

# 03

## Precinct Plans

### Castle Hill Station and Precinct



Artist Impression of Castle Hill Station. Source: Ai3D.



### 3.1 Precinct Context

Castle Hill Station is situated in Arthur Whitling Park, a key civic focus for Castle Hill and is oriented on an east west axis at the high point and intersection of Old Northern Road, Old Castle Hill Road and Crane Road.

The Castle Hill Station public domain responds to aspects of the station's immediate context and provides a high quality setting for the station architecture. The Castle Hill structure plan and intended future developments inform the precinct and architectural design.

Castle Hill Station is part of the Cut and Cover Station typology and is located between Showground and Cherrybrook Stations. The station is simple in its program and intuitive for the user. Entries are provided from adjacent precinct streets to a well organised concourse and even distribution of passengers to platform level.

The Castle Hill precinct and station will deliver:

- A network of socially connected civic spaces
- Seamless interchange from cycle, bus, taxi, and kiss and ride
- Socially active secondary and primary station plazas
- Visible, comfortable, protected and safe station entrances
- High quality proactive customer service within a modern, uplifting station environment
- An intuitive journey to the train.

#### 3.1.1 Purpose and Scope

This section of the Sydney Metro Northwest Urban Design and Landscape Corridor Plan (UDCLP) provides an overall description of the built elements, their context and the design drivers for the precinct at Castle Hill Station. 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 Castle Hill Station:

- Sets out the project context and vision
- Describes the local context
- Outlines the key relevant issues
- Describes the urban design, landscape and architectural design approach
- Describes and details the proposed buildings within the precinct site.

The proposed station facilities include:

- One island platform below street and concourse level
- Station entry providing access to a single covered paid concourse below ground over the platform
- Entry canopy providing weather protection to the concourse below
- Primary plaza located on the western side of Arthur Whitling Park
- Vertical transportation to concourse consists of lifts and escalators
- Customer facilities, including toilets and parent room, located in the paid concourse
- Station management room located in the paid concourse
- Service rooms located at each end of the station paid and unpaid zones below ground

- Service buildings for emergency egress stairs and ventilation
- Skylights integrated into the landscape of Arthur Whitling Park over the vertical transportation to the platform
- Interchange facilities with pedestrians, bicycles, buses, taxis and cars
- Landscape terraces to maximise the use of the slope and activate Old Castle Hill Road.

**3.1.2 Overview of Precinct Project**

Castle Hill Station is located between Showground and Cherrybrook Stations. The platform is oriented on a roughly east west axis at the high point and intersection of Old Northern Road, Old Castle Hill Road and Crane Road.

The station precinct sits within Arthur Whitting Park and is adjacent to the Castle Hill Town Centre including the Castle Towers Shopping Centre to the north and Castle Hill Main Street to the west.

The platform is located approximately 22m below ground with a glazed portion of the entry canopy and skylights bringing natural light into the station from above.

Refer Figure 3.1\_Plan view of Castle Hill Station and Figure 3.2\_Aerial View of Castle Hill Station.

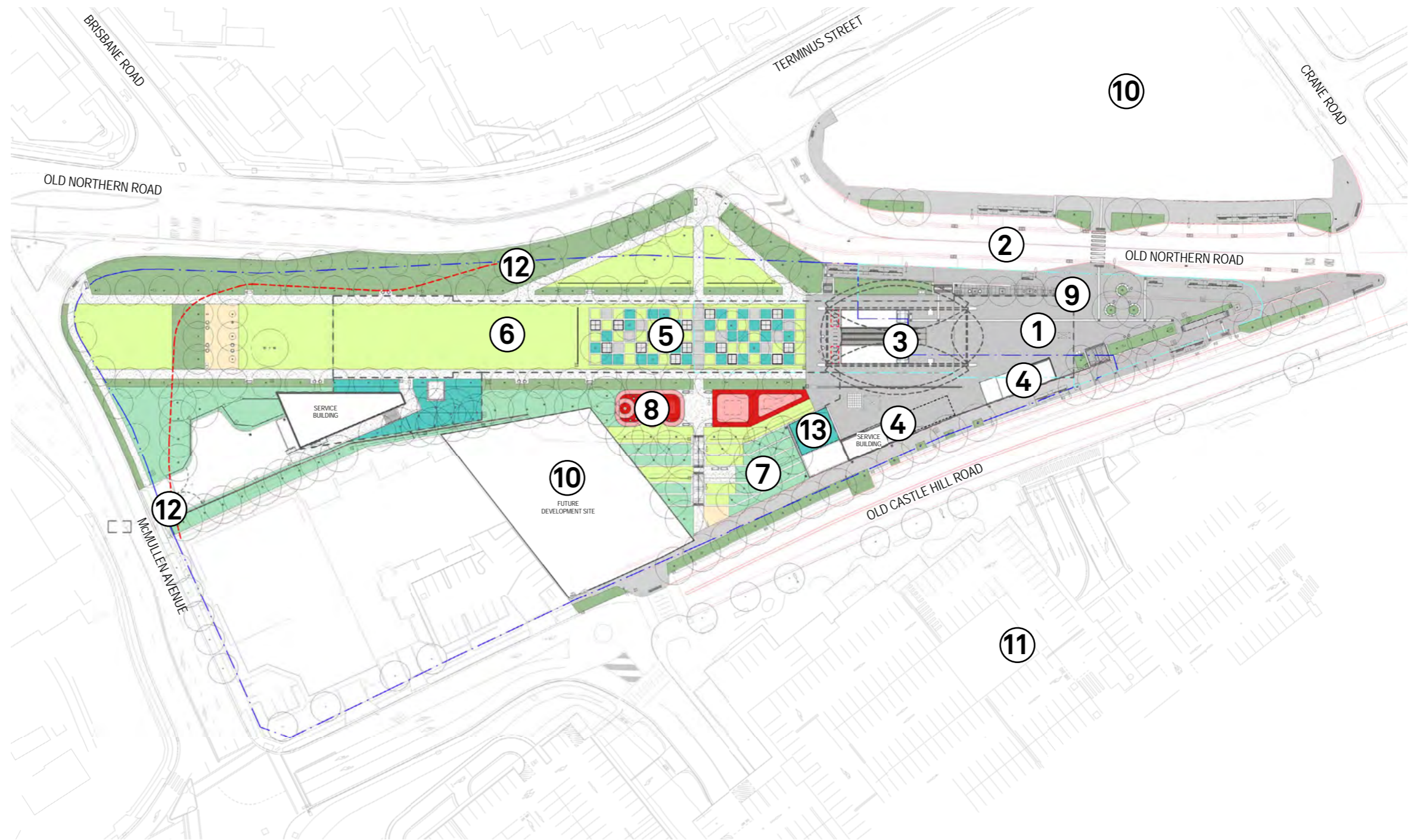
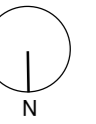


Figure 3.1 CSH\_Plan View of Castle Hill Station. Source: HASSELL.



The following are the key components of Castle Hill Station:

1. Primary Plaza
2. Transport Interchange
3. Station Canopy
4. Service Building
5. Skylight Lanterns
6. Arthur Whitling Park
7. Landscaped Terraces
8. Structured Play
9. Recognition Elements
10. Future Development
11. Castle Towers Shopping Centre
12. Proposed Extent of McMullen Avenue Realignment
13. Green Roof

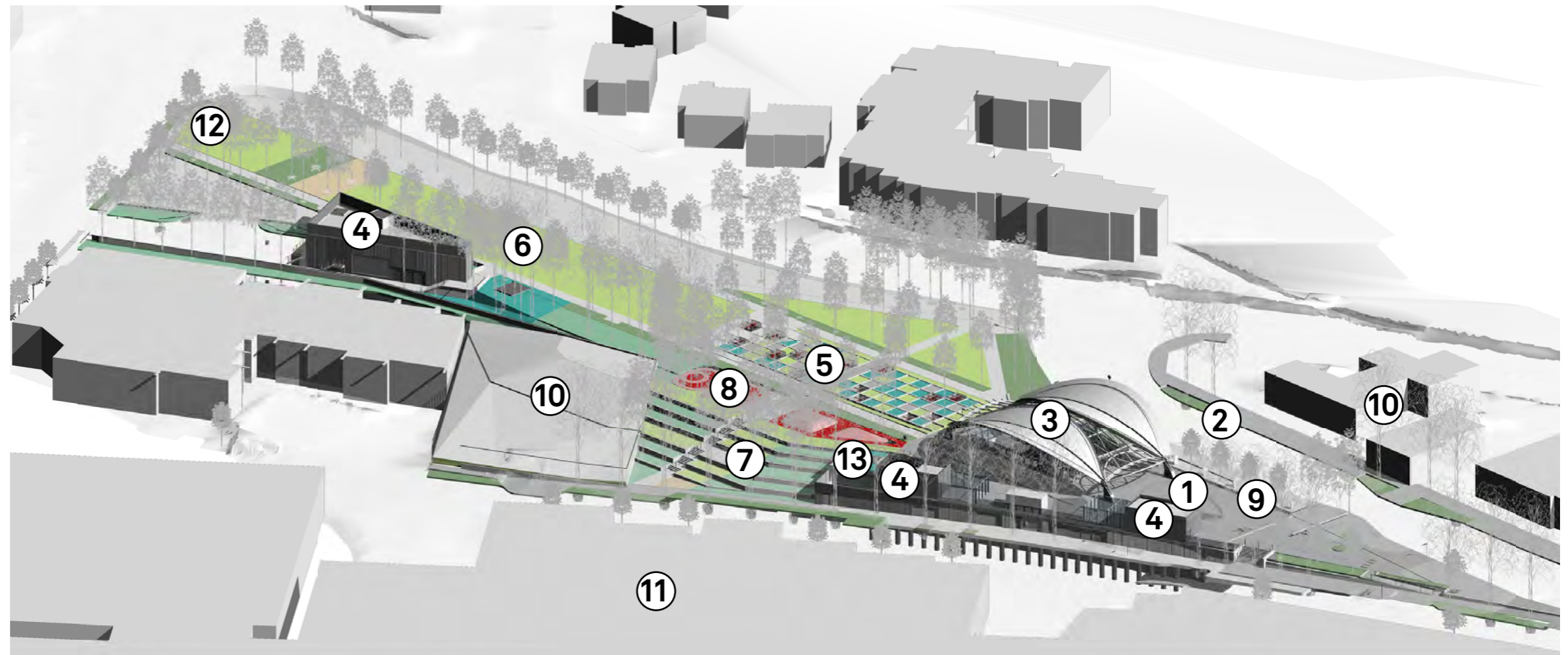


Figure 3.2 CSH\_Aerial View of Castle Hill Station. Source: HASSELL.

### 3.1.3 Location

#### Regional Location

Castle Hill Station is in the Hills Shire Council. It is located between Showground and Cherrybrook Stations, beneath Arthur Whitling Park, adjacent to Castle Towers Shopping Centre. The surrounding area is essentially residential and commercial development. The Castle Hill Station will service one of north western Sydney's largest retail and entertainment precincts.

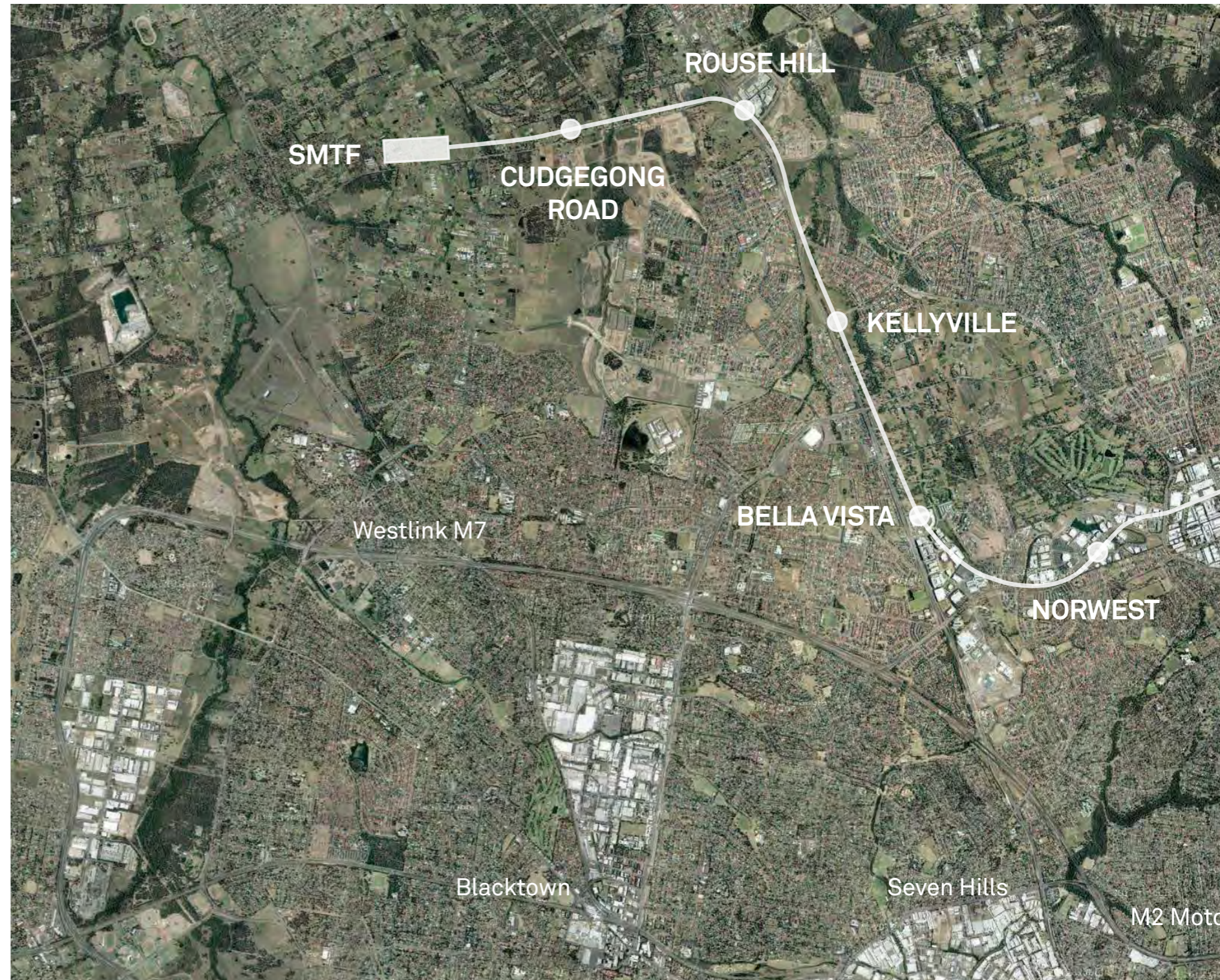
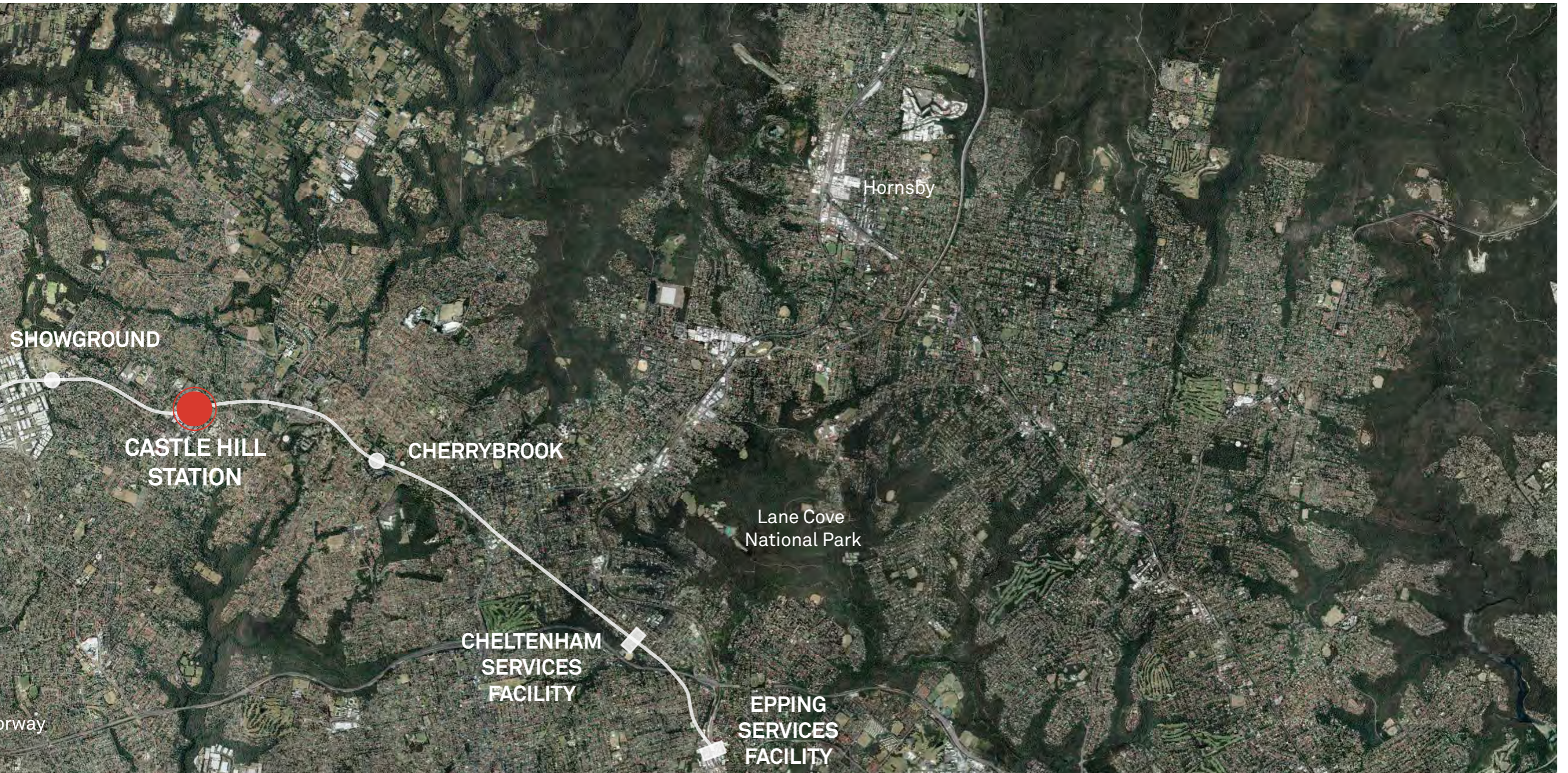


