### **Precinct Plans** 03

Cheltenham Services Facility



Artist Impression of Community Facility at Cheltenham. Source: HASSELL.

#### **3.1 Precinct Context**

Cheltenham Services Facility is located above the rail alignment between Epping Station and Cherrybrook Station.

Cheltenham Oval is a popular and well used local sporting facility. Established in 1907 through local fundraising initiatives, in response to a desire for neighbourhood sporting grounds, community guardianship of this park is strong. The park currently hosts winter soccer and summer netball and cricket sporting groups and is well used as an informal recreational space all year round.

The sporting precinct sits within the broader Beecroft Reserve area, a bushland corridor which runs along Devlin's Creek. The bushland reserve is acknowledged as being of particularly high value ecologically and for its amenity and character. Hornsby Shire Council declared the reserve a Wildlife Protection Area in 2006.

The facility, which is required to service the rail tunnel here, is intended to be as unobtrusive as possible within the final sporting precinct design with the provision of revitalised sporting facilities and a rejuvenated neighbourhood park.

#### 3.1.1 Purpose and Scope

This section of the Urban Design and Landscape Corridor Plan (UDCLP) provides an overall description of the built elements, their context and the design drivers for the park at Cheltenham Services Facility. This section should be read in conjunction with other sections of the UDCLP to gain an appreciation of the strategic context, design vision and system wide componentry of the project.

This section establishes the following for Cheltenham Services Facility precinct:

- Sets out the project context and vision
- \_ Describes the local context
- Describes the urban design, landscaping and architectural design approach
- Describes and details the proposed buildings within the precinct site
- \_ Outlines the key relevant issues
- Describes all key inputs and outputs of the design.

The proposed Services Facility Precinct includes:

- New community facilities building, which replaces the existing building
- \_ Multi-use netball courts and hardstand
- \_ Existing cricket nets resurfaced
- \_ New children's playground
- Reinstated public car parking
- New paths to tie into existing link paths
- Blackbutt Gully Forest setting reinforced with new planting.

Precinct Plans 03

Cheltenham Services Facility

03CSF\_2

Cheltenham Services Facility

#### 3.1.2 Overview of Precinct Project

The Cheltenham Services Facility is located on the new tunnel alignment, approximately half way between Epping Station and Cherrybrook Station. The services facility is located adjacent to Cheltenham Oval. The design seeks to minimise disruption to Cheltenham Oval and provide facilities for the benefit of the community.

