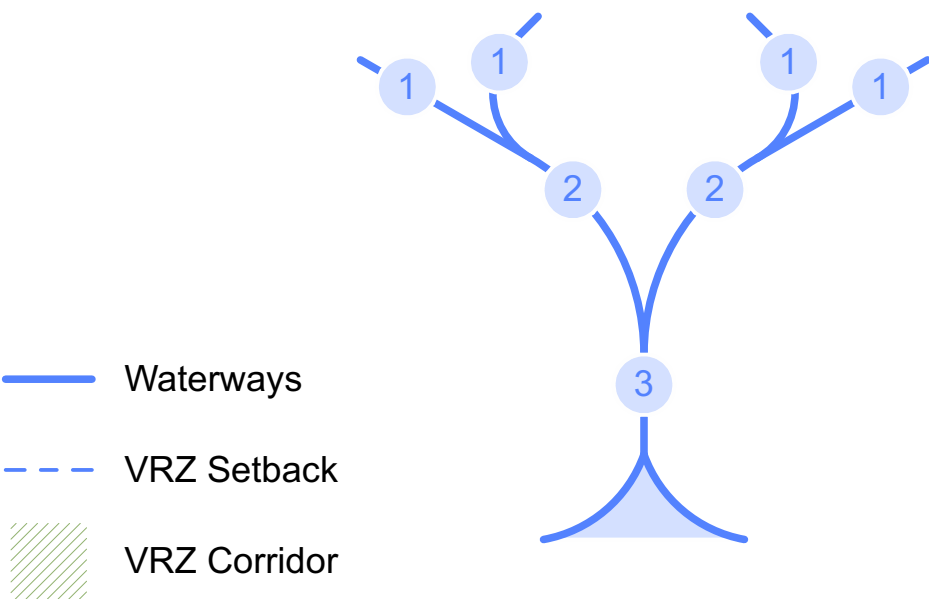


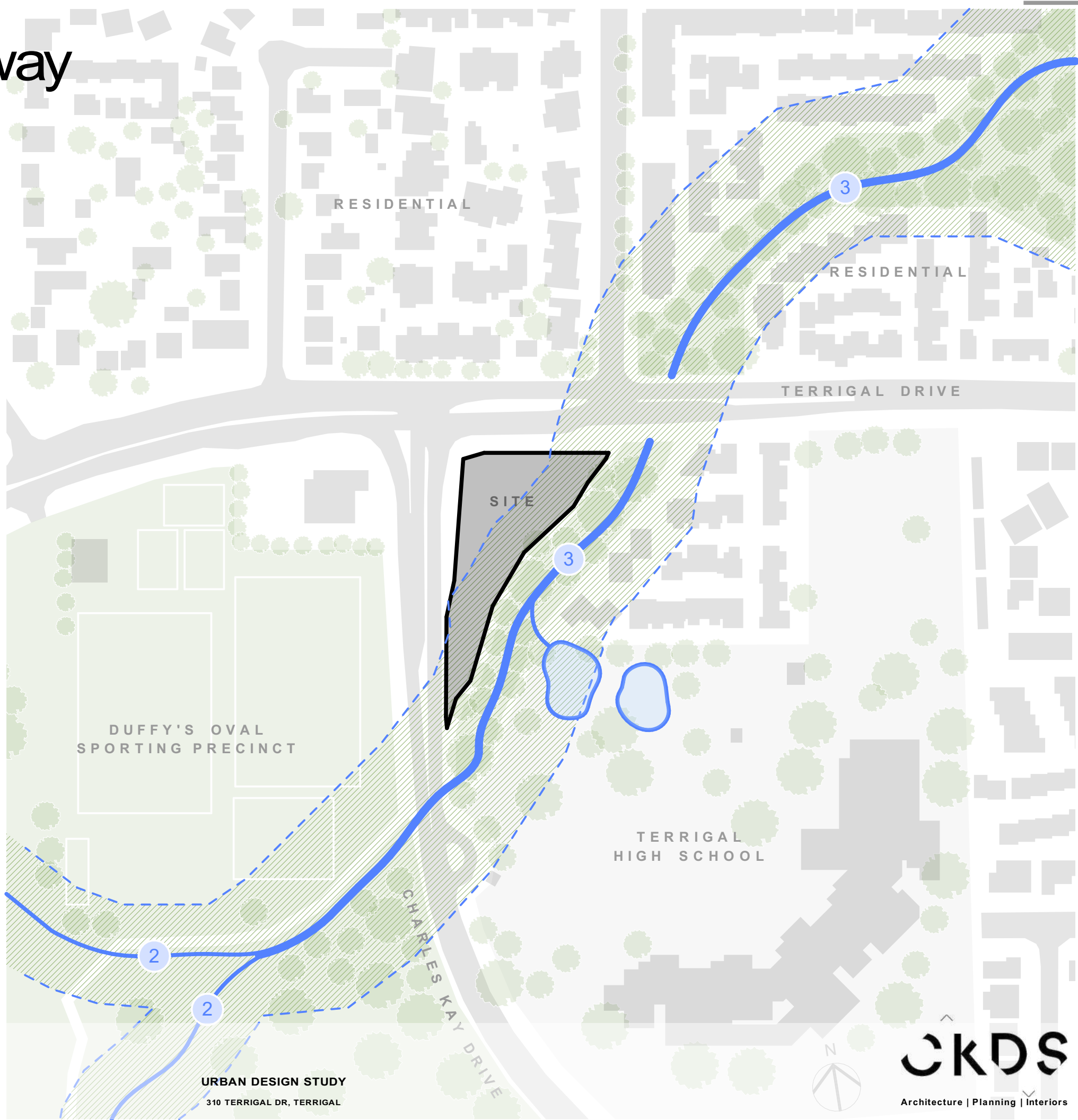
Site Analysis: Waterway

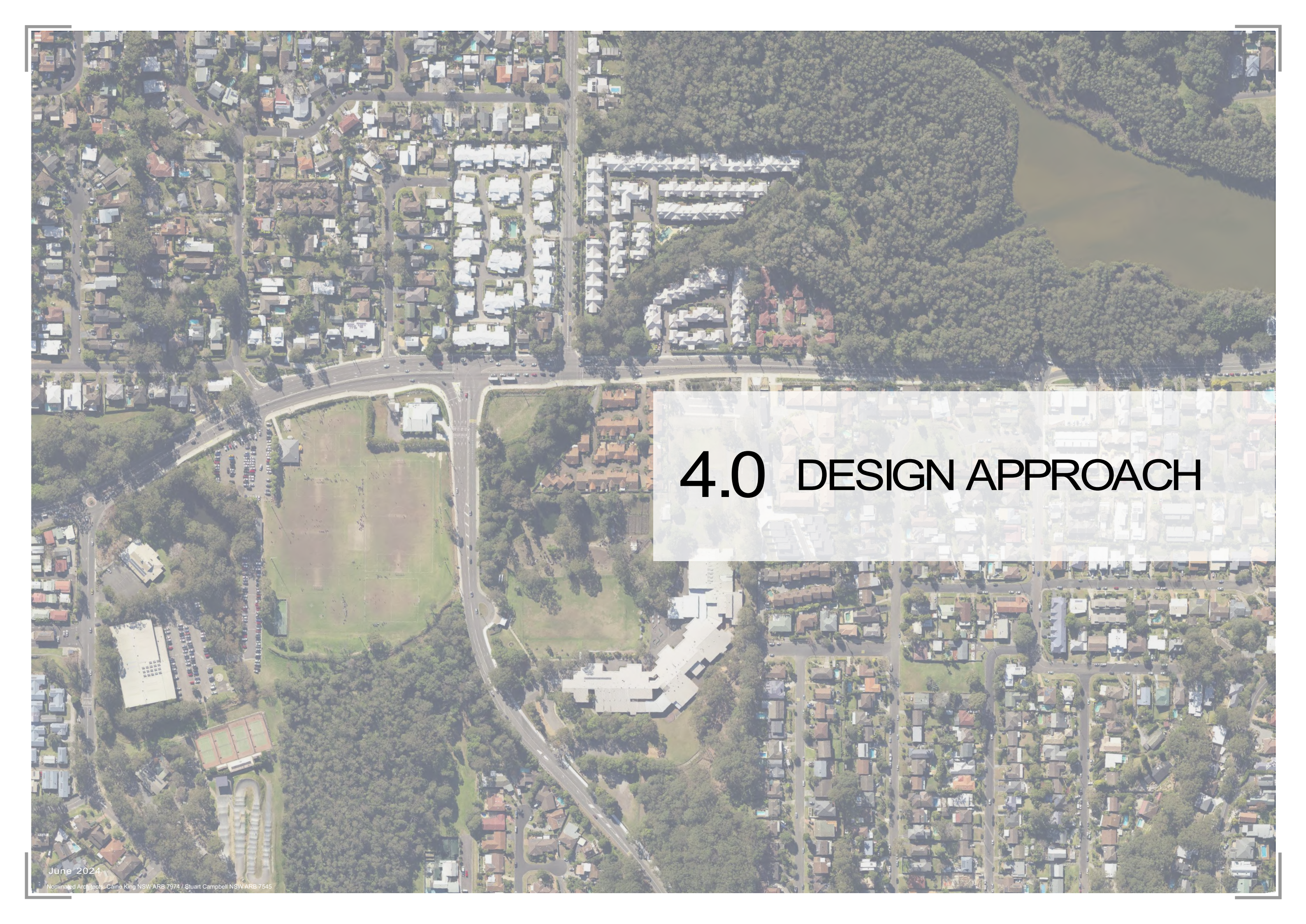
The site is adjacent a 3rd order stream which requires a 30m wide vegetated riparian zone (VRZ) to either side from top of bank.

As such, more than half the site (65%) forms part of the waterway's VRZ, limiting potential development to an irregular shaped area adjacent the intersection. As the footprint is difficult to develop efficiently, the proposed development uses the VRZ 'averaging rule' to achieve a more efficient footprint. Please refer to Section 5.0 Indicative Design for further detail.



- Waterways
- VRZ Setback
- VRZ Corridor



An aerial photograph of a suburban neighborhood. The image shows a mix of residential areas with houses, some with swimming pools, and a large green field. A road runs through the center, and a river is visible on the right side. The text '4.0 DESIGN APPROACH' is overlaid on the right side of the image.

4.0 DESIGN APPROACH

Developable Area: Site Constraints

While the site is sizeable at 4,262m² in area, only 27% (1,183m²) of the site is developable due to street and VRZ setbacks.

Site Area:	4,262m ²
Developable Area:	1,183m ² (27%)

With a height limit of 8.5m, a maximum of two storeys can be achieved. With two floors of the developable area, only 78% of the allowable FSR can be achieved.**

Max. Allowable FSR:	0.70 : 1* (GFA = 2,983m ²)
Max. Achievable** FSR:	0.55 : 1 (GFA = 2,366m ²)

The developable footprint is an irregular shape, making it inefficient to develop, likely significantly reducing yield further.