Figure 3.3 CSH\_Aerial View of Castle Hill Station. Source: Google Maps.



**Local Context**

Figure 3.4 is taken from the Castle Hill Structure Plan in the North West Rail Link Corridor Strategy (NSW Planning 2013) and illustrates the Castle Hill Station precinct's location within the structure plan study area and existing surrounding land uses. The legend identifies the key existing local places of note.

The new station will be located within Arthur Whitling Park and will serve as a major public transport interchange, helping to contribute to the strong growth of the area.

Arthur Whitling Park originally comprised a variety of landscape types providing different experiences for visitors including open grass, mature trees and formal gardens. Refer to Section 3.1.8 for further detail on the planning design issue and principles established for Arthur Whitling Park.



**Legend**

--- Precinct Boundary    Station Location

Figure 3.4 CSH\_Castle Hill Station Aerial. Source: Planning NSW 2013.



### 3.1.4 Statutory Context

A Structure Plan was prepared by Planning NSW for the Castle Hill Station Precinct as part of the North West Rail Link Corridor Strategy. The Structure Plan considered the potential for the Sydney Metro Northwest to transform the Castle Hill Station Precinct by providing a new focal point for the community centred upon the station.

Castle Hill is a major centre for North West Sydney. Castle Hill Station will serve a commercial core to the west of the station precinct. The commercial core is surrounded by high density dwellings. Surrounding the station precinct mixed use developments extend to the north and south. The edge of the Castle Hill precinct is medium density housing.

The Structure Plan boundary includes the area within an 800 metre radius, or roughly a 10 minute walk, of the new Castle Hill Station. The boundary has also taken into account the surrounding road network, natural features, and the development pattern of the area.

Refer Figure 3.5\_Castle Hill Structure Plan

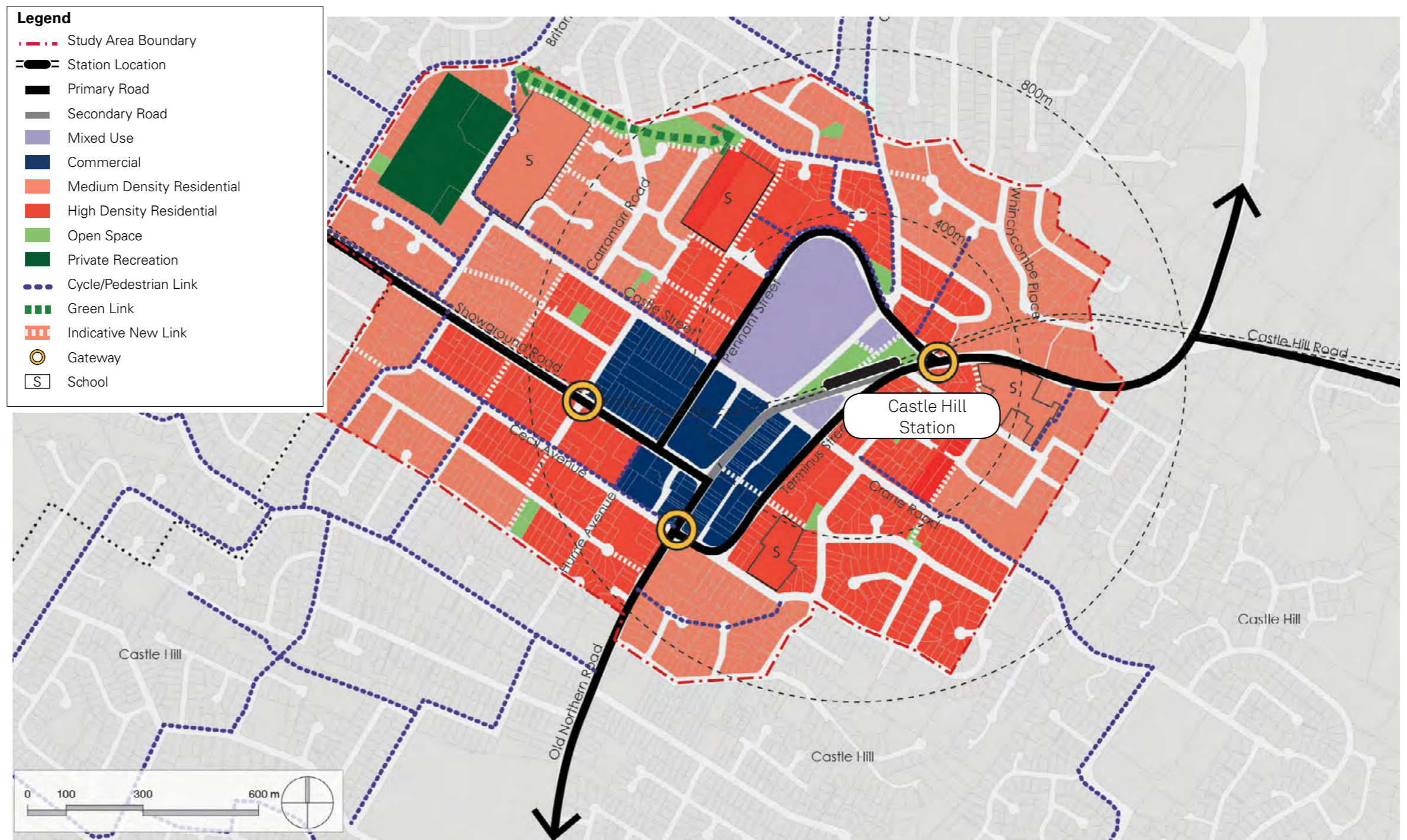


Figure 3.5 CSH\_Castle Hill Structure Plan. Source: Planning NSW 2013.

**3.1.5 Precinct Access**

The Station Access Plans describe traffic requirements and related pedestrian movement for the precinct. These have informed the precinct kerbside provisions for bus, taxi, kiss and ride and on-street parking.

The Sydney Metro Northwest Pedestrian-Cycle Network and Facilities Strategy contains recommendations for district cycle and pedestrian access requirements for the precinct. Castle Hill Station precinct integrates off road cycle access routes to and from the station. Locations for provision of bicycle parking are consistent with these recommendations.

**3.1.6 Parking, Pedestrian, Cyclist Access Arrangements and Facilities**

The parking, pedestrian and cyclist access arrangements and facilities are consistent with the requirements of the station access plans and pedestrian cyclist strategy. They are illustrated in summary form in Figure 3.6.

- Bicycle parking has been located to be adjacent to access movement paths and are a maximum of 10m from Castle Hill Gatelines.
- Bus stands are located on both sides of Old Northern Road
- The taxi rank is located on Old Castle Hill Road to the south of the Primary Plaza
- Designated Kiss and Ride bays have been located on the northern side of Old Castle Hill Road.

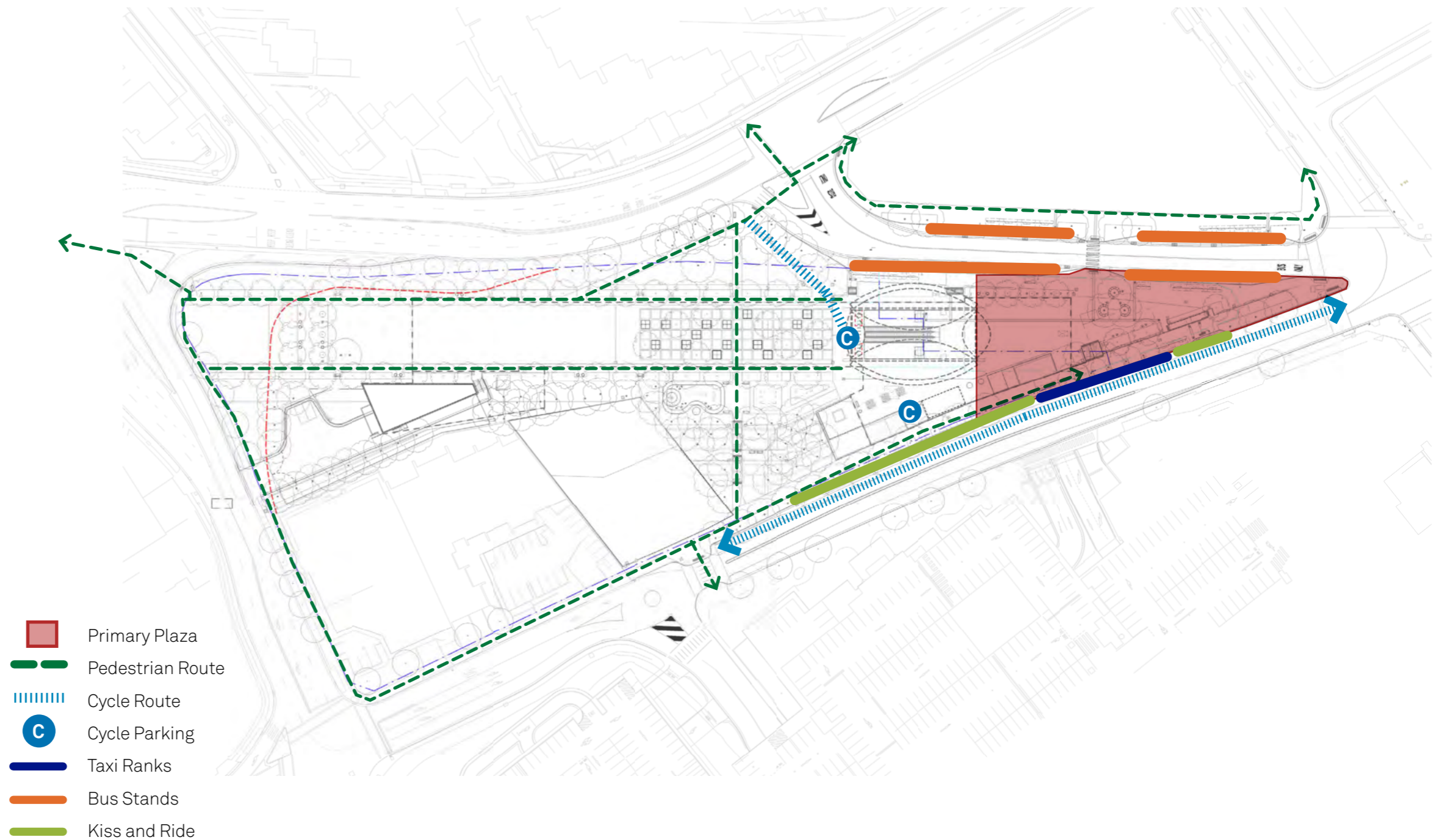
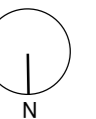


Figure 3.6 CSH\_Castle Hill Station Plan showing Parking, Pedestrian, Cyclist Access Arrangements and Facilities. Source: HASSELL.



### 3.1.7 Castle Hill Precinct Planning Design Issues and Principles

The key issues identified at Castle Hill Station are summarised below.

- Pedestrian access to the station and accommodating traffic access to the adjacent retail centre and bus interchange.
- Street activation and the quality of the public domain.
- Poor quality interface presented by the Shopping Centre currently.
- Arthur Whitling Park should be reinstated following construction of the station. The mature planting along the Old Northern Road boundary of the park should be retained.
- Safeguarding future connections to the centre.
- Any station entrance structure in the park should be as light and minimal as possible.
- Visual permeability and moderation of bulk along Castle Hill Road.
- The southern end of the park, the former site of the Anzac Hall, would be the preferred site for the entrance.
- It would be preferable for service structures to be located along the street edges to ensure that maximum open space can be returned for the park.
- The need for strong connectivity across Castle Hill Road.

The key precinct principles developed for Castle Hill Station are summarised below.

- A station entry and landmark integrated with a civic park
- Integration into an active town centre precinct with an efficient interchange
- A design that enhances the character of Arthur Whitling Park.