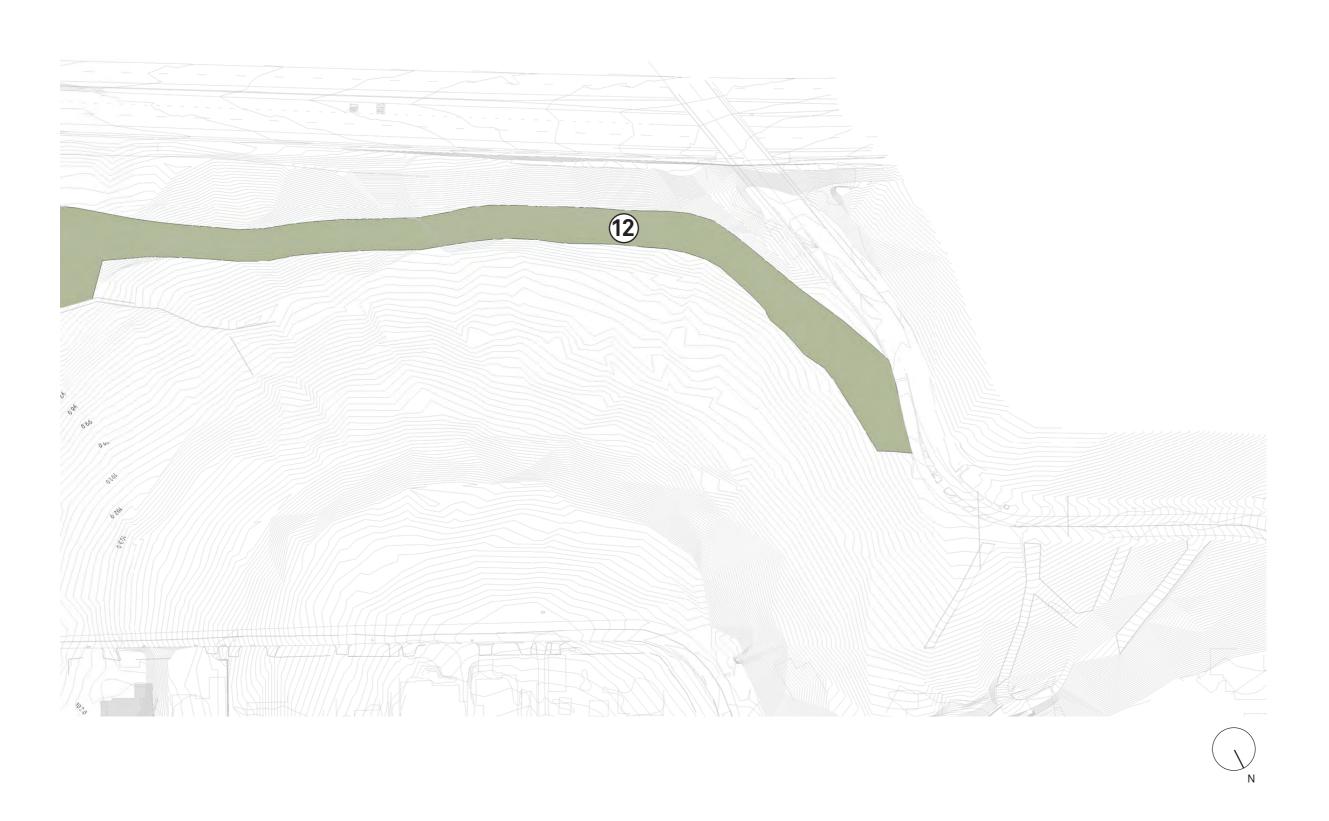
Refer Figure 3.1\_Plan View of Cheltenham Service Facility.

The following are the key components of the Cheltenham Service Facility precinct:

- 1. Cheltenham Oval
- 2. Multi-use Netball Courts
- 3. Multi-purpose Hardstand
- 4. Shelter, Storage and Amenities
- 5. Soccer Kick Wall
- 6. Cricket Practice Nets
- 7. Children's Playground
- 8. Car Park and Setdown
- 9. Community Facilities
- 10. Services Building
- 11. Hydrant Booster
- 12. Reinstated Bushland Planting



 $\label{thm:condition} \textit{Figure 3.1 CSF\_Plan View of Cheltenham Service Facility}. \textit{Source: HASSELL}.$ 



#### 3.1.3 Location

#### Regional Location

Cheltenham Services Facility is located in the Hornsby Shire. It is located beside the M2 Motorway adjacent to a area of significant remnant Blackbutt Gully Forest. The bushland in which the park sits provides a linkage from Cheltenham Oval through to Beecroft.

The surrounding landscape is generally residential in character, retaining some of the semi rural character of the past.

#### Local Context

The Cheltenham service facility is located within the Cheltenham Sports Ground site, nestled between Castle Howard Road and the M2 Motorway.

The oval is located in a bushland setting and accessed from Castle Howard Road. The surrounding development consists of low density residential housing in a bushland setting. Particular focus is required to ensure minimum visual impact

of the service facility building on both the adjacent residential properties and the recreational facilities.

The facility location should also minimise the requirement for the removal of vegetation listed on the Environment Protection and Biodiversity Conservation Act, 1999 (EPBC Act) or impact on the amenity of the oval.



Figure 3.2 CSF\_Location of Cheltenham Service Facility. Source: Google Maps.

#### Beecroft Reserve Native Vegetation

The existing bushland is described as Blackbutt Gully Forest and is highly valued. The following description is extracted from Hornsby Council's Beecroft to Cheltenham Link Track brochure.

The vegetation structure is tall open forest with trees up to 45 metres high. The canopy is dominated by Turpentine (Syncarpia glomulifera), Blackbutt (Eucalyptus pilularis) and Sydney Red Gum (Angophora costata), with some Bloodwoods (Corymbia gummifera), Forest Oaks (Allocasuarina torulosa) and Red Mahogany (Eucalyptus resinifera). Most of the Sydney Bluegums (Eucalyptus saligna) occur in the higher residential areas where the soil is more fertile.

