of the site have been described in 5.2 SITE CONSTRAINTS and have been well documented in the the specialist consultant reports. |
| 6. The Applicant acknowledged these matters and reiterated a strong focus on designing to the site constraints, noting that consultants have already been approached on most of the above matters. | Noted. |
| 7. The Department discussed and provided some feedback on architectural and design matters for consideration, including: | |
| a. Tree canopy cover for the site should aim for a minimum of 35%, consistent with the target for public schools and given the strong natural setting of the site, noting the proposal includes removal of many existing trees. | <p><i>Response from Landscape Architect:</i></p> <p>A total of 241 new native trees are proposed across the site, resulting in a projected canopy cover of 31.9%. While the Government Architect encouraged a target of 35%, the agreed outcome of 31.9% has been developed in consultation with the project's Bushfire Consultant. This balance reflects the need to achieve strong ecological and canopy outcomes while maintaining Asset Protection Zones (APZs) and ensuring bushfire safety.</p> |

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| <p>b. The north-eastern corner of the site for conservation and regeneration of natural bushland is positive and should be expanded on as a designing with Country opportunity.</p> | <p><i>Response from Landscape Architect:</i></p> <p>The north-east corner of the site has been recognised as an important area for bushland regeneration and a clear opportunity to embed Designing with Country principles. The design strengthens this outcome by retaining significant remnant trees, undertaking weed removal, and introducing understorey planting to build ecological resilience. Additional biodiversity opportunities are also proposed, including the installation of habitat structures such as nest boxes within retained trees, and the creation of micro-habitats supported by the dry riverbed feature in the overland flow swale.</p> <p>In response to the GA's suggestion, and with Queenwood's agreement, the previously proposed education space has been removed from this sensitive area. The Connection to Country elements have instead been relocated to the front setback and entry sequence, where they are more accessible and visible to visitors. Reclaimed timber from removed trees will be repurposed as a series of timber pillars at the entry, providing a strong cultural and landscape feature that continues the story of Country in a prominent and meaningful location.</p> |
| <p>c. The Y-shaped fire truck turning circle within the north-eastern corner degrades the strong landscape character and should be relocated or incorporated within other hardstand areas proposed from Oxford Falls Road.</p> | <p>For clarity, the Y-shaped turning area is required for trucks to pump out the proposed septic tank. The site and surrounding area is not serviced by a sewerage system.</p> <p>The septic tank is required to be located in the vicinity of the proposed toilets and on the low side for gravity function. Various alternative locations for locating and accessing the septic tank were explored but have all proven technically not feasible.</p> <p>One option explored was to run a pipe from the septic tank to either the site boundary or the porte cochere to provide a remote suction point. Unlike a grease arrestor, the septic tank contents include heavier solids and effluent and do not make this option technically possible.</p> |

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| <p>d. Should relocation or a redesign of the fire truck access not be possible to meet the NCC requirements, the options explored should be well documented and explain why relocation cannot be achieved, and the Y-shaped area should be better integrated into the landscaping.</p> | <p><i>Response from Landscape Architect:</i></p> <p>The Y-shaped turning circle in the north-east corner has been deemed a functional requirement for the site, but its design has been refined to reduce visual impact on the surrounding landscape. The use of a permeable material (Atlantis Turf Cell) allows the surface to function as required for vehicle access while also being integrated into the broader planting strategy. The area will be mass planted/seeded with native grasses, allowing it to blend with the adjacent landscape treatments and enhancing the bushfire buffer for this part of the site. This approach ensures the turning area remains functional while minimising its effect on the landscape character.</p>  |
| <p>e. The synthetic surface of the outdoor court is not the preferred from a sustainability, landscaping and permeability perspective, but it is understood it is required to facilitate hockey and other sports.</p> | <p>The synthetic surface is a requirement for hockey and tennis. The synthetic surface is also required for all weather use and for the longevity of the sporting surface.</p> |