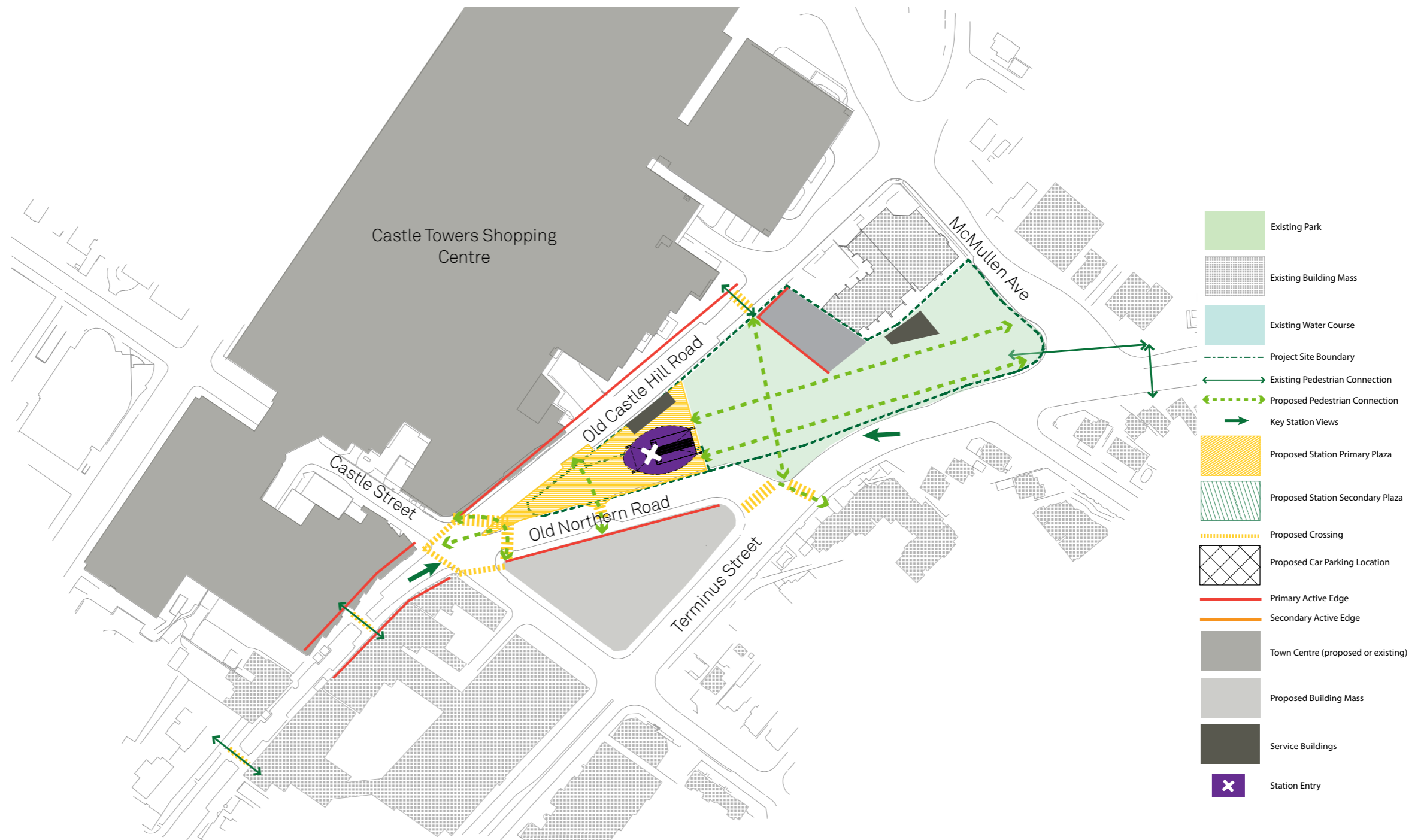
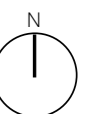


Figure 3.7 CSH\_Castle Hill Station Precinct Principles Plan. Source: HASSELL.



**3.1.8 Arthur Whitling Park Planning Design Issues and Principles**

The key issues identified at Arthur Whitling Park are summarised below.

- Recognising that the station is a piece of infrastructure that sits within Arthur Whitling Park.
- Connection between Park, Station and Castle Hill Main Street
- Topography of park creating access challenges

The key precinct principles developed for Arthur Whitling Park are summarised below.

- Use the station design to reinforce the safety, access and attractiveness of this central open space.
- Create a gateway into the town that reinforces a sense of identity and place.
- Create attractive, effective pedestrian and cycling connections to the east along Old Northern Road, to the north and to the south and down the steep topography.
- Retain significant trees where possible and extend the tree canopy of the park.
- Create a highly visible station and station precinct which is easily seen from surrounding streets to create a safe environment.

The key opportunities identified at Arthur Whitling Park are summarised below.

- Arthur Whitling Park had a number of positive attributes that contribute towards its distinctive and well-liked character. The park design proposes to enhance these qualities.
- Ensure the historical and cultural context is considered and reflected in the design of Arthur Whitling Park.

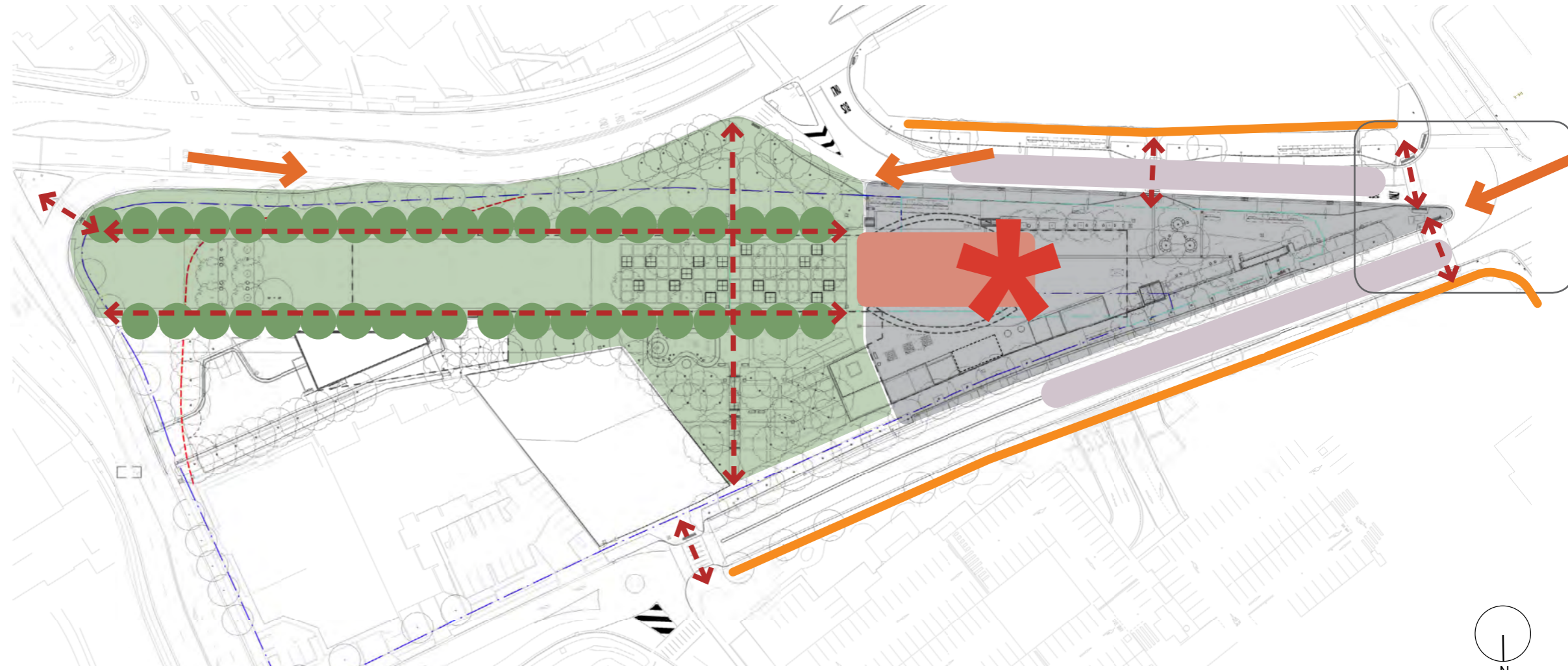
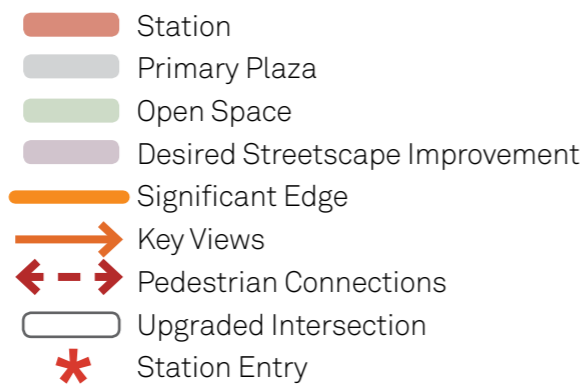


Figure 3.8 CSH\_Arthur Whitling Park Precinct Principles Plan. Source: HASSELL.



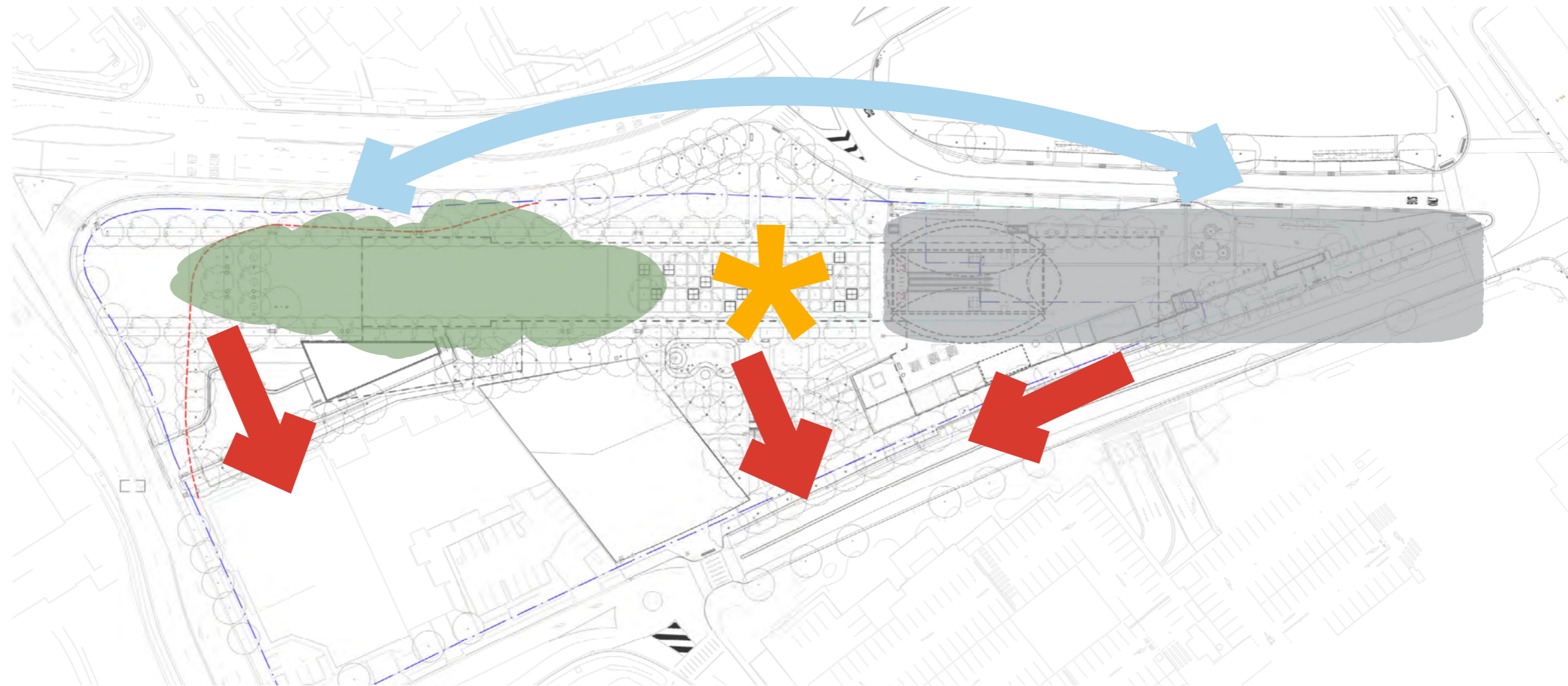
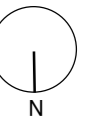


Figure 3.9 CSH\_Arthur Whitling Park Design Opportunity Plan. Source: HASSELL.



**Framework**



Ensure Arthur Whitling Park considers the existing topography, consider the central ridge and heavily sloping adjacent streets; this arrangement affects how the park is used.



Ensure the Park has a strong district identity within the Hills Shire Council "The Garden Shire"



Provide a coordinated Park with the Primary and Secondary Plazas - character, views, materials, activities and program.



Create a balance of softscape and hardscape; passive and active spaces.

**Response**

Make use of existing flatter areas for active uses, creating terraces on slopes and utilise existing views.

Create an iconic framework to best reflects the formal, historical and cultural "Garden Shire"

Create long connecting sight lines with a common material palette.

Provide a balance between paving, turf and planting to cater for all users.

**Station Type**  
Cut and Cover

**Depth below Concourse**  
22 metres

**Centre Type**  
Major Centre

**Catchment**  
Employment and Residential

**Local Government Area**  
Hills Shire Council

### 3.1.9 Key Design Drivers

The key design drivers informing Castle Hill Station precinct are summarised below:

- Recognition and address of its town centre setting
- Establish an integrated transport interchange at the station entry, providing activation, connection, integration with the park setting and a strong sense of identity
- Reinstatement and reprogramming of Arthur Whitling Park
- Thoughtful integration of the station facility elements into the park setting and surrounding streets, in particular Old Castle Hill Road
- Safety and security of the public domain areas around the station entry



Figure 3.10 CSH\_Castle Hill Station Vertical Transport and Skylight Lanterns Concept Diagram. Source: MWA with T+C Studio.



### 3.2 Urban Design and Landscape Plan

This section contains descriptions of the proposals for the urban and landscape design of Castle Hill station 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 Site Interactions

Interactions between the Castle Hill Station and its immediate surrounds that have informed the design are summarised in the adjacent diagrams. Refer Figures 3.11 to 3.14.

##### 1. Civic Public Domain

Opportunity to create a station in a civic park setting activated by the shopping centre on one edge and future developments with active edges on the other sides.

##### 2. Tree Lined Boulevards

Opportunity to enhance the distinct character of Arthur Whitling Park by providing two parallel tree lined boulevards.

##### 3. Permeable Station Public Domain

Opportunity to create new pedestrian connections through the station precinct to Castle Towers, Castle Hill Town Centre and future developments.

##### 4. Future Developments

Opportunity for the precinct to respond to the existing town centre and future developments surrounding the station.

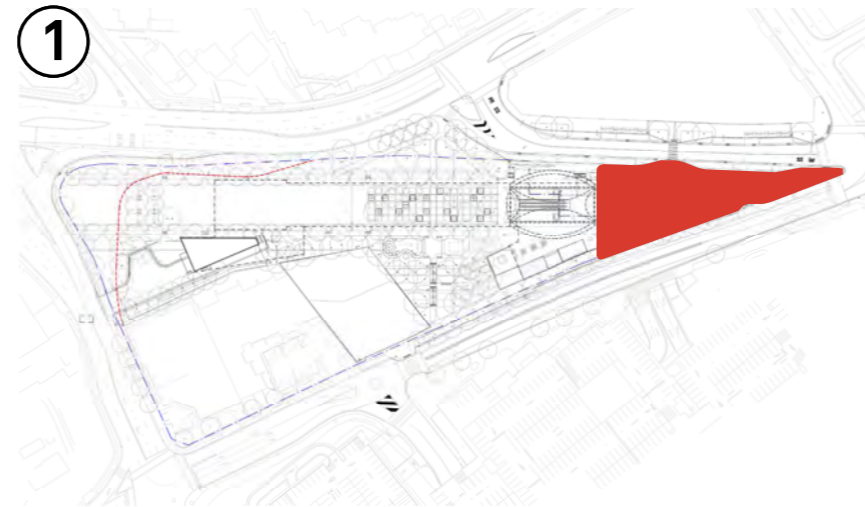


Figure 3.11 CSH\_Interconnected Public Domain. Source: HASSELL.