* Refer Clause 4.4A of CCLEP
** not allowing for GFA exclusions such as circulation, services, etc

- Outer VRZ

Inner VRZ

Waterway

Street Setback
- VRZ Encroachment

VRZ Offset

Developable Footprint/Massing

VRZ

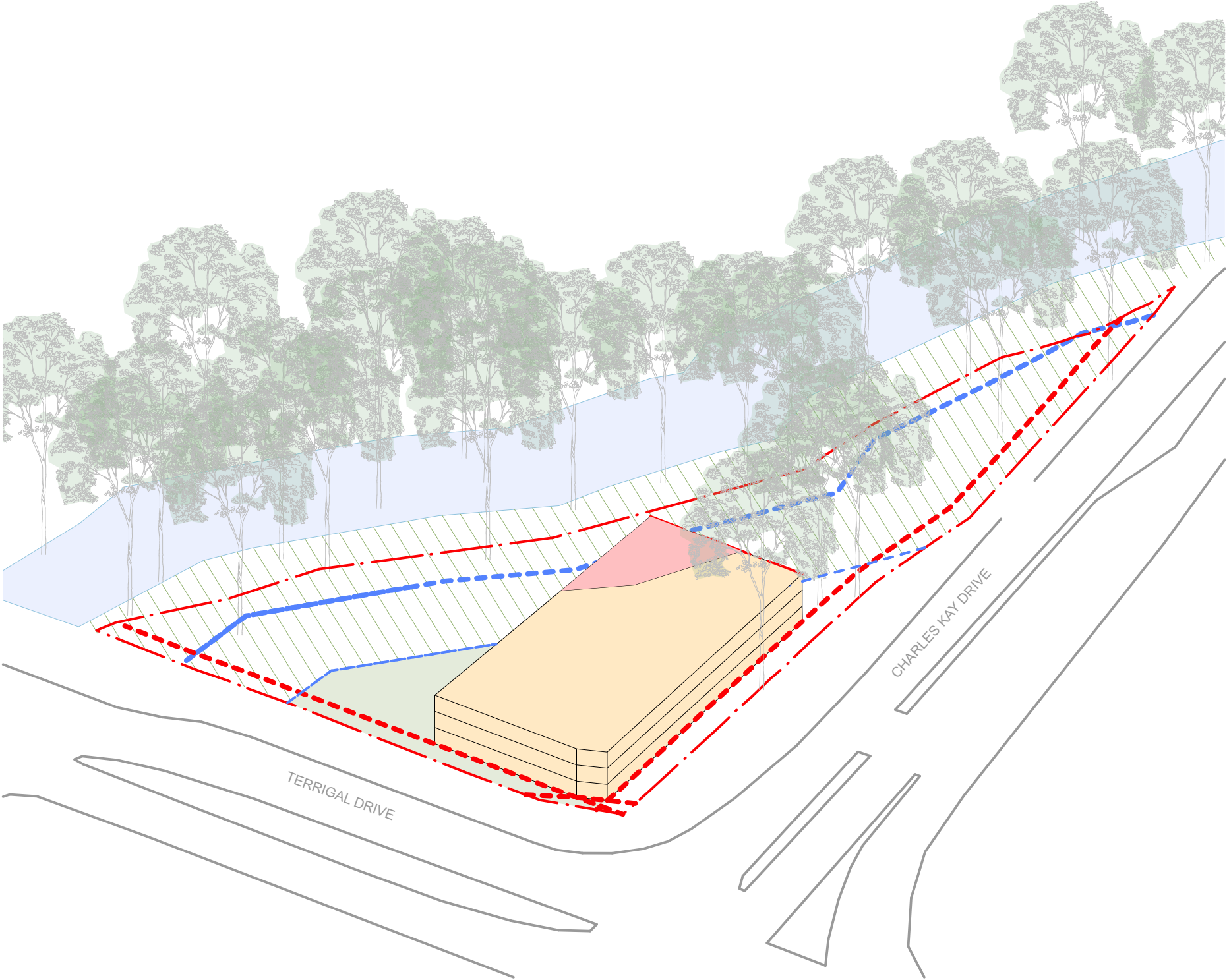


Developable Area: VRZ Averaging

The developable footprint is an irregular shape, making it inefficient to develop.

To achieve a more efficient footprint, the VRZ 'averaging rule' was used, balancing encroachment with offsetting to arrive at a more regular footprint, improving potential efficiency.

- Outer VRZ
- Inner VRZ
- Waterway
- Street Setback
- VRZ Encroachment
- VRZ Offset
- Developable Footprint/Massing
- VRZ



Developable Area: Compliant Design

Initial investigations into a compliant scheme only achieved 5 townhouses, even using VRZ offsetting. Due to the small scale of the development, basement parking was not viable, disqualifying it from additional FSR provisions (CCLEP Clause 4.4A), reducing the max. allowable FSR to 0.5:1.

Max. Allowable FSR: 0.50 : 1* (GFA = 2,983m²)
Max. Achieved FSR: 0.22 : 1 (GFA = 954m²)

The compliant scheme only achieved an FSR of 0.22:1 (44% of the allowable FSR) - a density lower than most surrounding residential lots. Give the site was earmarked for strategic densification ("Area 1" in the CCLEP), the compliant scheme fails to achieve the intended strategic outcomes for the site.