Of special note is a stand of native Crabapple Trees (Schizomeria ovata) growing close to Devlins Creek near Murray Farm Road bridge. They are uncommon in the northern suburbs. They can be identified by their distinctive lichen blotched grey trunks and dense canopy.

The shady north side of the creek carries an understory of Rainbow Fern (Calochlaena dubia), not often seen on the sunny, drier and more open south side. East of the Welham Street footpath where the slope becomes more gentle, Banksia and other examples of sandstone flora appear. Across Murray Farm Road, near Cheltenham Oval, sandstone flora dominates.

There are many different vines and about thirty species of fern in the valley. The diversity of growing conditions throughout the valley ensures a rich variety of plants. Over two hundred and fifty different species have been identified so far.

#### Beecroft Cheltenham Link Track

The existing bushland track provides linkages from Cheltenham Oval through to Beecroft.

The existing bushland corridor is a unique vegetation community characterised as Blackbutt Gulley Forest.

Historically, timber cutters from Parramatta were attracted to the area by the good timber trees even before 1800. Old weathered stumps still visibly mark where trees were felled by convicts long ago. The old road construction visible on the track leading from the end of Austral Avenue may have been part of an old logging road.

In the suburb's early days, residents from Orchard and Murray Farm Roads would walk through the bush to Beecroft Station. Many of the tracks used today originate from that time although they have be truncated by the M2 Motorway since 1997.

The paved footpath from the end of Welham Street is an example. The original route now ends at Devlins Creek and access to Finlay Avenue, Allerton Road and Ferndale Road is by a detour west and under the viaduct of the M2.

#### 3.1.4 Key Design Drivers

The key design drivers informing Cheltenham Service Facility are summarised below:

- Mitigation of the visual impact of the services facility from residential properties and the oval.
- Integration and protection of the existing vegetation at the adjacent site to the north.

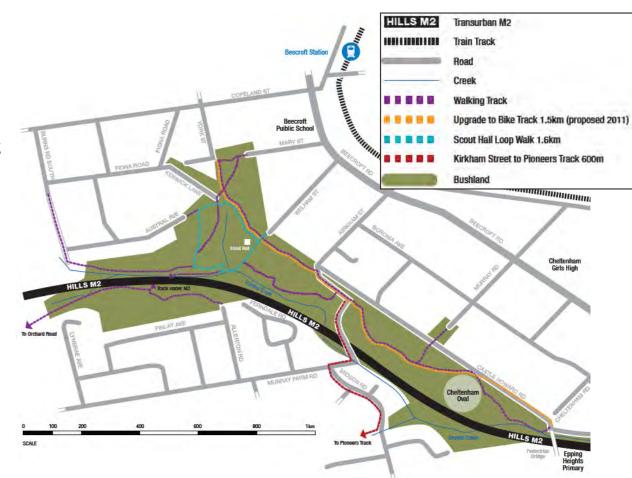


Figure 3.3 CSF\_Beecroft Cheltenham Link Track. Source: Beecroft - Cheltenham Link Track, Hornsby Council.



Source: Beecroft - Cheltenham Link Track, Hornsby Council.

## 3.2 Urban Design and Landscape Plan

This section contains descriptions of the proposals for the urban and landscape design of Cheltenham Services Facility and its immediate surrounds in the context of the wider precinct. Plans have been prepared in accordance with the strategies documented in Section 2 of this UDCLP using the componentry documented in Section 4 of this UDCLP.

# 3.2.1 Landscape Site Plan and Precinct Elements

The community facilities comprise of competition standard netball courts, multi-use hard stand space, practice kick/tennis walls, refurbished cricket nets and play area.

Site planning objectives aim to locate these elements with consideration for:

- optimising the sporting functions of the facilities
- protection and retention of existing mature trees
- \_ maximising visual amenity
- optimising physical and visual connections between the park facilities
- seamlessly integrating service facility requirements (access and maintenance) with minimum impact on the amenity and character of the park.



Figure 3.4 CSF\_Landscape Elements Context Plan. Source: HASSELL.