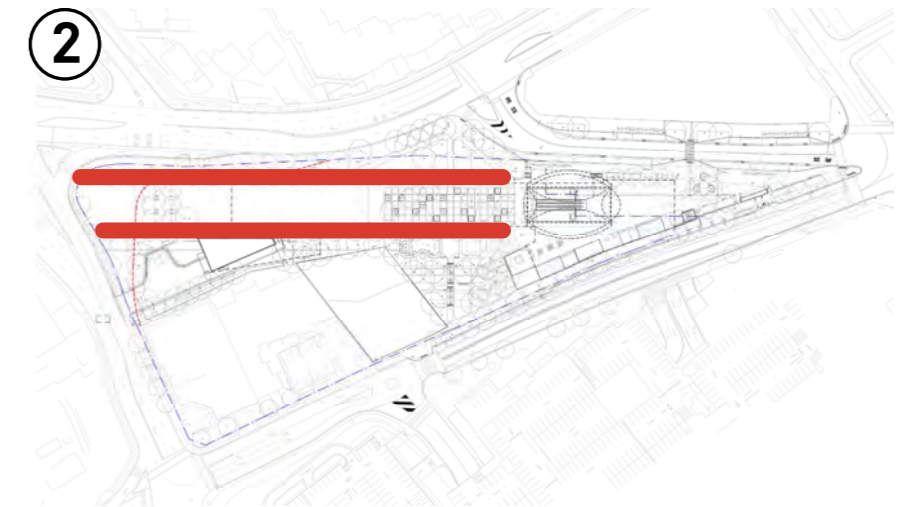


Figure 3.12 CSH\_Tree Lined Boulevards Source: HASSELL.

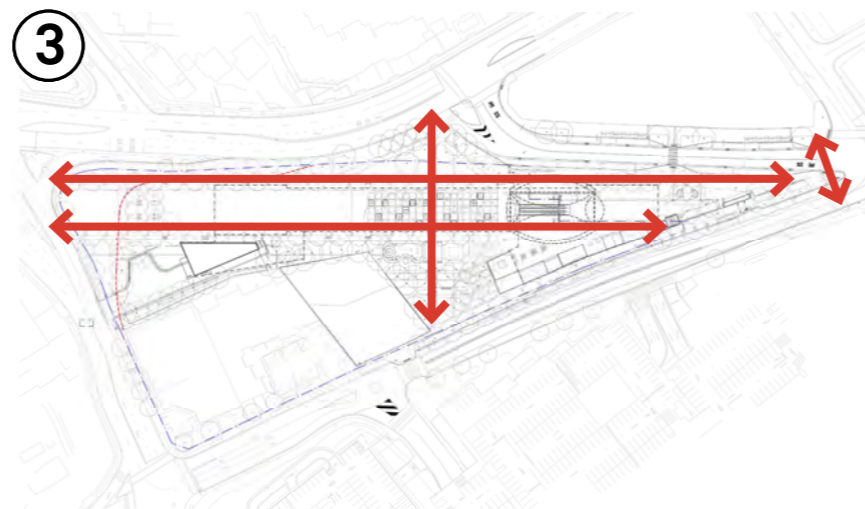


Figure 3.13 CSH\_Permeable Station Public Domain. Source: HASSELL.

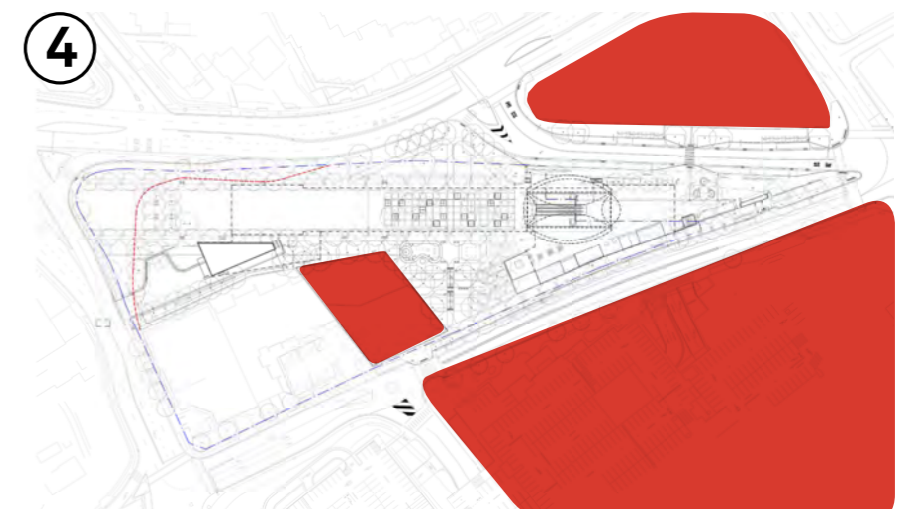
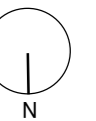


Figure 3.14 CSH\_Future Developments. Source: HASSELL.





### 3.2.2 Design Opportunities

The design opportunities informing the design of the Castle Hill Station and its immediate surrounds are summarised in the adjacent diagrams. Refer Figures 3.15 to 3.18.

#### 1. Station within an Historical Park Setting

Opportunity to ensure the historical and cultural context of Arthur Whitling Park is considered in the design of the Castle Hill Station precinct. Opportunities include new recognition elements designed in consultation with the Castle Hill RSL sub Branch.

#### 2. Station Identity

Opportunity to create an easily identifiable station through the design of the Station Canopy, the Public Art layer and the historical and cultural context of Arthur Whitling Park.

#### 3. Shady Public Domain

Opportunity to create shady public spaces for pedestrians by maximising tree planting in the park adjacent to and over the station box.

#### 4. Activation and Connections

Opportunity to create four distinct but interconnected civic public spaces including a civic plaza, open grassed multi-use event space, skylight field and landscaped terraces. The use of the public spaces is discussed in further detail in Section 3.2.3.

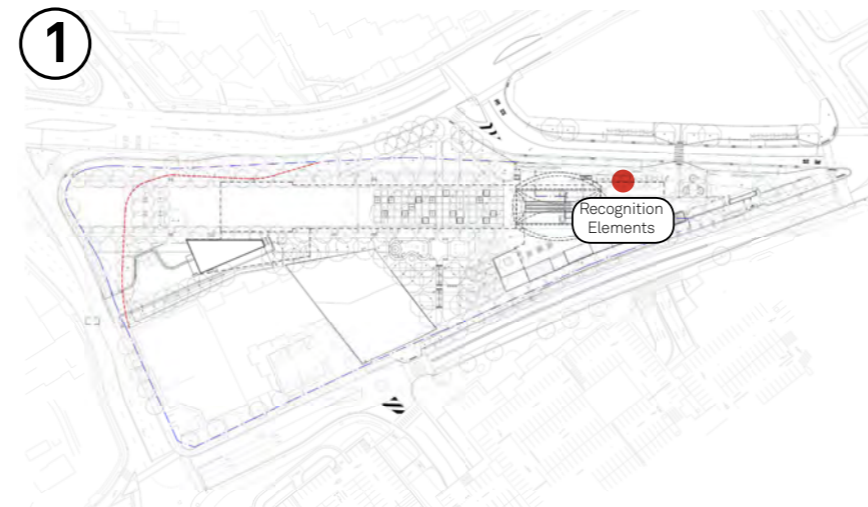


Figure 3.15 CSH\_Station Setting. Source: HASSELL.

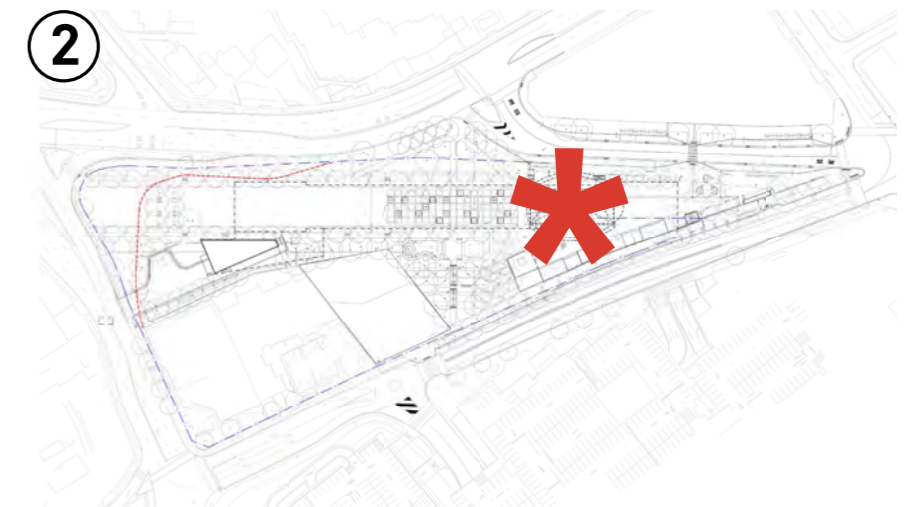


Figure 3.16 CSH\_Station Identity. Source: HASSELL.



Figure 3.17 CSH\_Shady Public Domain. Source: HASSELL.

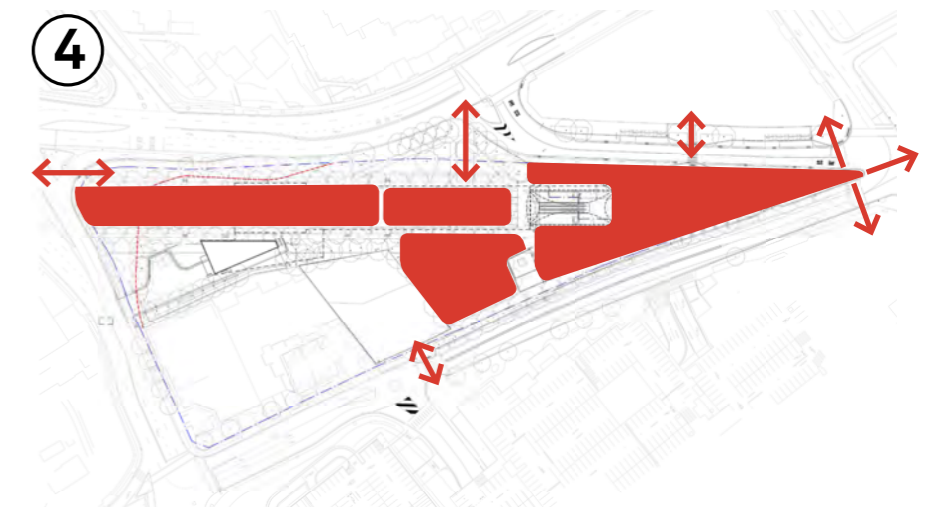
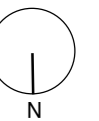


Figure 3.18 CSH\_Activation and Connections. Source: HASSELL.



**3.2.3 Landscape Site Plan and Precinct Elements**

The main Castle Hill Station precinct elements are located on the following plan and explained in further detail below.

**Plaza Spaces**

*Primary Plaza*

The Primary Plaza is on the north west side of the station entry. The area relates to the entry space and is designed to allow unimpeded pedestrian movement in and out of the station. This transitional space will be primarily paved, with trees and under storey planting, to provide an appropriate level of softscape amenity.

The character of the plaza will be an extension of the main street, with similar paving, lighting and softscape. The Primary Plaza will incorporate pole top, LED strip and tree up lighting.

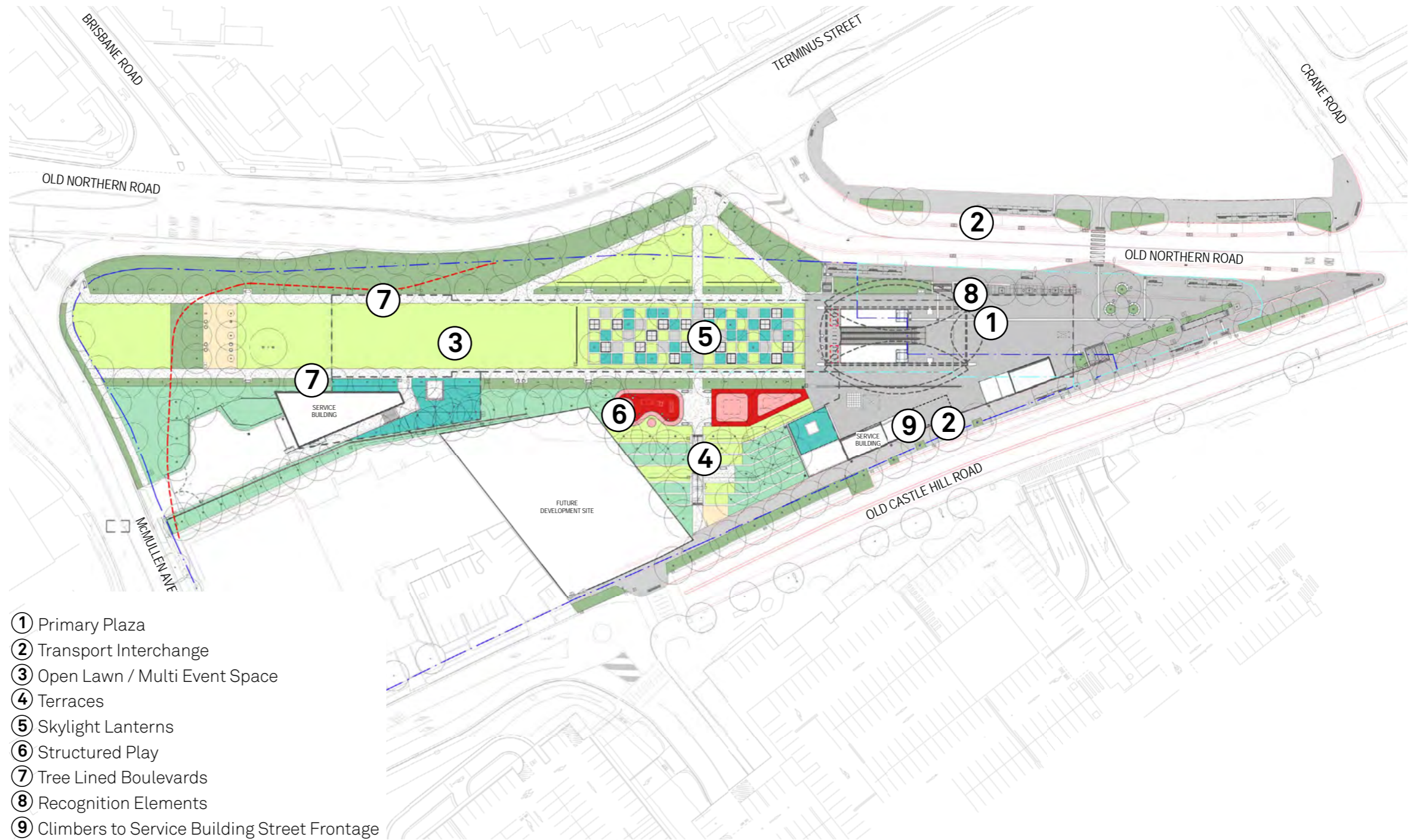
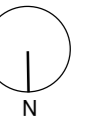


Figure 3.19 CSH\_Castle Hill Precinct Plan. Source: HASSELL.



**Open Lawn / Multi Use Event Space**

The lawn area is located in the central zone of Arthur Whitling Park. It is well situated for a range of active uses, ball sports, events, fitness etc. It is located away from busy roads and at the area's highest point, which assists with drainage and enables passive surveillance. This area will be robust and able to host temporary structures and stages.

The top of the station box poses constraints for design. For Arthur Whitling Park, the main constraint is the location of trees. The turfed area helps activate these spaces.