- Outer VRZ
- Inner VRZ
- Waterway
- Street Setback
- VRZ Encroachment
- VRZ Offset
- Developable Footprint/Massing
- VRZ

Developable Area: Compliant Design

In addition, the compliant scheme also results in poor design outcomes.

Due to the risk of flooding, the townhouses and driveway access are elevated and disconnected from natural ground and the street.

With vehicle access only available from Charles Kay Drive and away from the intersection, the townhouses are oriented to face Charles Kay Drive to reduce the driveway length. The compliant design fails to address its primary street frontage, Terrigal Drive.

As basement parking is unviable for such a small scale development, much of the developable footprint is lost to exposed hardstand area.

The compliant scheme does not respond to the site's prominent location, and does not contribute to neighbourhood amenity.

** Refer Clause 4.4A of CCLEP*

- Outer VRZ

Inner VRZ

Waterway

Street Setback

VRZ Encroachment

VRZ Offset

Developable Footprint/Massing

VRZ
-
- 30 | June 2024
Nominated Architects: Caine King NSW ARB 7974 / Stuart Campbell NSW ARB 7545
- URBAN DESIGN STUDY
310 TERRIGAL DR, TERRIGAL
- CKDS**
Architecture | Planning | Interiors

Developable Area: Proposed Design

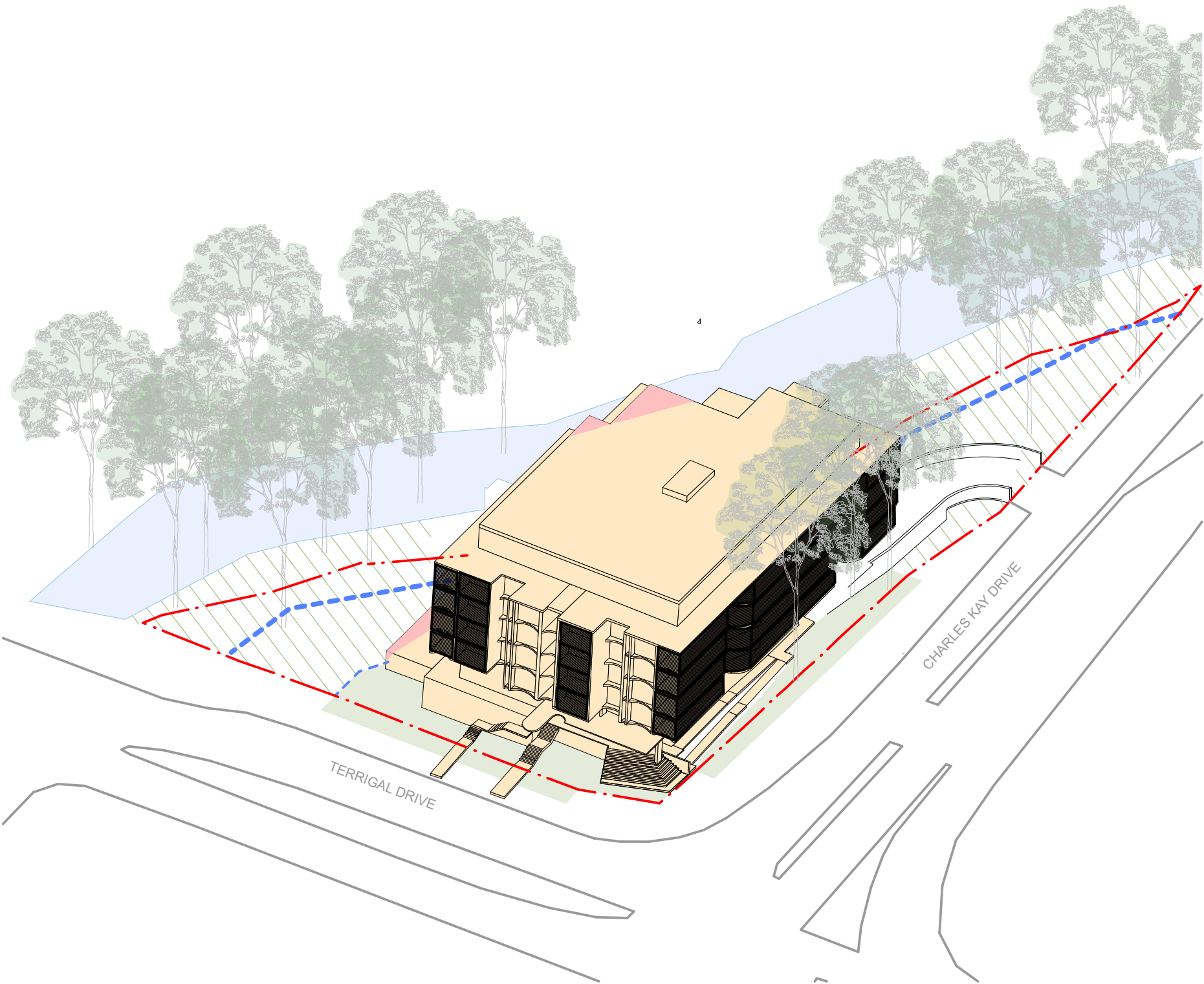
To achieve better design outcomes, a non-compliant option was investigated prioritising design outcomes over compliance.

Increasing the height and FSR allowed a shift from low-density townhouses to a denser mixed-use model.