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| f. The setbacks around the outdoor court are minimal, close to neighbouring properties and have limited space for spectators and other facilities, opportunities to increase these setbacks should be explored, however it is understood the size of the court is driven by a standard size for hockey fields. The setback zones should be designed to maximise planting opportunities and reduce impact on residential neighbours. | <p>By way of context, the closest residences to the sports field are located to the south and are located on large 1.2 ha lots where the main residences are located between 40m and 60m from the sports field boundary. There are existing mature trees located along the southern boundary that range in height from 12m to 18m.</p> <p>The Outdoor Sports Field edge has been setback 5m from the southern and western boundaries, which allows the edge of the sports field to be generously landscaped and planted out with 4m high screening shrubs. In addition, the sports field is set down approximately 3m below the existing ground level in the south-west corner and the perimeter will be screened by a 1.8m high lapped and capped timber fence, serving as an additional acoustic and privacy barrier.</p> <p>The landscape architect has confirmed that any additional setback is not likely to afford any genuine additional screening and will start to impact landscape screening and setbacks on Dreadnought Road.</p> <p>A generous 5m wide area has been provided along the eastern side of the Outdoor Sports Field for spectator viewing, which is more than adequate to accommodate the expected number of spectators.</p> |
| g. The building envelope and design of the Indoor Sports Hall needs refinement and should reflect the character of the area and site, with consideration given to the bushland character as well as surrounding development. Consideration should be given to the play of light and shadows on the facades of the building from the surrounding trees. | <p>The building envelope has been refined and developed to site comfortably and recessively within a bushland setting.</p> <p>The facade uses earthy and recessive neutral colours to sit as a backdrop to the surrounding trees and natural environment. The play of light and shadows from the surrounding trees onto the facade will further reinforce the trees and natural environment as the primary site feature, with the building sitting comfortably within a bushland setting.</p> <p>Refer to 10.5 BUILDING FORM for additional details.</p> |
| h. The materials palette should continue to be developed and be natural (where possible) and reference the natural features of the site, noting the mottled face brick as a positive choice that references natural tones. Consideration should be given to alternatives to the timber-look aluminium. | <p>The materials palette has been developed in reference to the natural features and colours of the site. Refer to 10.6 EXTERNAL MATERIALS & FINISHES for details.</p> <p>The underside of the external eaves are proposed to be lined in a timber-look aluminium panel to give the facade a warmth and richness that relates to the natural features of the site. Aluminium is proposed to be used as the use of real timber and combustible materials are not permitted to comply with NCC fire requirements.</p> <p>Natural materials will be used where possible, such as the internal timber wall and ceiling panels.</p> |
| i. The entry marker on Oxford Falls Road is very clear and works well to identify the entrance, however as most people will enter the site from the carpark, the use of this pedestrian entry is questioned and could be consolidated with the basement entry. | <p>It is acknowledged that the majority of participants will arrive by car and enter the site from the basement carpark.</p> <p>There will be however participants being dropped off in the Porte Cochere or on Oxford Falls Road by coach. The pedestrian entrance is therefore required to direct these participants into the main entry of the building or guide them towards the Outdoor Sports Field and amenities.</p> <p>In addition, the entry marker serves to identify the building to the community and first time users of the building.</p> |

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| j. The connecting bridge is a positive element of the proposal and has potential to be a significant design feature of the site, as a precedent (while a different use) Kerstin Thompson Architects bridge at Bundanon Arts Museum is an excellent example of a bridge sitting within an undulating landscaping below. | <p>The proposed pedestrian bridge is a positive element of the design and incorporates elements of the suggested reference project.</p> <p>The proposed Pedestrian Bridge has been designed with a similar simple but expressive and exposed trussed structure that spans across the undulating landscaping below.</p> |
| k. Any bridge would ideally have a gradient of 1:20, as opposed to 1:14, to avoid handrails and tactiles. | The Pedestrian Bridge has been designed with a 1:20 gradient as suggested to avoid handrails and tactiles. |
| 8. The Applicant acknowledged these matters, and the feedback provided. | Noted. |
| 9. The Applicant is to consider and respond to these matters as the design development moves forward and in the documentation for future lodgement of an SSD. | Noted. |