#### 3.2.2 Design Opportunities

The design opportunities informing the design of the Cheltenham Services Facility and its immediate surrounds that have informed the precinct are summarised in the adjacent diagrams. Refer Figures 3.5 to 3.8.

#### 1. Court Alignment

The orientation of the multi-use netball courts is an important element to consider. The north/south orientation helps prevent players looking directly into the low level sun in mornings and afternoons.

#### 2. Pedestrian and Vehicle Movement

Proposed footpaths will tie into existing link paths. A new car park configuration and setdown will improve accessibility.

#### 3. Bushland Character

The character of the Blackbutt Gully Forest and the adjacent Beecroft Reserve is a unique setting in which a variety of interesting flora species co-exist. The vegetation community has influenced the planting palette for all softscape areas.

#### 4. Maintain Sight Lines

Site lines are important both for safety and spectating. Location of the various elements considers visual and physical connections.



Figure 3.5 CSF\_Court Alignment. Source: HASSELL.





Figure 3.7 CSF\_Bushland Character. Source: HASSELL.

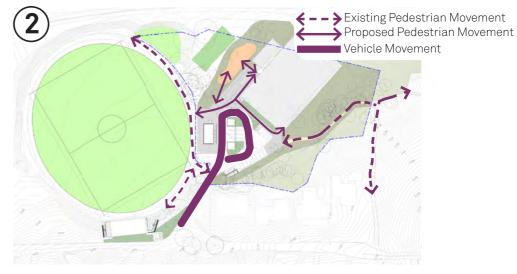


Figure 3.6 CSF\_Pedestrian and Vehicle Movement. Source: HASSELL.



Figure 3.8 CSF\_Sight Lines. Source: HASSELL.



#### Multi-use Courts and Hardstand

New park facilities include three new multi-use courts, sized and marked for netball, with surface finish appropriate to competitive netball standards, plus a multi-purpose hardstand area for general use with tennis practice wall.

Fencing is provided to the perimeter of the courts and the hardstand area.

Floodlighting to all courts and hardstand areas enable evening use.

A netball store, toilet and shelter is located alongside the courts in a good position for surveillance across the netball courts and the childrens playground.

#### Crickets Nets

The works includes the resurfacing of the run up area to the existing cricket practice nets.

#### Children's Playground

New park facilities include a playground area with equipment to suit 0 to 9 year old and 10 to 14 year old age groups, with soft fall play surface.

The playground design will reflect the language of the surrounding bushland setting.

#### Car Parking

The works include a reinstated public car park with improved circulation in a one way loop arrangement. Emergency vehicle requirements have been accommodated within the car park area with access to sports oval also provided.



Figure 3.9 CSF\_Landscape Elements Plan. Source: HASSELL.



#### 3.2.3 Planting Design

A variety of planting treatments will be used within the precinct to echo the existing landscape character and habitats on this site, as well as respond to functional requirements. These are summarised below.

#### **Bushland Planting**

This mix will make up the majority of planting proposals for the site. The species palette has been derived from the endemic community of the Blackbutt Gully Forest. See Section 3.2.5 for more detail on the bushland vegetation.

#### Park Planting

These species are intended to be a transition mix between bush and park scale. The planting will provide partial screening and shade but not dominate the canopy overhead.