The increased height allowed the ground floor to be freed up for more diverse uses and active street frontages.

The increased density and yield allowed for parking to be shifted to a basement, making more efficient use of the developable footprint.

Due to the site's isolation, the increase in height had minimal impact on the solar access of other developments.



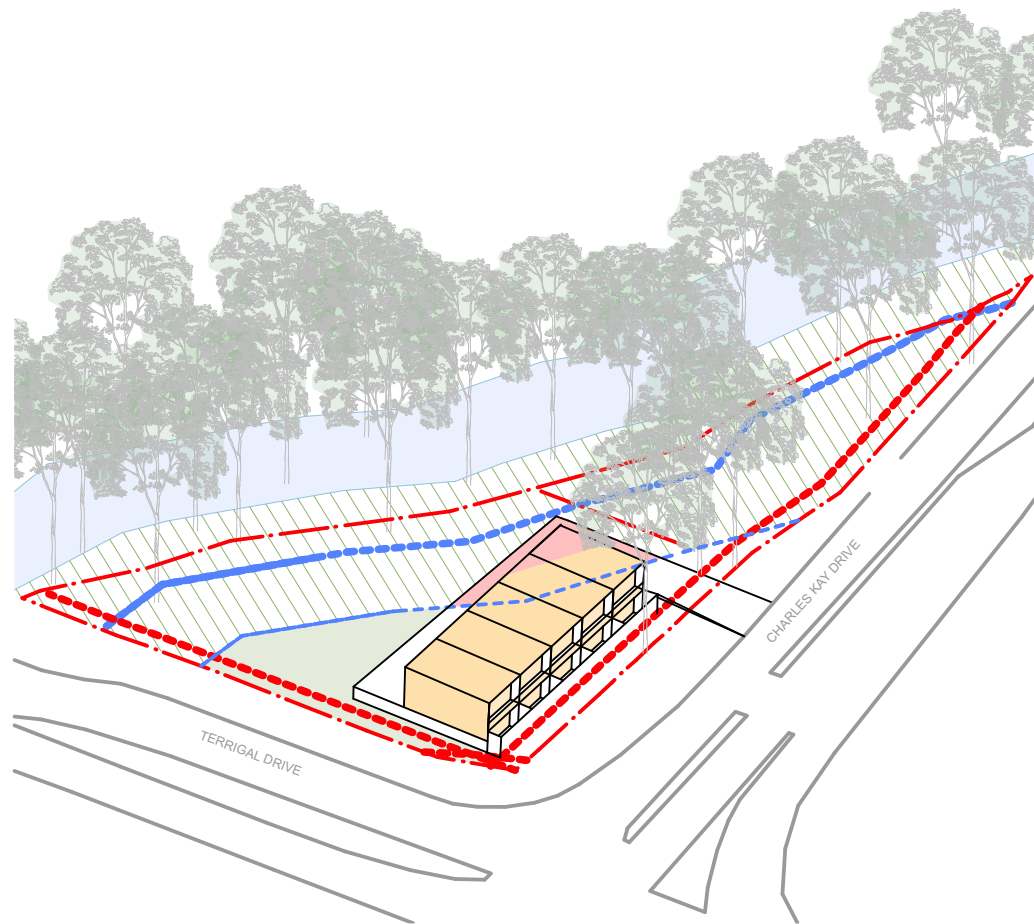
- Outer VRZ
- Inner VRZ
- Waterway
- Street Setback
- VRZ Encroachment
- VRZ Offset
- Developable Footprint/Massing
- VRZ

Concept Comparison

Compliant Development

Yield: 5 residences
 FSR: 0.22 : 1
 Height: 8.5m
 Compliant: Yes *(with CCLEP Height and FSR)*

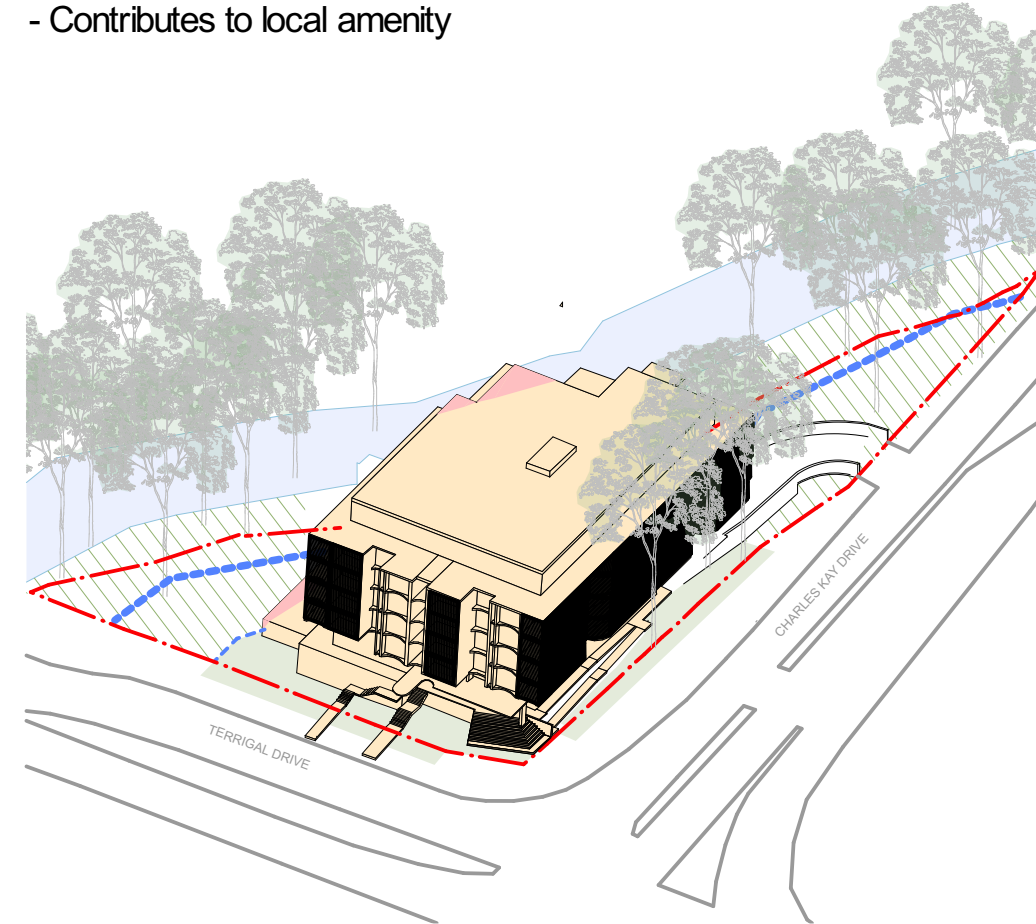
- Does not address intersection or primary frontage
- Disconnected from ground and street
- No active street frontages
- Does not contribute to strategic densification
- Does not contribute to local amenity