**Skylight Lanterns**

Skylight Lanterns will be arranged to minimise adverse impacts on the park. The skylights are sited so they are a playful element and safe for users.

**Tree Lined Boulevards**

The strong linear gesture of the two parallel boulevards provides a distinct character to Arthur Whitling Park. The boulevards will be lined with rows of trees, creating informal outdoor rooms for eating, relaxing, viewing lawn areas and socialising.

The southern boulevard will be more heavily used by pedestrians and cyclists as it is a key desire line. The northern boulevard will be predominately pedestrian, acting as a movement spine, with facilities and activities branching off the link.

**Recognition Elements**

Recognition elements designed in consultation with the Castle Hill RSL sub Branch and stakeholders. The design of this feature and associated station elements will be integrated.

**Streetscapes**

Increased occupancy by pedestrians and vehicles will change the character of Old Castle Hill Road. Continuing the successful characteristics of the Castle Hill main street down Old Castle Hill Road will help with increasing shade and amenity.

A bus interchange will provide activation on Old Northern Road to the south of the station and taxi/kiss and ride will provide activation on Old Castle Hill Road to the north.

Rows of street trees will be retained and / or planted along Old Northern Road and Old Castle Hill Road, linking the main streets of Castle Hill to Arthur Whitling Park

**Playground**

The playground is located in a centralised position within the park, at the top of the Terraces, alongside the future community facility. This location ensures strong passive surveillance with good connections to and through the space. The playground is located away from adjacent roads and station entry, providing a safe and well orientated position.

The proximity of the skylight lanterns and playground will allow these spaces to relate and function as one large play area.

The scope and design of the playground is currently in progress and is being developed as part of the stakeholder engagement process. Elements of a railway theme within the play area provides a playful connection with past and future use of the site. Forms, tracks, and features express the language of train tracks and stations. A suite of structured play equipment catering to a range of age

groups/abilities is envisioned to express movement and a sense of journey.

Seating will be provided both as formal bench types nearby the play structures, as well as secondary seating offered where possible in the form of low wall details and level changes.

**Terraces**

The terraces are provided to maximise the use of the slope and assist with activation of Old Castle Hill Road. The stepped areas create outdoor gathering and rest areas offering a spillout space from the shopping centre opposite. The terrace spaces will allow for flexible seating options for those alone, or in groups.

The Terraces consist of mixture of open turf and Eucalyptus tree plantings. Trees will provide an element of shade to these north facing terraces.

The terraces layout also helps to shape an appropriate response from future development on the adjacent site. Landing levels are arranged with consideration for entry points of a future building.

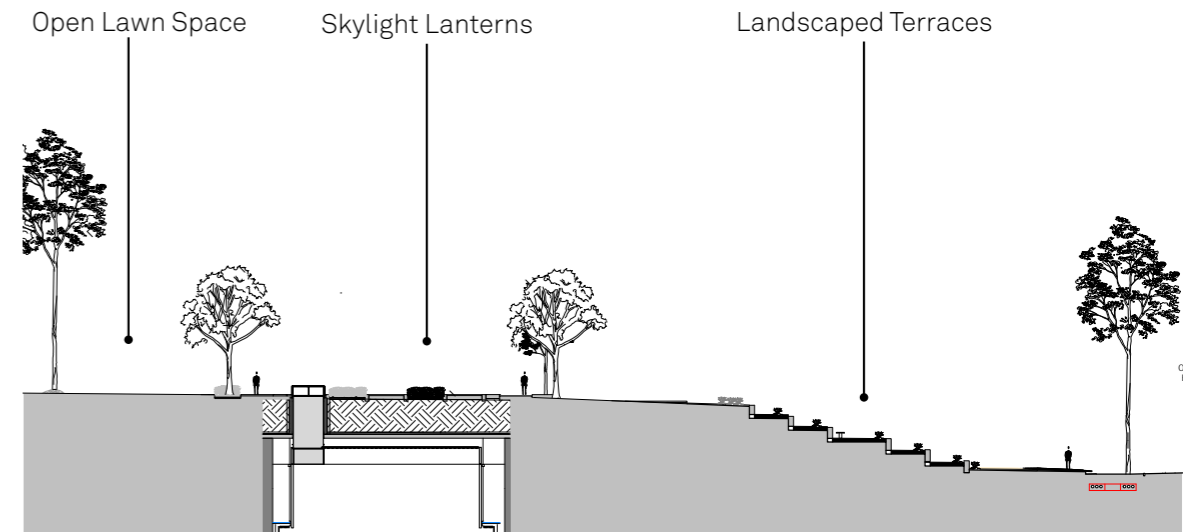


Figure 3.20 CSH\_Section through Arthur Whitling Park. Source: HASSELL.

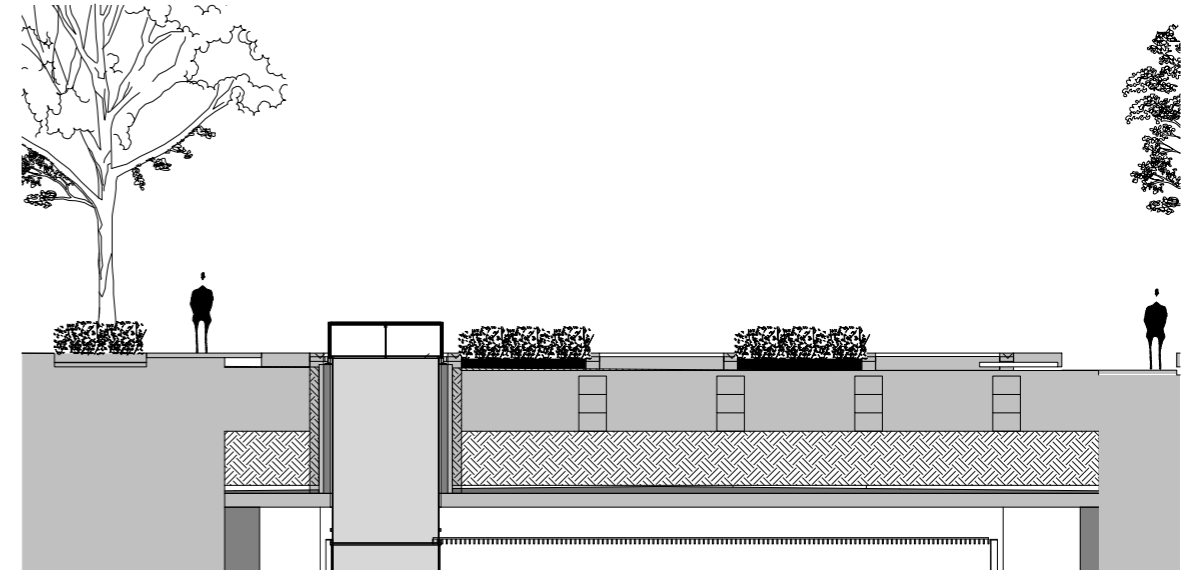


Figure 3.21 CSH\_Section through Skylight Lanterns. Source: HASSELL.

**3.2.4 Sustainable Landscape Design**

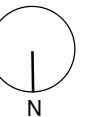
The key sustainable landscape design strategies used at Castle Hill Station include the following:

- Generous planted areas are provided to maximise permeable surfaces
- Trees close to the station provide shade beyond the built canopy
- Light coloured surfaces are used where possible to reduce the urban heat island effect
- Incorporation of continuous massed planting beds along streetscapes where footpath and plaza requirements allow
- Selection of diverse mix of drought tolerant, plant species used where possible.
- Climbers to the Castle Hill Road frontage of the country end service buildings will reduce the urban heat island effect and soften the street elevation of Castle Hill Road.

Refer to Section 4.5 of this UDCLP for further detail on the project wide Sustainable Design and Maintenance initiatives.



Figure 3.22 CSH\_Castle Hill Station Plan showing Proposed Tree Planting across the Precinct. Source: HASSELL.



### 3.2.5 Heritage Interpretation, Interactions and Public Art

#### Heritage Interpretation

Heritage interpretation will be in accordance with the guidelines in Section 4.10 of this UDCLP.

#### Heritage Interactions

There are no heritage interactions in Castle Hill Precinct which require visual impact considerations.

#### Public Art

Public art for Castle Hill Station will be in accordance with the public art plan *Light Line Social Square*. Refer Sections 2.5.4 and 4.11 of this UDCLP. Elements are arranged and orchestrated to make a cohesive composition fusing together architecture, landscape, engineering, lighting, science and art.

Figure 3.23 shows the layout and organisation of *Light Line Social Square* elements at Castle Hill Station. They comprise:

1. *Urban Grove*- Cultural trees
2. *Social Spheres*- Sculptural Elements
3. *Incidental Play*- Ground Play Elements
4. *Skylight Lanterns*- Terraces
5. *Light Screen*- Platform and Threshold Lighting

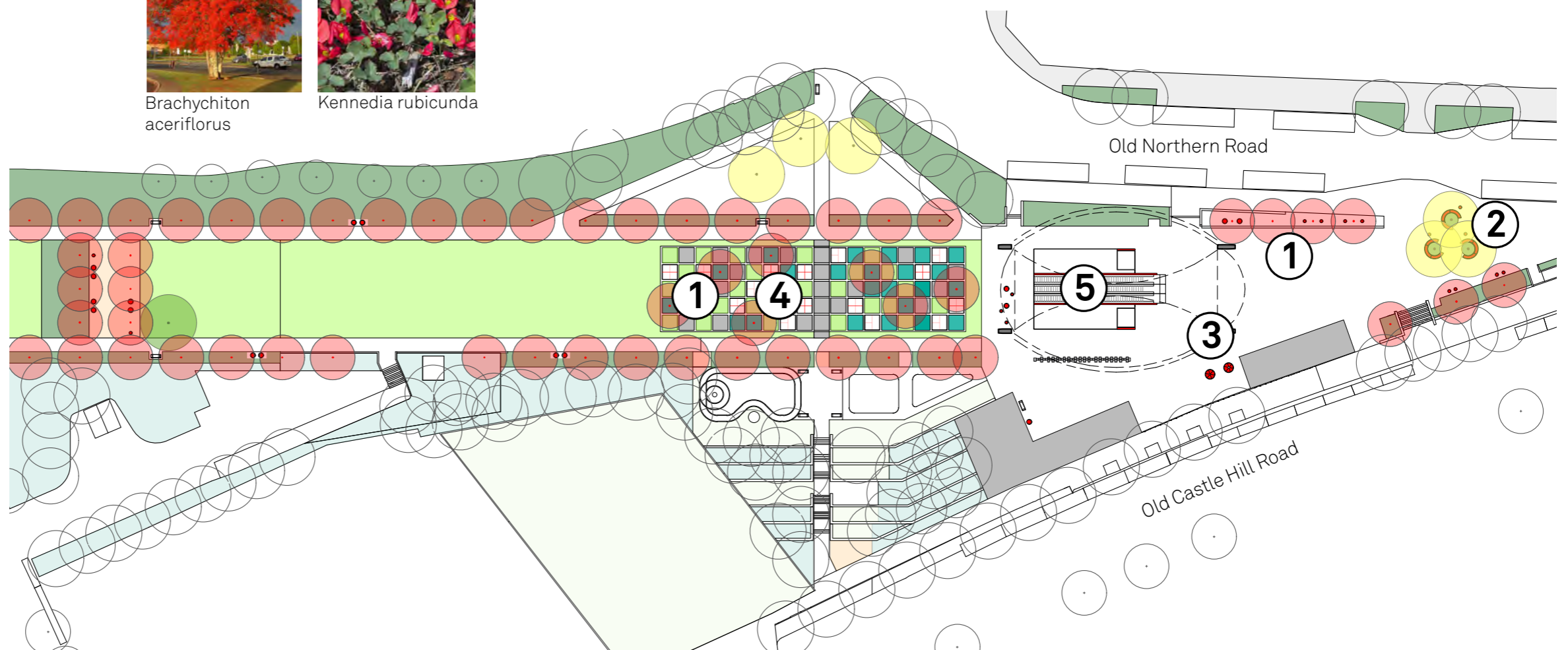
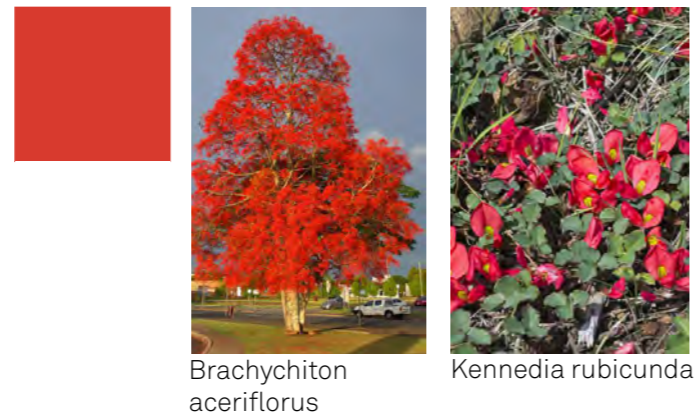
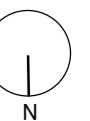


Figure 3.23 CSH\_Location of Public Art Elements at Castle Hill Station. Source: MWA with T+C Studio.



**3.2.6 Planting Design**

Planting design for Castle Hill Station is consistent with the project wide design themes discussed in Section 2.5 Urban and Landscape Design Values and Approach and Section 4.3 Landscaping Measures to Minimise, Mitigate and /or Offset the Impacts of the SSI, of this UDCLP. Different vegetation characters responding to functional requirements and situation are proposed throughout the precinct. These are summarised below.

**Boulevard Trees**

Avenues of trees, in a formal row providing a linear boulevard experience with plenty of shade. The trees will create a distinct character and inform the framework of the park along the main pathways.

**Plaza Trees**

Public Art trees within the plaza area define the station entry areas and assist with orientation and location of the station access points from wider public domain. They provide shade and amenity to the entry, ensuring all sight lines are maintained.

**Street Trees**

Rows of street trees along Old Castle Hill Road and Old Northern Road provide shade and character.

Refer to Section 4.3.7 Planting Design for further detail on the project wide tree and understory planting strategies.