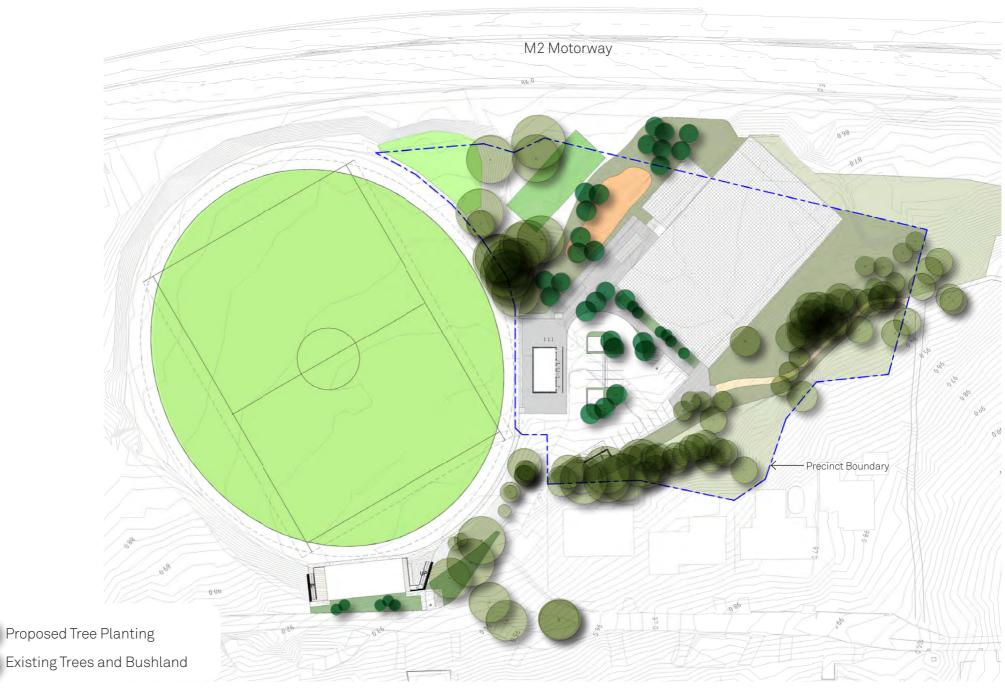
#### Playground Planting

A planting palette for the play area provides a range of colour and textural which will represent the neighbouring bushland species while also being robust enough to suit the location and use of the area.

#### 3.2.4 Sustainable Landscape Design

The key sustainable landscape design strategies used at Cheltenham Services Facility include the following:

- Generous planted areas are provided to maximise permeable surfaces
- Blackbutt Gully Forest species used in the precinct provides connected planted and ecological corridors
- A selection of a diverse mix of drought tolerant, endemic plant species have been used.



 $\label{thm:prop:signal} \textit{Figure 3.10 CSF\_Cheltenham Service Facility Planting Plan . Source: HASSELL.}$ 



#### 3.2.5 Bushland Planting

Blackbutt Gully Forest - Planting Palette.

The Blackbutt Gully Forest plants are typically dominated by the species described here and will be used to form a basis for a planting palette.

There will be further development of proposals for appropriate bushland species planting, regeneration and bushcare strategies as part of ongoing design processes.

#### Trees

Syncarpia glomulifera Eucalyptus pilularis Angophora costata Eucalyptus punctata Eucalyptus pipperta Corymbia gummifera Allocasurina torulosa Eucalyptus resinifera

#### Understorey

Acacia linifolia
Banksia serrata
Callicoma serratifolia
Ceratopetalum gummiferum
Dodonaea triquetra
Elaeocarpus reticulatus
Grevillea linearifolia
Leptospernum trinervium
Persoonia linearis
Pittosporum undulatum
Pultenaea flexilis

#### Groundcovers

Calochlaena dubia Dianella caerulea Entolasia stricta Lomandra longifolia Microlaena stipoides Pratia purpurascens Pteridium esculentum Xanthosia pilosa



1\_Syncarpia glomulifera



8\_Grevillea linearifolia



2\_ Eucalyptus pilularis



9\_ Persoonia undulatum



# 3.3 Architectural Design

Cheltenham Services Facility design is based on a suite of components and systems that form part of the system wide approach to design, as well as site specific responses to the precinct.

# 3.3.1 Built Elements Design

### - Services Facility

The main functions of Cheltenham Services Facility are to:

- House the ventilation fans that assist with the air movement through the rail tunnel
- To provide emergency service access to the tunnel
- Provide point of egress for de-trained passengers.



Figure 3.11 CSF\_Location of Community Facilities and Amenities. Source: HASSELL.



#### Community Building

A community building is located to the north of Cheltenham Oval. The community facilities provided within the new building, which replaces the existing building, will make provision for:

- Home and away shower and changing rooms
- Separate referee changing room
- Storage space for council equipment and staff accommodation
- Secure storage space for nominated sporting associations
- Public toilet facilities
- \_ Canteen
- \_ Multi purpose meeting space.