Proposed Development

Yield: 38 residences and retail tenancy
 FSR: 1.3 : 1
 Height: RL 26.95m [**Refer to Elevations - height varies from NGL Sits below 25m effective height**]
 Compliant: No *(with CCLEP Height and FSR)*

- Addresses intersection and primary street frontage
- Transitions to ground and street
- Active street frontage
- Contributes to strategic densification
- Contributes to local amenity

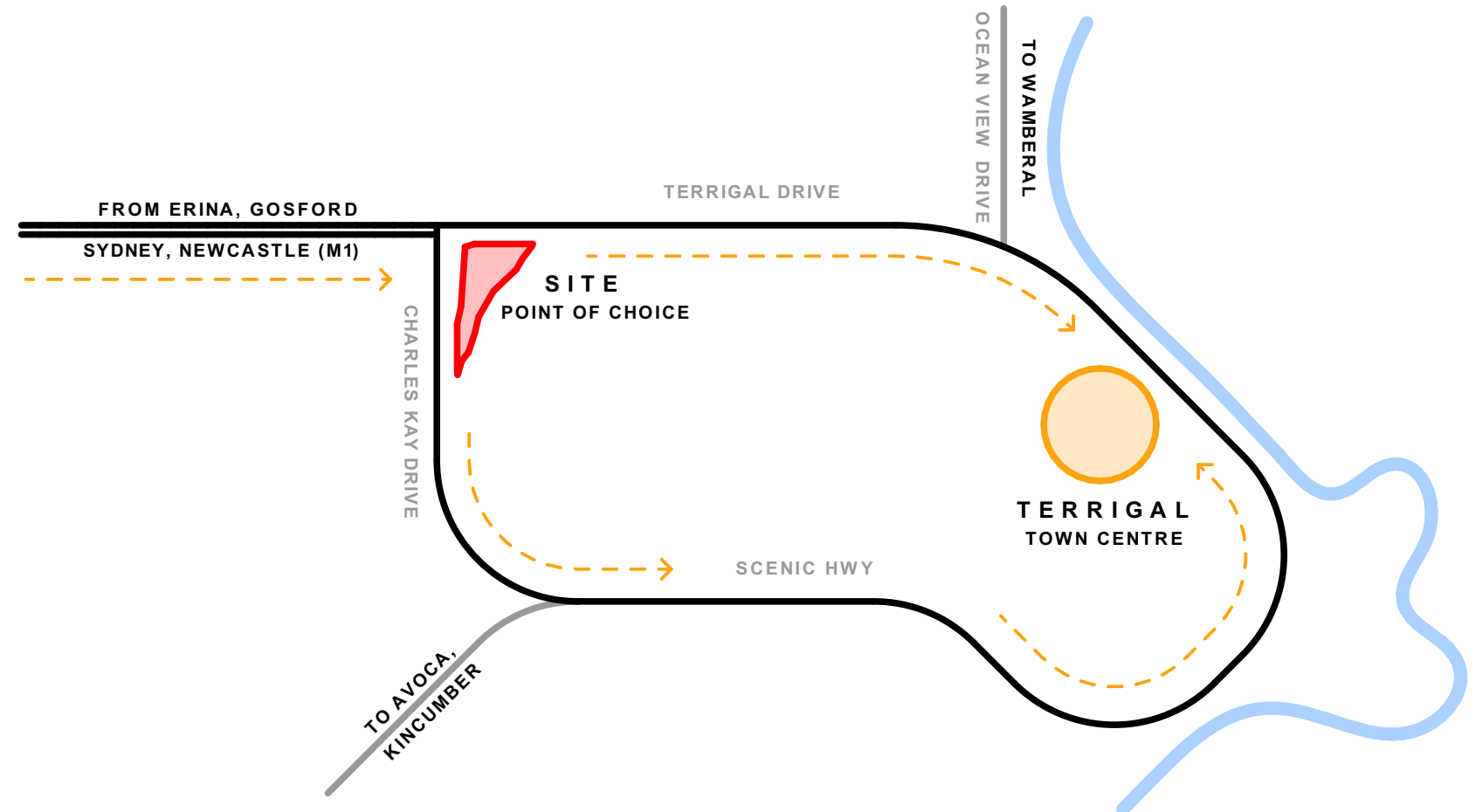


Urban Design Principles

PLACEMAKING

Located at a major intersection and point of choice when entering Terrigal, the proposal has the potential to serve as a local landmark and aid in wayfinding.