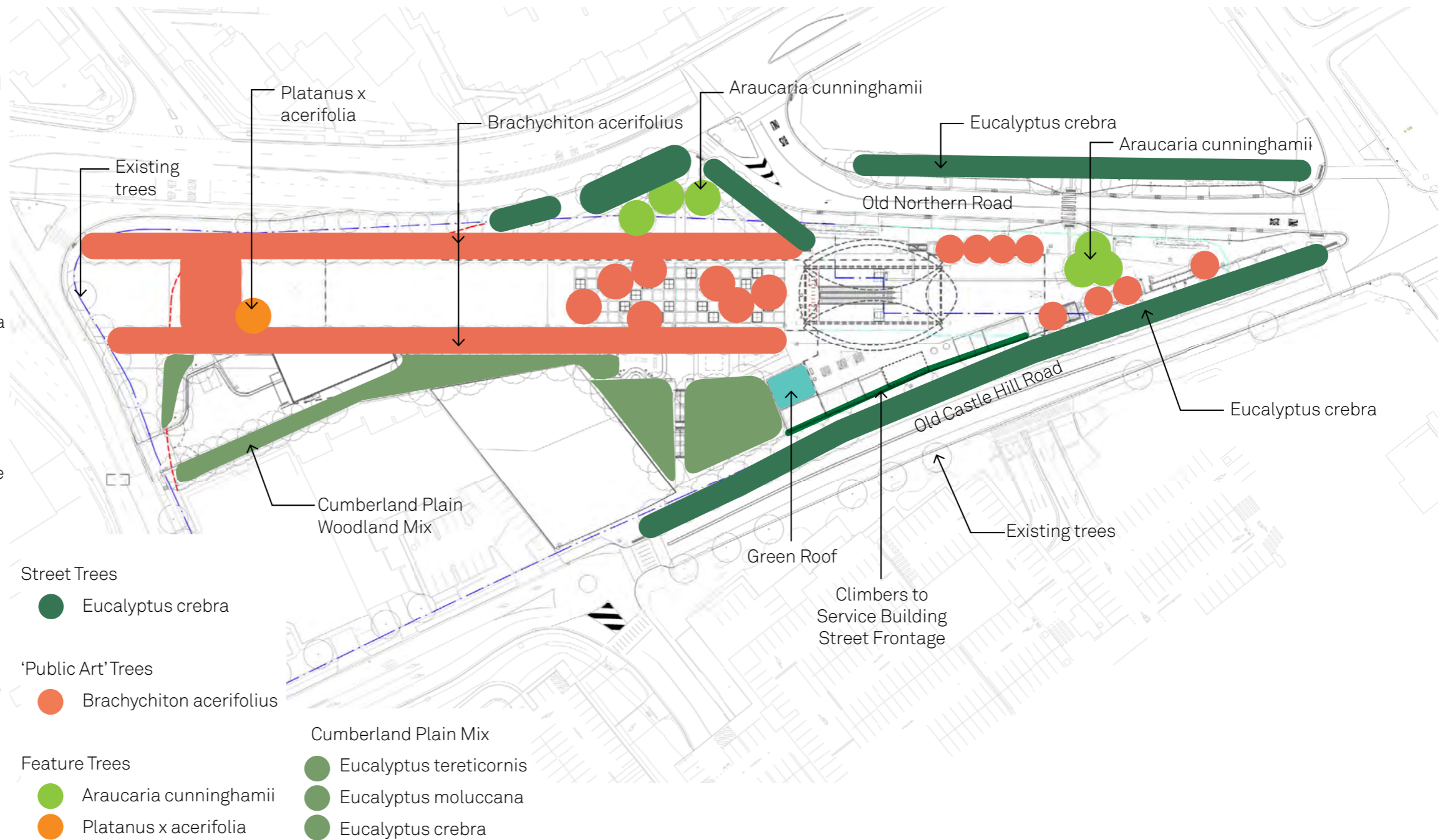
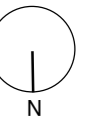


Figure 3.24 CSH\_Castle Hill Precinct Planting Plan. Source: HASSELL.



### 3.3 Architectural Design

Castle Hill Station 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. Refer to Section 4.12 for further detail on the design of these elements.

There are eight new stations along Sydney Metro Northwest with three station typologies. Castle Hill Station is part of the cut and cover typology.

#### 3.3.1 Built Elements Typology - Cut and Cover

Key aspects of the cut and cover typology at Castle Hill Station include:

- The platform is below ground at the depth below street level of approximately 22m
- The Station sits below the existing Arthur Whitling Park
- The station gateline location is one level below ground on the concourse
- The main station entry sits within the western side of Arthur Whitling Park
- The station services are located to both ends of the station over four levels below ground with partial above ground service buildings to each end.

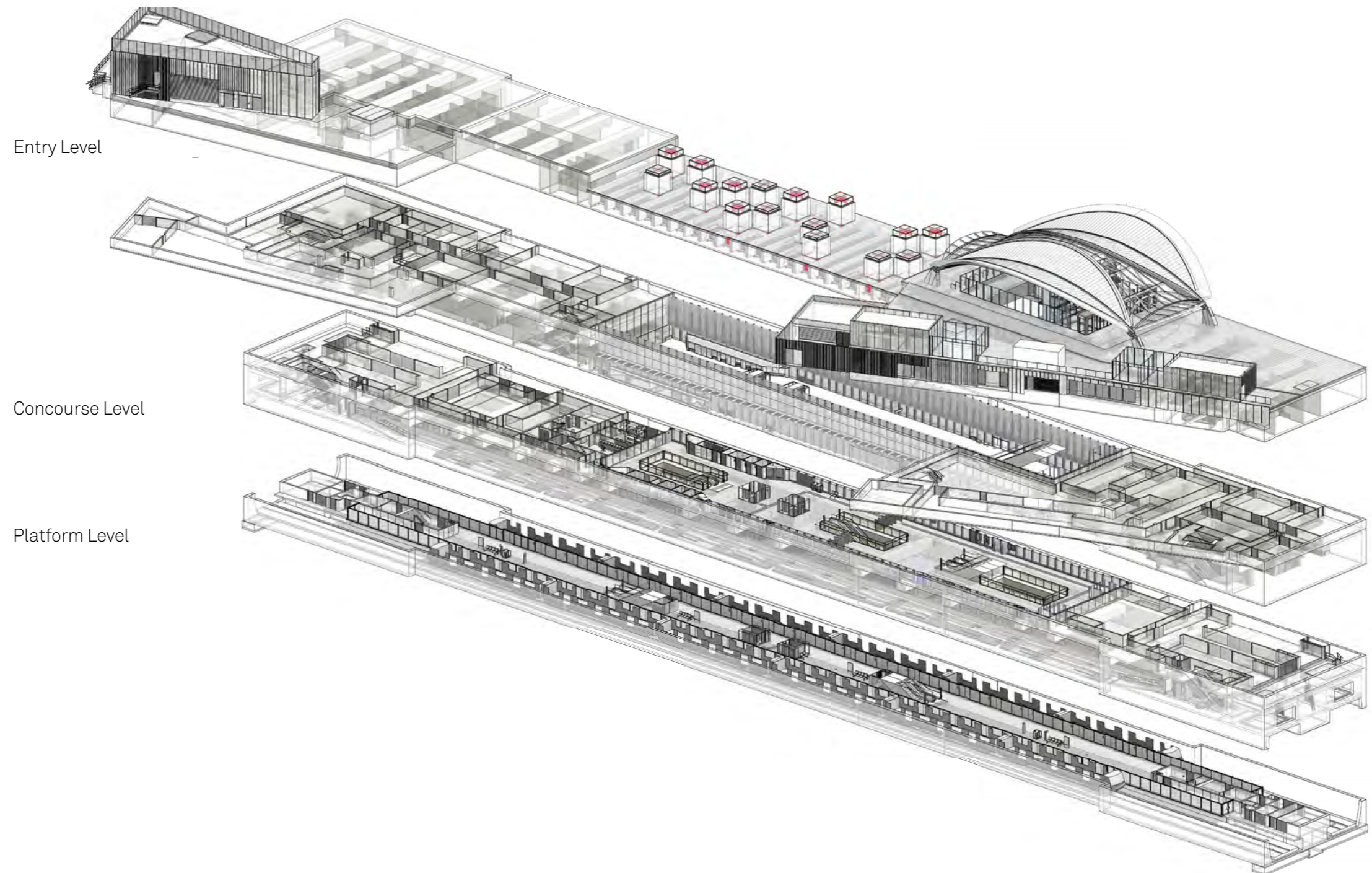


Figure 3.25 CSH\_Castle Hill Station Exploded Diagram showing Station Configuration. Source: HASSELL.

### 3.3.2 Built Elements Design Opportunities

The arrangement of the built elements at Castle Hill station to deliver an integrated station and precinct that optimises transport interchange and community amenity has the following features.

#### 1. Terraces

Landscaped terracing to the north to maximise customer connection with the south side of the Park.

#### 2. Concourse (Underground)

Open concourse and gateline free from obstructions with clear circulation routes and sight lines to destination.

#### 3. Station Gateline (Underground)

Station gateline location below ground to minimise the number of entry points at ground level to achieve better wayfinding and address.

#### 4. Service Buildings

Minimise service buildings at street level to reduce visual impact.

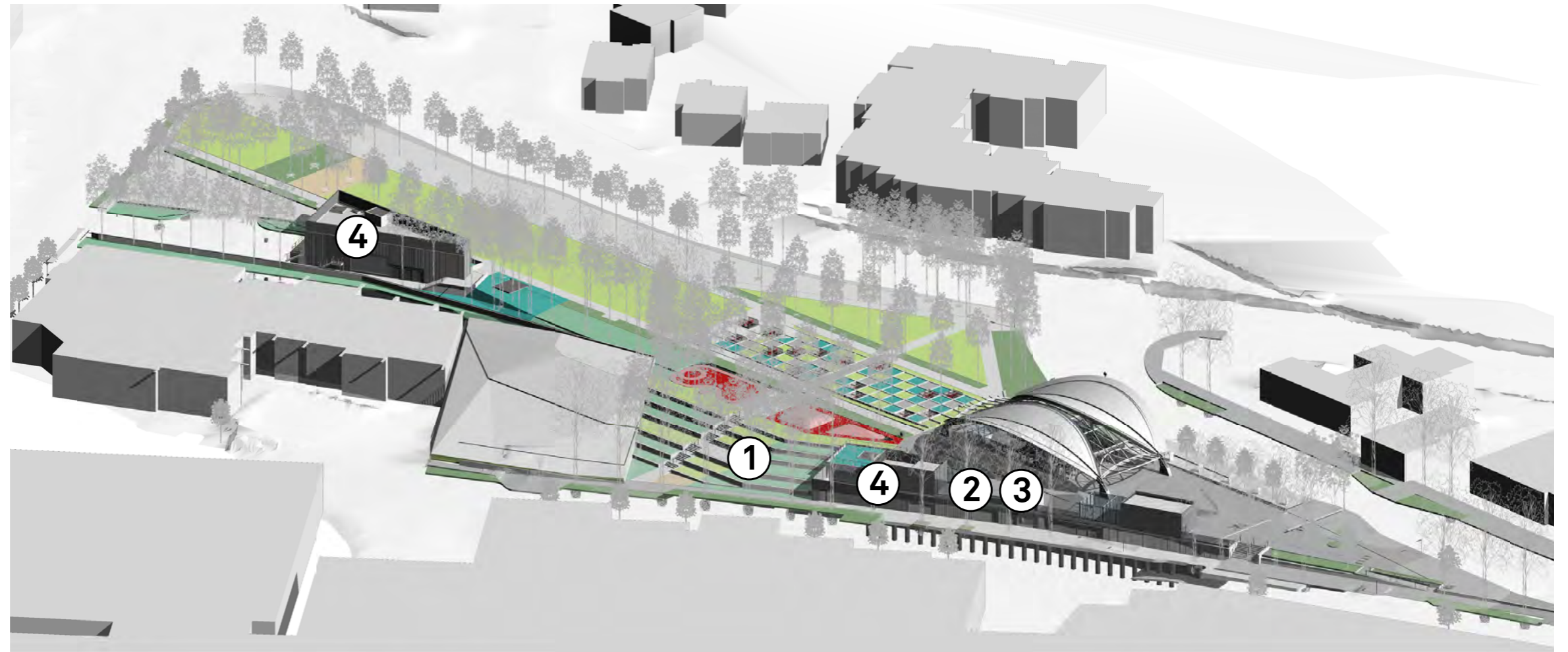


Figure 3.26 CSH\_Castle Hill Station Precinct Diagram. Source: HASSELL.



### 3.3.3 Built Elements Design

The design of Castle Hill Station's key built elements are outlined below. Refer Figure 3.27.

#### Station Configuration

Key components of the station include:

- An island platform 22m below street level.
- A station entry and primary plaza on the western side of Arthur Whiting Park providing access to a single paid concourse below ground over the platform via escalators and lifts.
- Vertical transportation consisting of lifts and escalators from concourse to platform.
- Entry canopy providing weather protection to the concourse below.
- Customer facilities including toilets and parents room located on the paid concourse.
- Station Manager's room located on the paid concourse.
- Service rooms located at each end of the station paid and unpaid zones below ground with small pop-up built forms for the emergency egress stairs and ventilation at ground level.
- Skylight Lanterns integrated into the landscape of Arthur Whiting Park over the paid concourse to the station.
- Two breakout panel provided at concourse level for a future entry to the north and the south
- Allowance for a future unpaid pedestrian subway connection
- Book end plant room configuration allowing an open concourse layout.

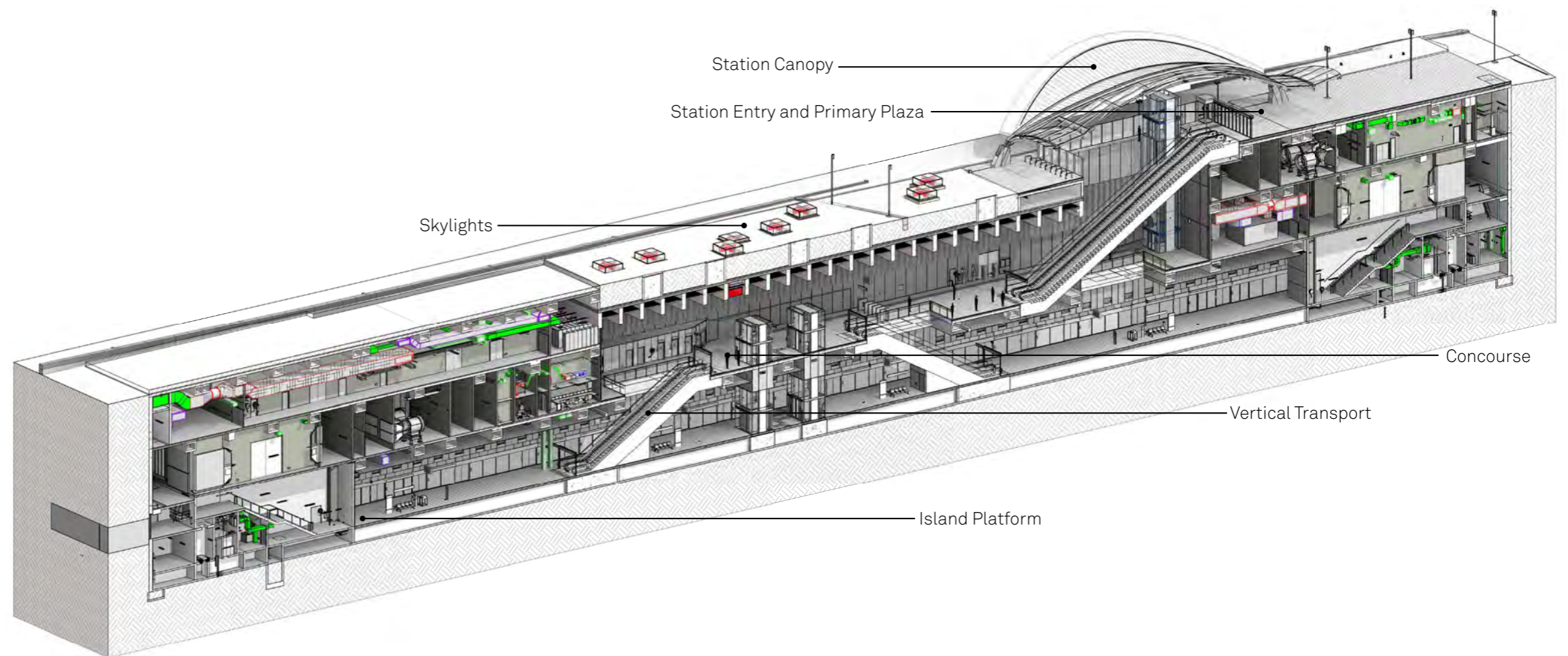


Figure 3.27 CSH\_Castle Hill Station Diagram showing Station Configuration. Source: HASSELL.

**Skylight Lanterns**

The Skylight Lanterns are designed as modules that sit within the landscape. The lanterns are placed in a grid above the paid concourse running in a east west direction between the deep precast beams that support the roof deck of the concourse.