#### Netball Store and Amenities Building

A store and amenities building is located adjacent to the multi-use netball Courts and childrens playground. The building will make provision for:

- \_ Netball storage
- \_ Public toilet facilities
- \_ Wet weather shelter.

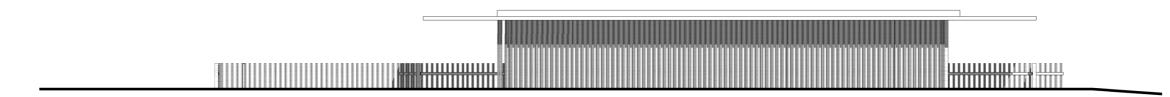


Figure 3.12 CSF\_View of Community Facilities from Castle Howard Road. Source: HASSELL.

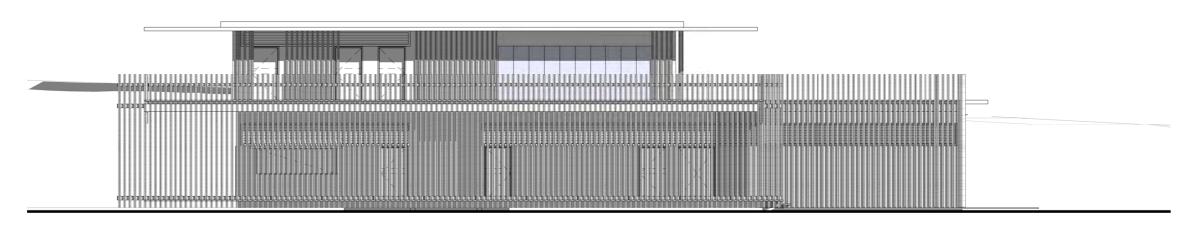


Figure 3.13 CSF\_View of Community Facilities from Cheltenham Oval. Source: HASSELL.

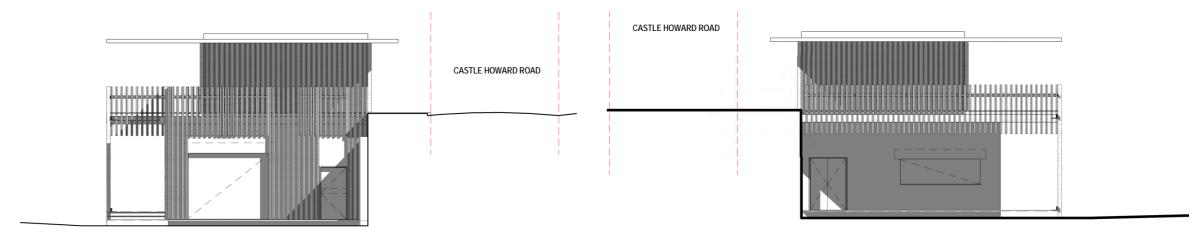
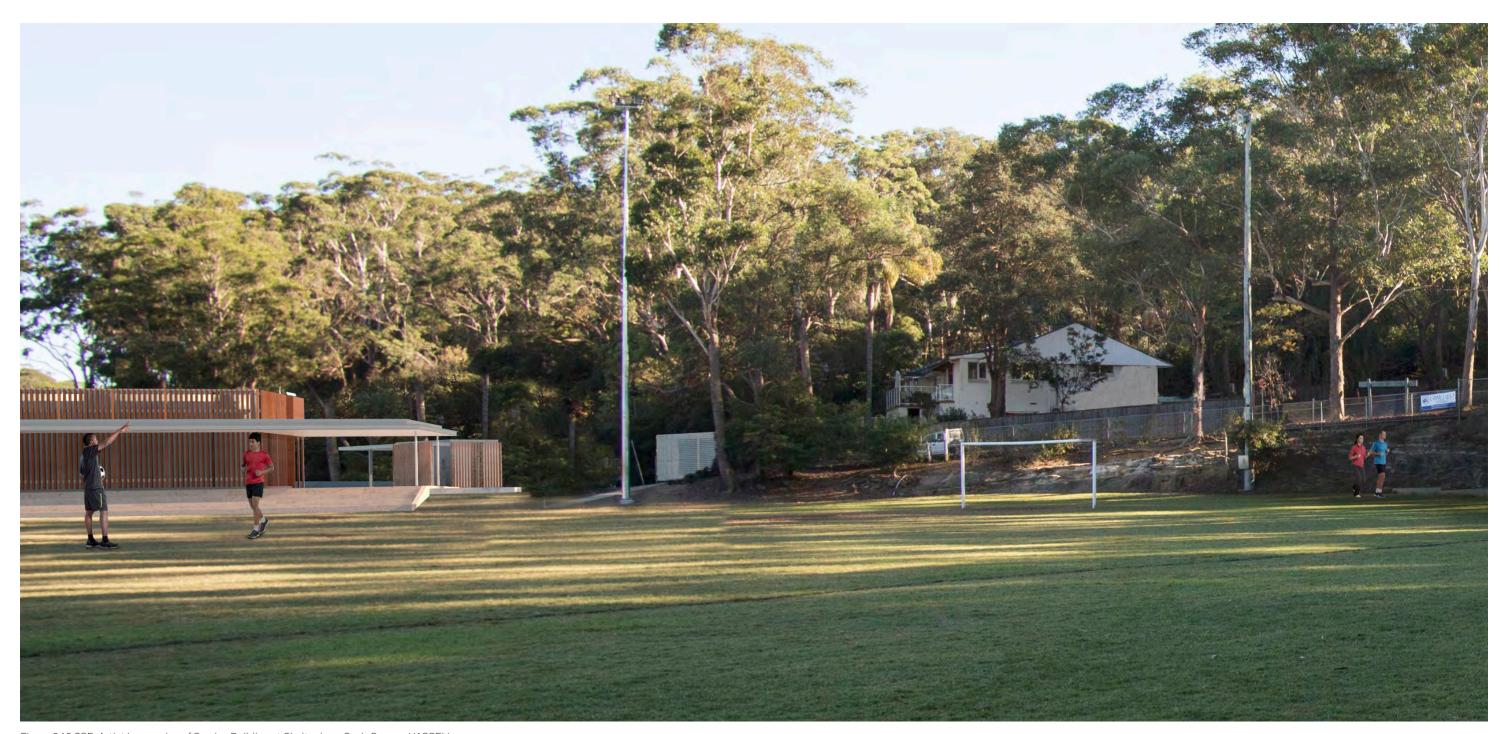