The proposal aims to provide a development that responds to the scale of the intersection and the site's exposure, with a strong street presence and well-considered design that serves as a welcoming gesture to the area.



View of site from Terrigal Drive and Charles Kay Drive intersection, headed into Terrigal

Urban Design Principles

ACTIVE STREET FRONTAGES

To contribute to local amenity and generate social activity, the proposal is to include a cafe component and active street frontages.

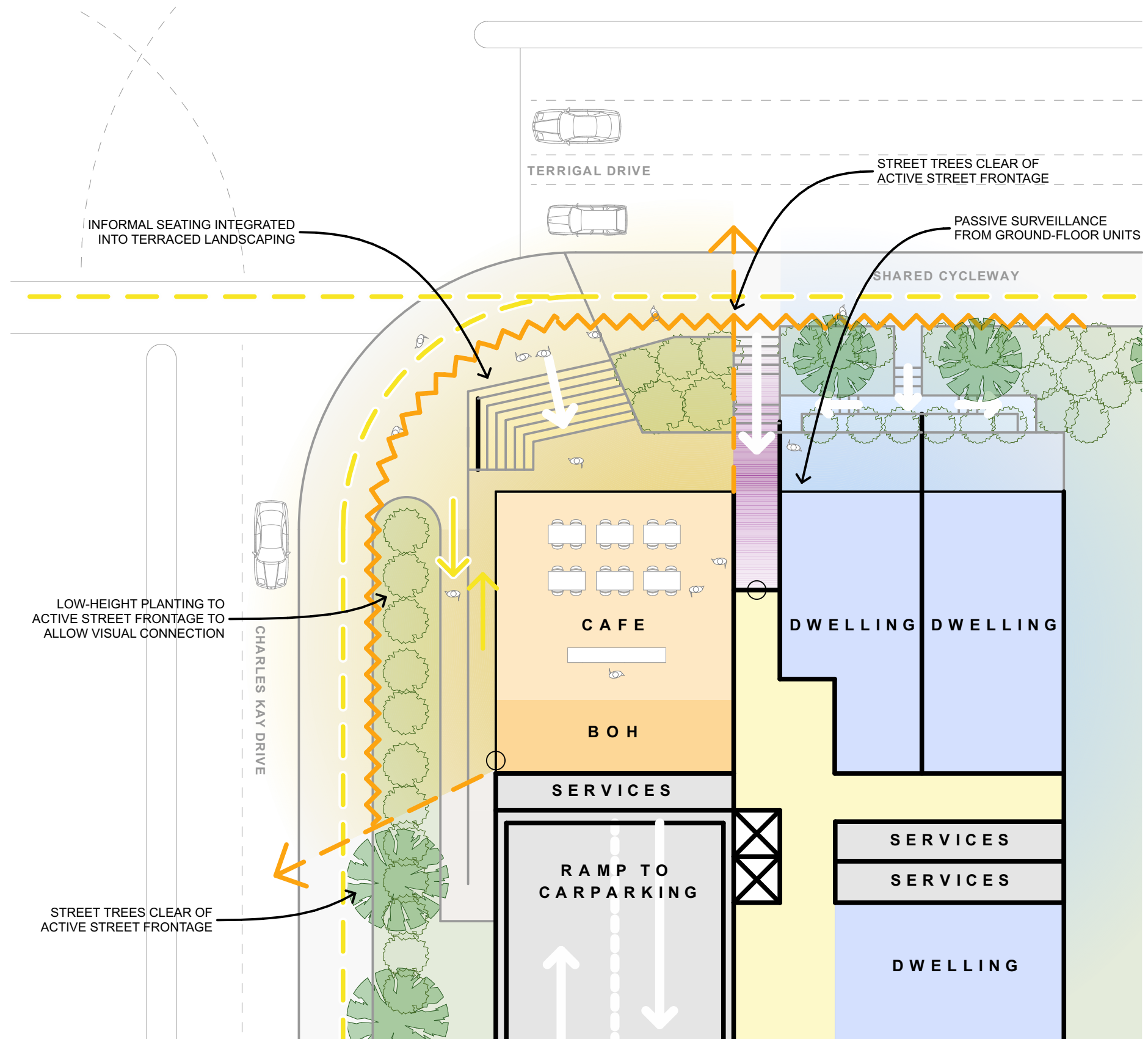
The cafe is to have good visual connectivity to the road and shared cycleway, and be inviting and accessible.

The raised plinth is to be softened with landscaped terraces, doubling as informal seating areas, to negotiate the step in elevation.

The floor-to-floor height of the ground level is to allow for future conversion of the residential units to commercial spaces, allowing for flexible growth as needed by the community.

The private areas – ground floor units and gardens – are to provide passive surveillance to the road and shared cycleway, improving local safety.