The proximity of the playground and skylight spaces will allow the area to function as one larger play/ art space. Movement between and around the two spaces will be promoted, while the skylight lantern layout also offers opportunity for more restful/ reflective and passive activity.

Refer to Section 4.11 and 4.12.7 for further detail on the design of these elements.

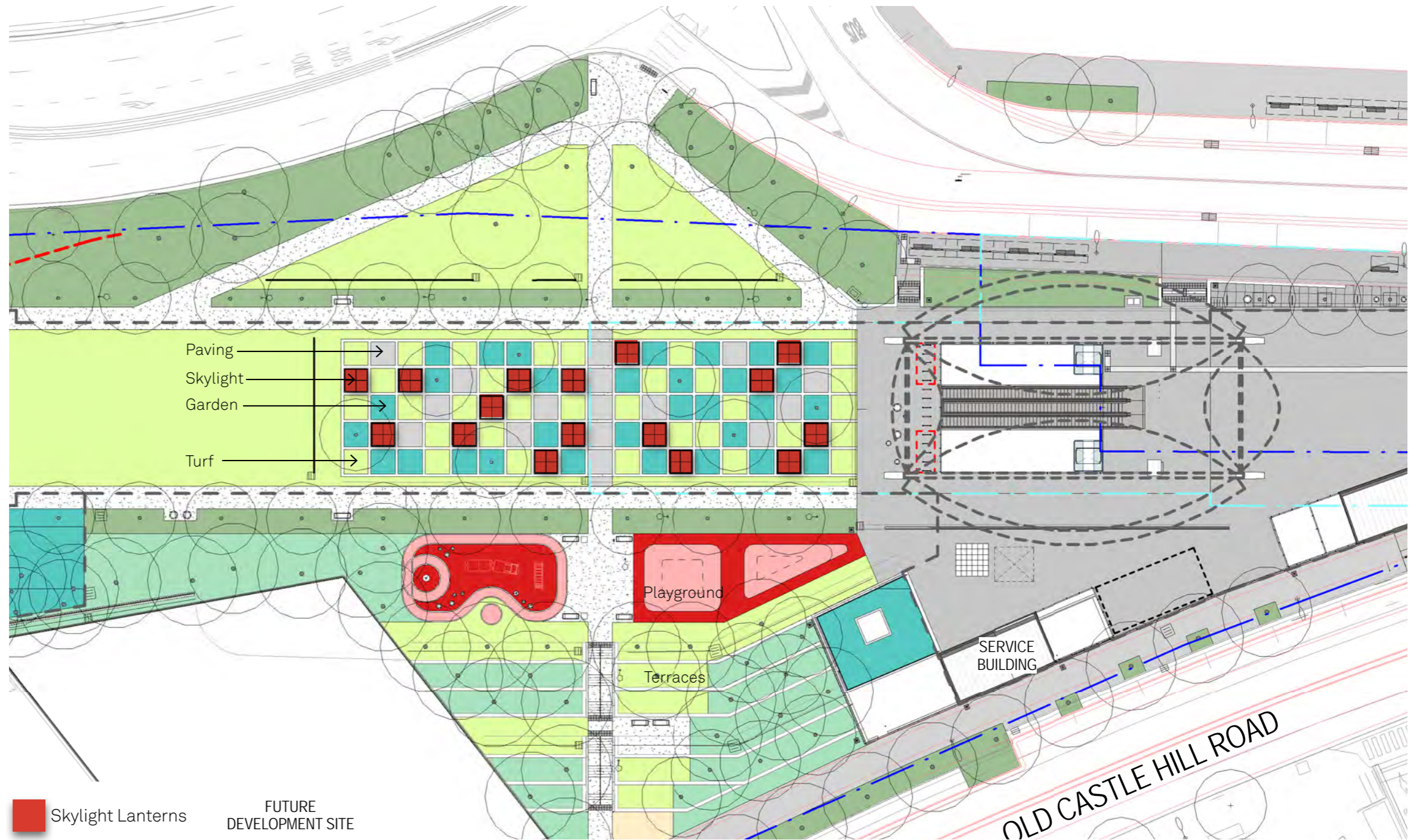
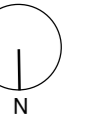


Figure 3.28 CSH\_Location of Skylight Lanterns at Castle Hill Station. Source: HASSELL.



### Station Entry

Primary access to the station will be from the primary plaza on the western side of Arthur Whitling Park on the corner of Old Castle Hill Road and Old Northern Road. The entry configuration has the gateline at the underground concourse level to suit the construction of the potential future station entries to the north and/or the south of the station box.

The paid and unpaid concourses are below the entry and covered by the main station canopy and a modular set of skylights that sit within the landscape. Customer information, ticketing and associated facilities are provided in the unpaid concourse integrated into the perimeter walls.

The spatial quality of the paid and unpaid concourse is essentially divided into two spaces, the majority of the unpaid concourse is open environment covered by the leaf form canopy housing the vertical transport down to the station plus customer facilities.

The paid concourse is below the modular set of skylights that are placed between the expressed precast beam structure to support the roof deck of the park.

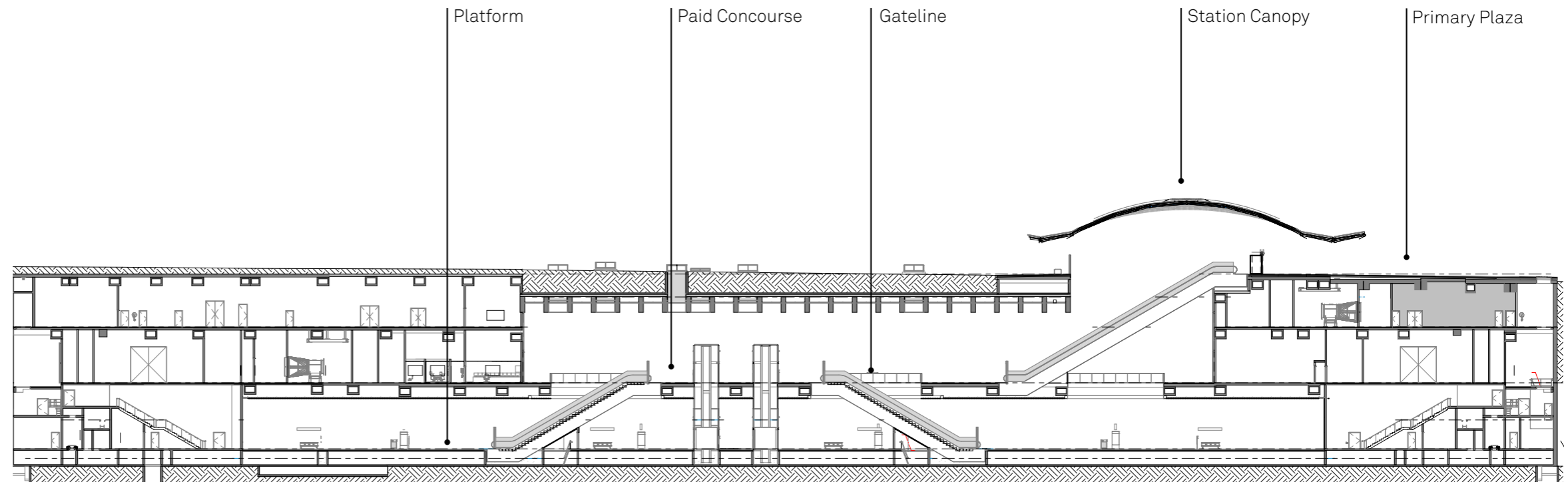


Figure 3.29 CSH\_Castle Hill Station Entry. Source: HASSELL.

**Future Pedestrian Link**

Future pedestrian links have been provided for within the station precinct design.

The future pedestrian connection to the north would connect the station precinct to Castle Towers Shopping Centre under Old Castle Hill Road.

The potential pedestrian link to the south will connect pedestrians to future developments and residential areas.

To safeguard these future links the station walls will be provided with a breakout panel at the proposed locations of connection, as shown in Figure 3.30.

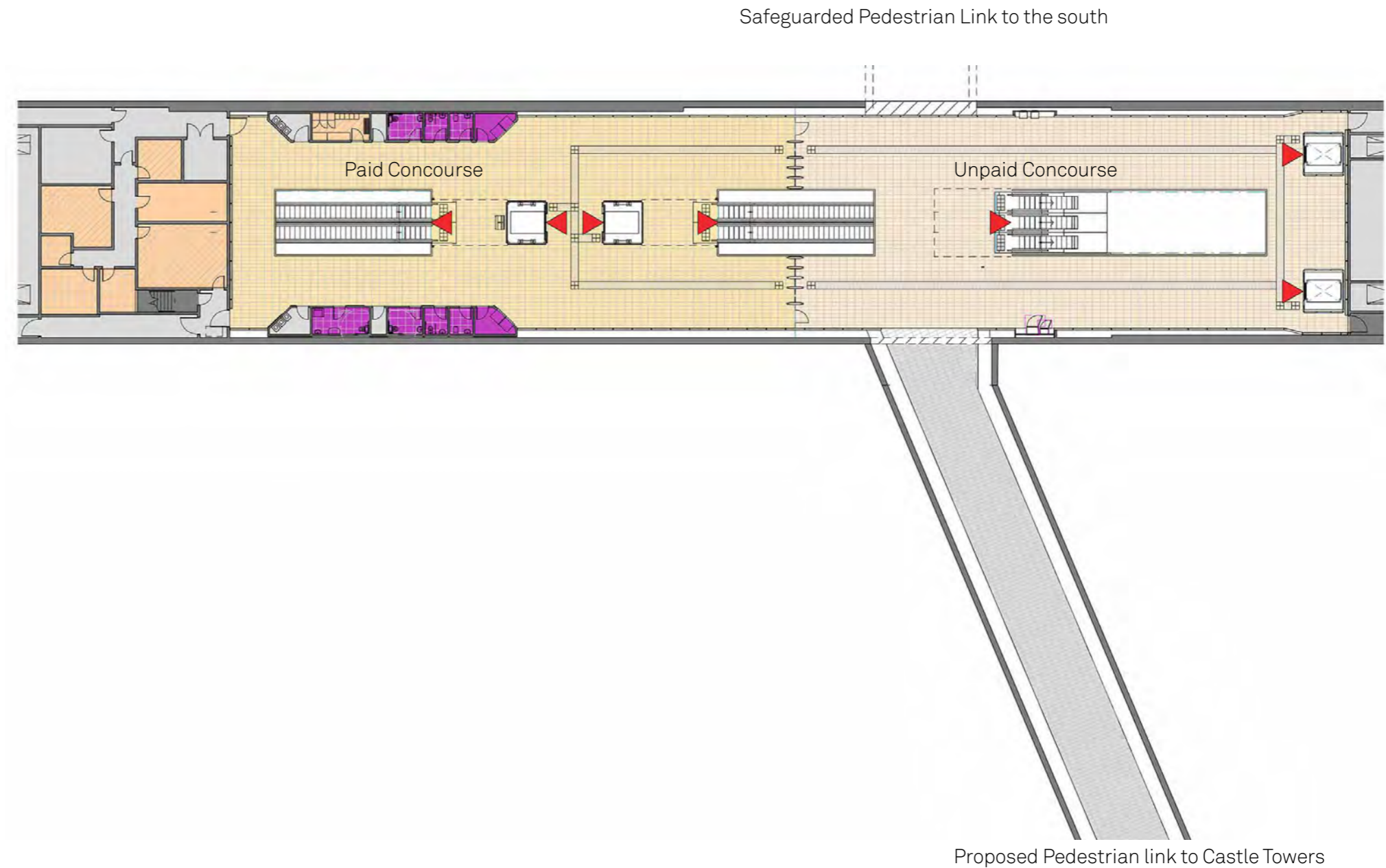
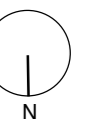


Figure 3.30 CSH\_Castle Hill Station Future Pedestrian Link. Source: HASSELL.



### Service Buildings

There are two above ground service buildings located at each end of the station on the east and to the west. The service buildings house essential services crucial to the operation of the station as well as bicycle storage and potential future retail.

The scale and position of built forms within the surrounding area have been carefully considered to ensure the environment is as open and transparent as possible. Climbers will be planted on the Castle Hill Road frontage of the country end service buildings to soften the street elevation.

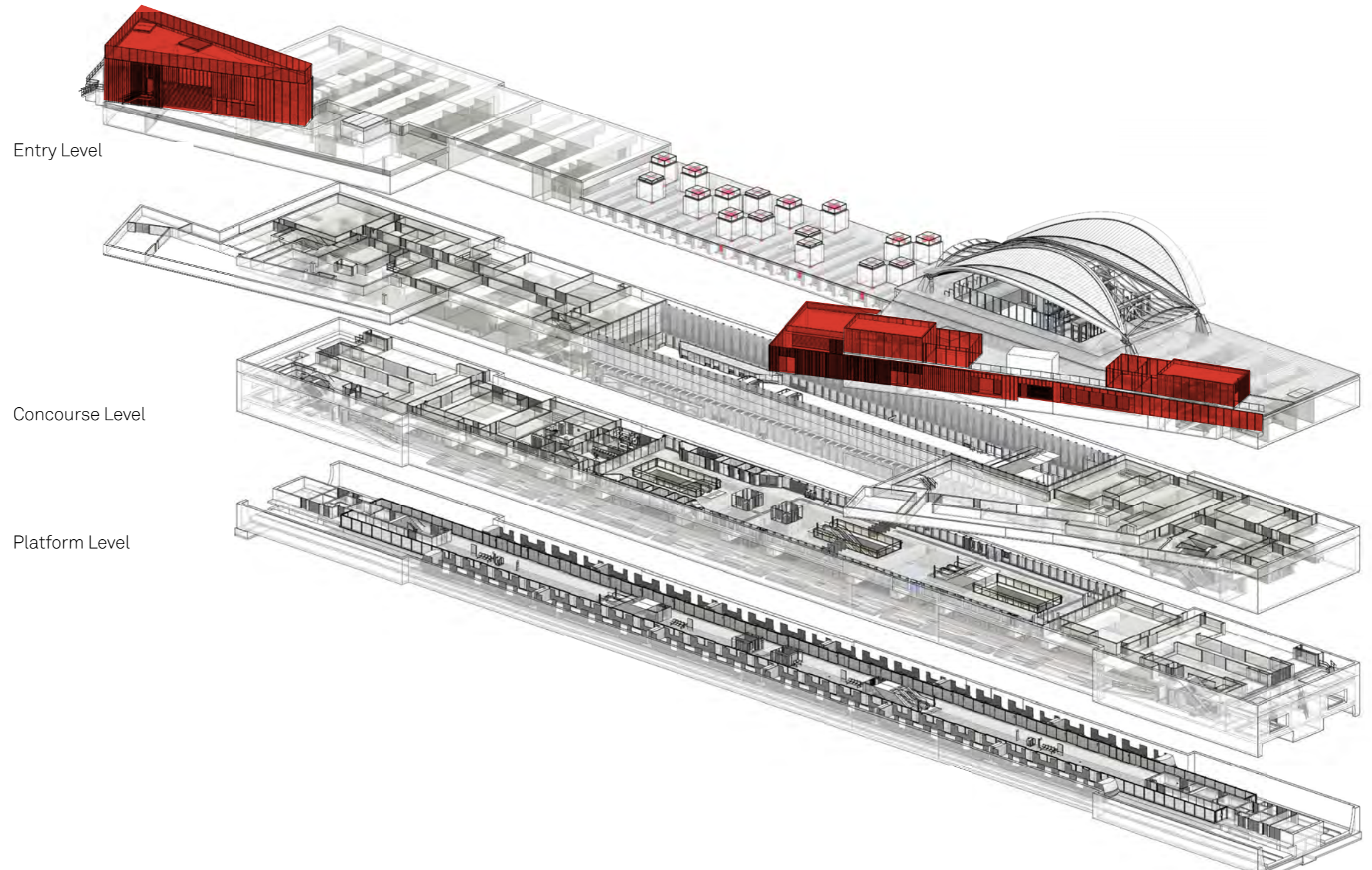


Figure 3.31 CSH\_Location of Service Buildings at Castle Hill Station. Source: HASSELL.