Figure 3.14 CSF\_West Elevation showing access to Council Store Room. Source: HASSELL.

Figure 3.15 CSF\_East Elevation showing Canteen . Source: HASSELL.

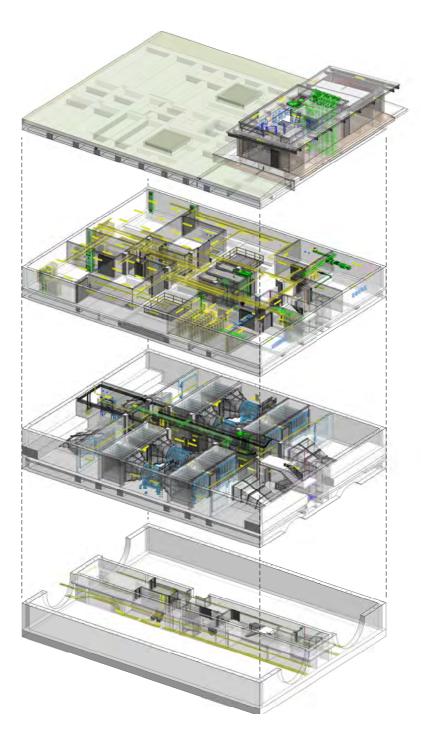


 $\label{thm:pression} \textit{Figure 3.16 CSF\_Artist Impression of Service Building at Cheltenham Oval \,.\, Source: \textit{HASSELL}.}$ 

#### Service Building

The Cheltenham Services building provides housing for the impulse fans. The building contains rail systems rooms supporting the operation of the railway and the facility itself.

The building consists of a ground level structure sitting over a significant underground structure.



Lift and Egress Stairs

Ground Level- Fire Control Room

Basement 1- Electrical and Communications Level

Basement 2-Tunnel Vent Level

Basement 3-Tunnel Level

Figure 3.17 CSF\_Cheltenham Service Facilities Exploded Axo. Source: HASSELL.