**Station Accommodation Strategy**

The station accommodation has been categorised into four types and has been integrated with the precinct and station to enhance the customer experience both physically and visually.

**1. Customer Facilities**

Located on the paid concourse adjacent to the vertical transport down to platform.

**2. Staff Facilities**

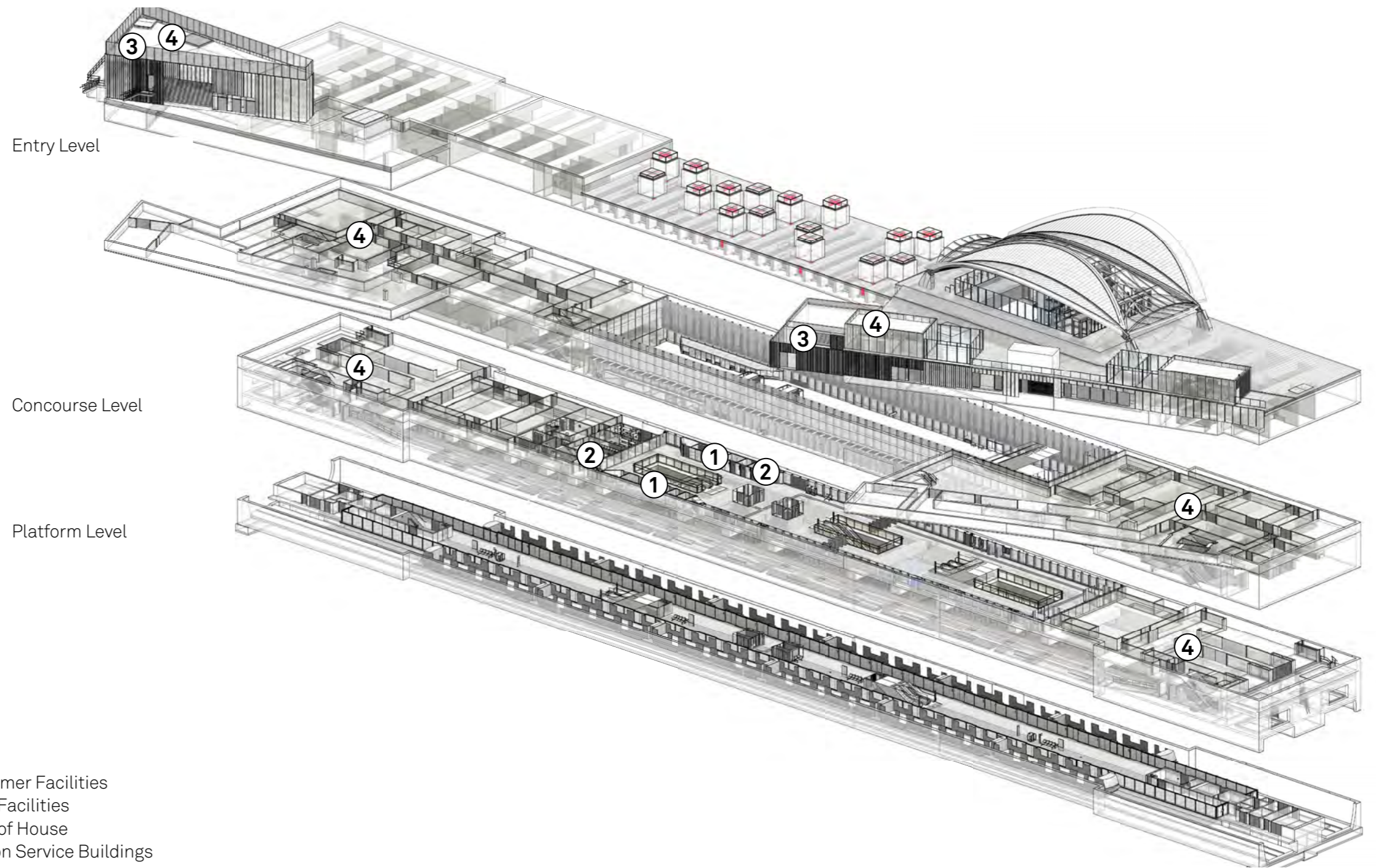
The Station Manager's Room has been placed on the Paid Concourse level to satisfy operational requirements and proximity to gateline.

**3. Back of House**

Maintenance rooms have been located at street level to minimise ventilation equipment. Due to the deep nature of the station much of the services are below ground. The accommodation has been provided at either end. A service transfer level below the concourse connects the plant areas at the station ends.

**4. Station Service Buildings**

There are two above ground service buildings located at each end of the station, one on the Eastern and two on the Western side of the park. The service buildings house essential services that are crucial to operation of the station.



- ① Customer Facilities
- ② Staff Facilities
- ③ Back of House
- ④ Station Service Buildings

Figure 3.32 CSH\_Castle Hill Station Accommodation Strategy. Source: HASSELL.

### 3.3.4 Future Opportunities

Potential opportunities for the location of commercial facilities and the expansion of station facilities (where appropriate) have been identified in the design refinement of the stations. In the future, retail opportunities will be developed at this station and potential locations where such uses are likely to be suitable are identified on Figure 3.33. The final locations will be subject to further design and viability assessment.

An objective for commercial activity is that it should contribute positively to customer journeys. The following commercial opportunities have been identified.

#### Retail

The station design has safeguarded retail space adjacent the station entry on Old Castle Hill Road. The retail opportunity could be integrated with the station services and focused towards the Primary Plaza and station entry, creating an active edge.

#### Vending Machines

Provision has been made for vending machines within the paid concourse. This space has been integrated with concourse pods to provide seamless integration with the architecture and not adversely impact customer circulation or wayfinding.

#### Advertising

Advertising will be integrated with the station architectural design and finishes as part of the design development process in future stages.

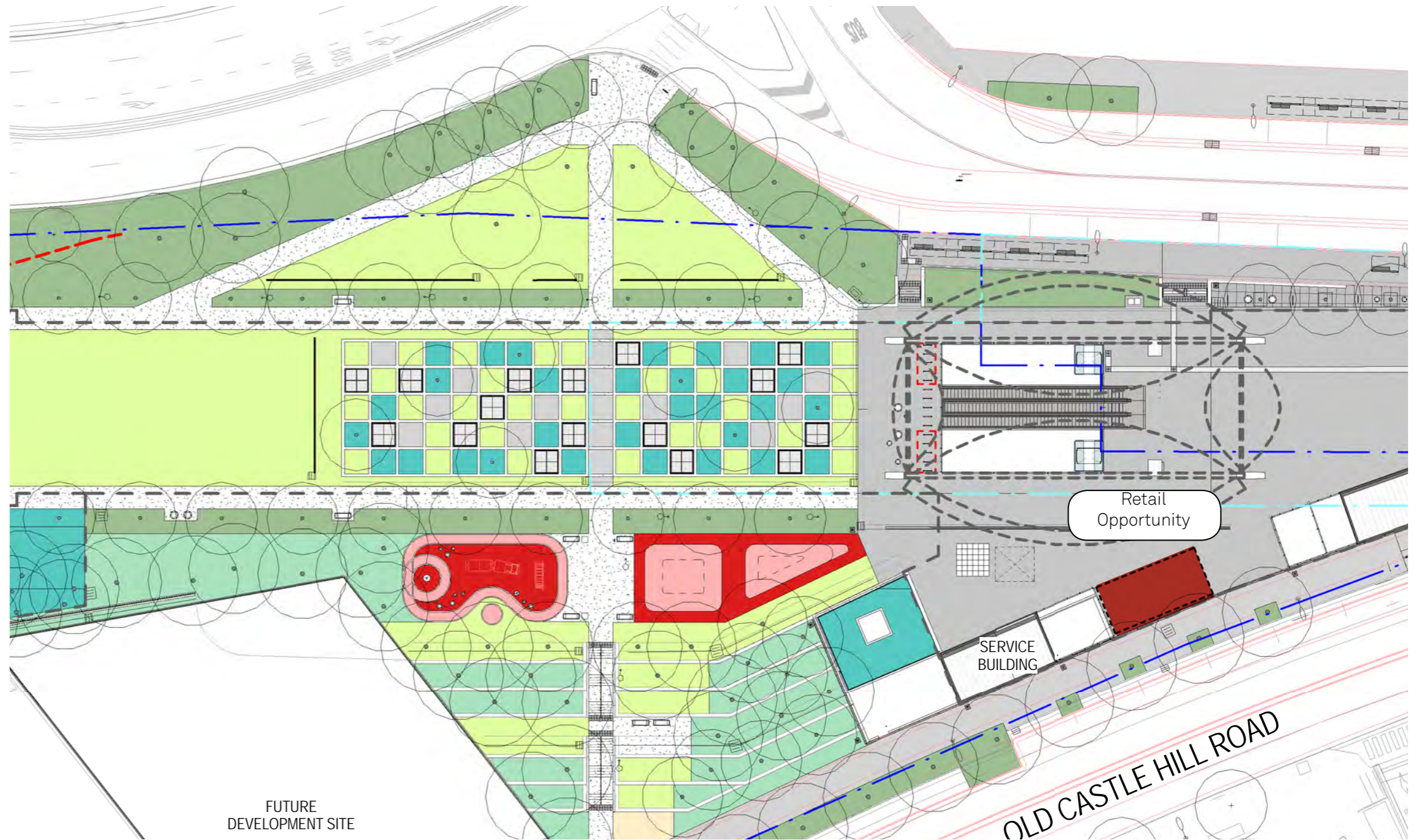
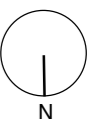


Figure 3.33 CSH\_Castle Hill Station Commercial Opportunities Plan. Source: HASSELL.



### 3.3.5 Signage and Wayfinding

The Sydney Metro Northwest stations are designed to be open, accessible and intuitively navigable with a wayfinding and signage strategy that will enhance these features. The wayfinding strategy provides directional and location information through simple clear signage, messages and use of pictograms, and aims to provide the right information at the right location so customers can navigate their way around the stations safely and efficiently.

The wayfinding strategy and associated signage is designed to optimise the navigation experience inside and around the stations. This will be integrated with the station architecture, consistent with the principles currently being tested and established by TfNSW and tailored for a modern single line, rapid transit system. The current signing products as established by TfNSW will be specified for use in the stations.

The right location for signing is usually at a decision point and at the Station, there are primarily two key decision points. One of these is on entering the concourse where the correct platform has to be selected for travelling in the right direction and the other is when exiting the concourse to access the local area and other transport interchange modes. The other main choice customers face is the mode of vertical transportation and whether to use the lifts or escalators to travel between the station concourse and platform below.

The signage and customer information details shown are indicative only and will be developed in greater detail during subsequent design stages.

### Precinct Signing

The area immediately outside of the station buildings will vary in scale and function depending on location. At Castle Hill Station precinct, the initial provision is for a 'park and ride' function plus small-scale transport interchange.

Precinct signing will identify and direct passengers to transport interchange facilities and the town centre and shopping centre, primarily through the use of a standard TfNSW finger-post sign and to a lesser extent the use of a TfNSW blade sign.

The blade sign has the added advantage of incorporating poster information which can take the form of local area maps.

Precinct signs will include station totem signs, using the two (different sized) standard post mounted products developed by TfNSW.

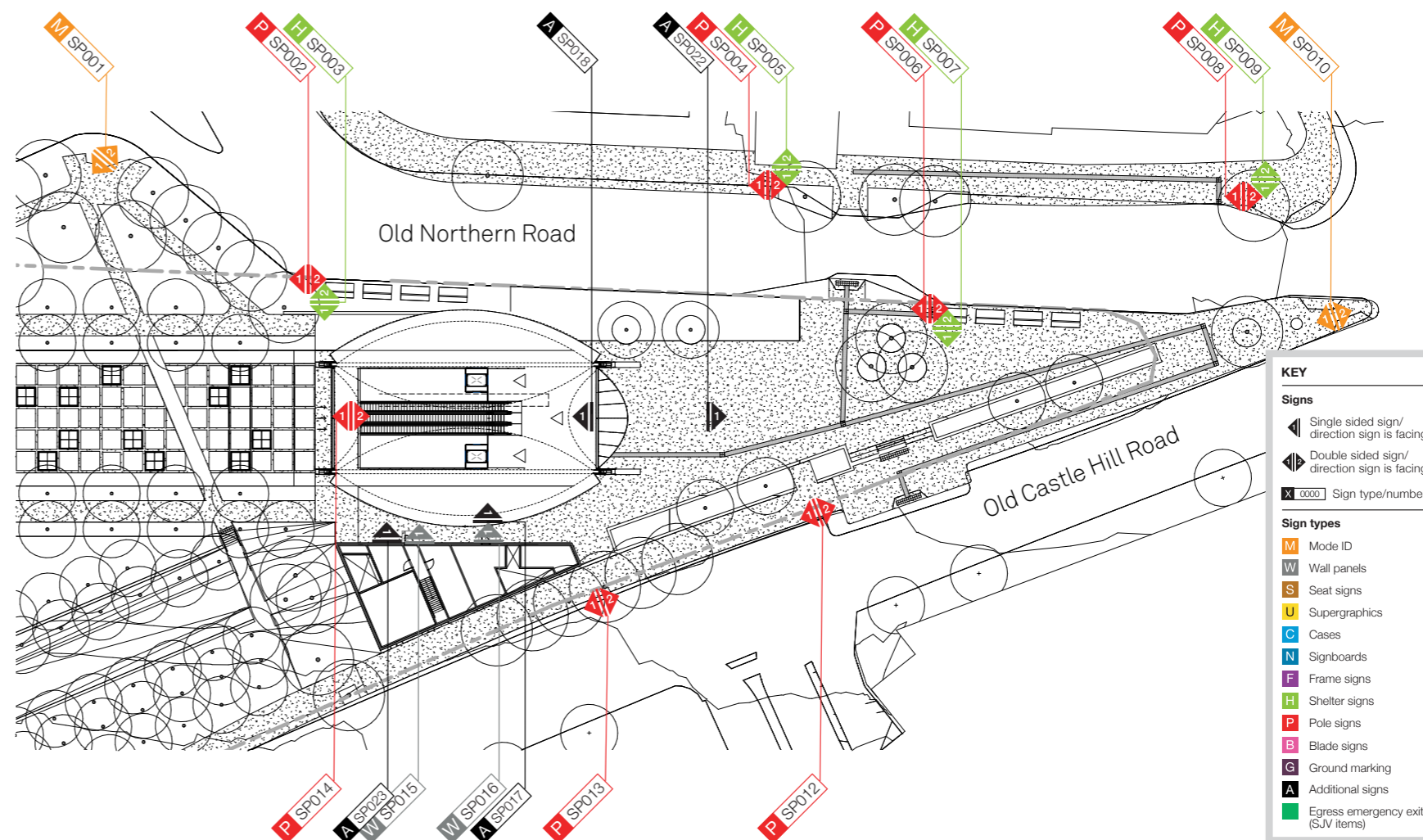


Figure 3.34 CSH\_Extract of Precinct Signing in Primary Plaza. Source: Blue Sky.