- Public Use: Shared
- Public Use: Cafe
- Private Use: Residential
- Pedestrian Access
- Sightlines
- Active Street Frontage



Architectural Approach

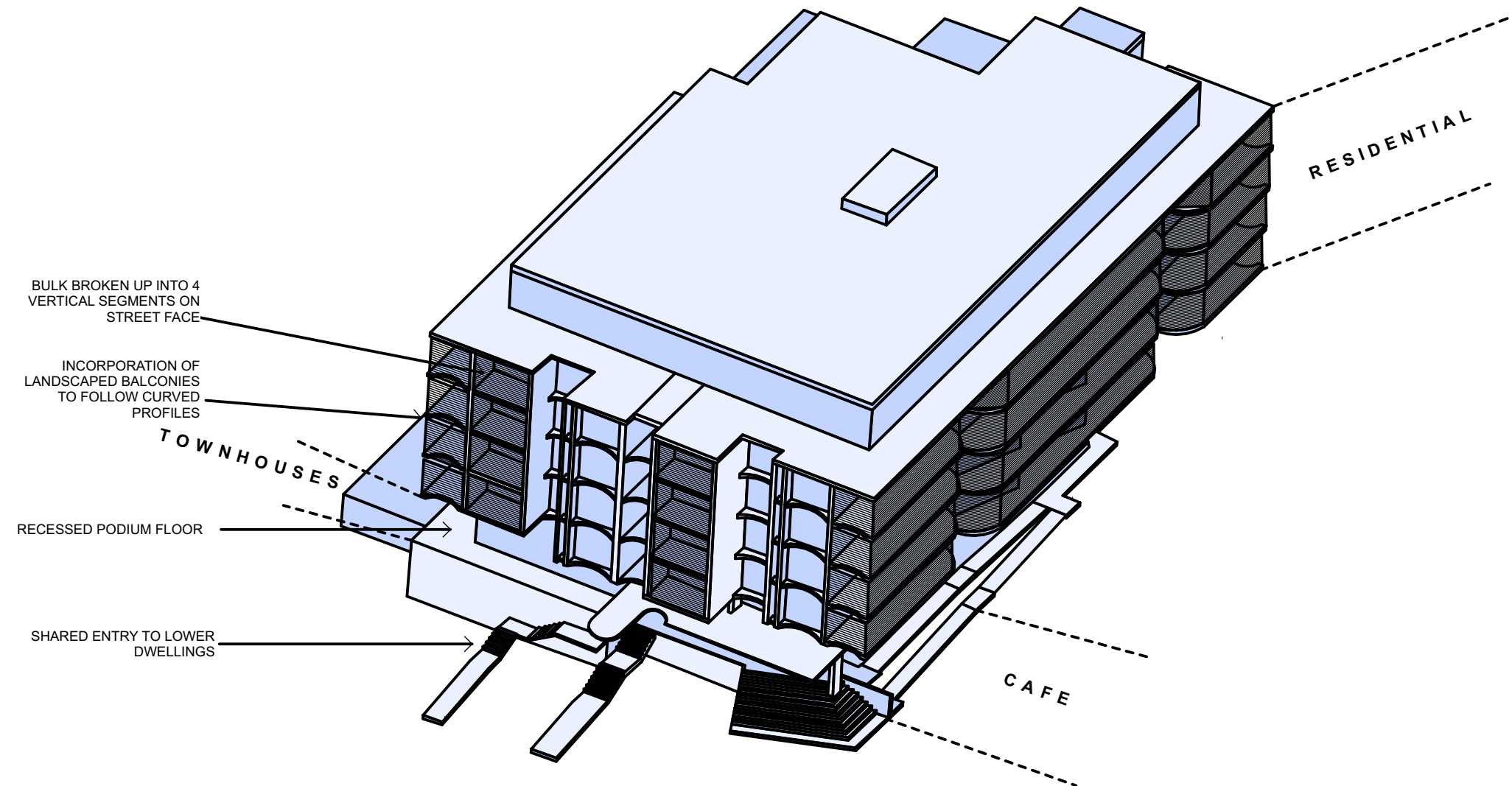
BUILDING SCALE & FORM

The bulk and scale of the proposed development is to be managed with articulation strategies such as:

- deep balconies
- vertical niches
- recessed floors
- textured surfaces

The design is to be visually organised into several key elements, each with their own distinctive language, to further break-down the scale of the building:

- Podium: Townhouse
- Podium: Cafe
- Residential



Architectural Approach

PODIUM: Retail

The cafe / retail component of the podium is to be Inviting and Accessible, and enable Social Activity in the neighbourhood.

INVITING

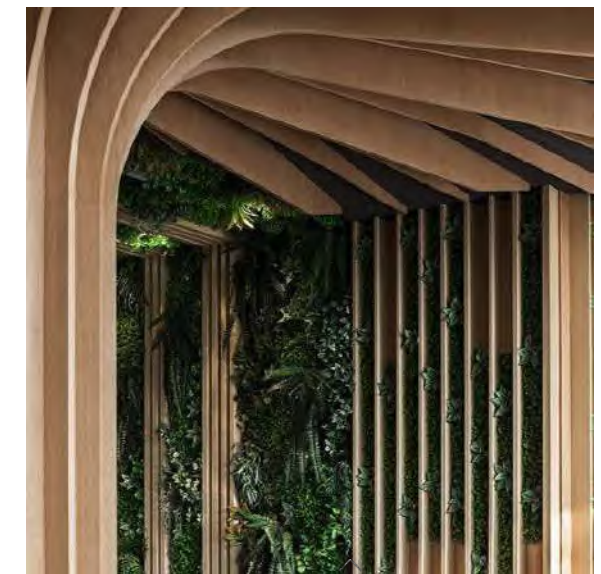
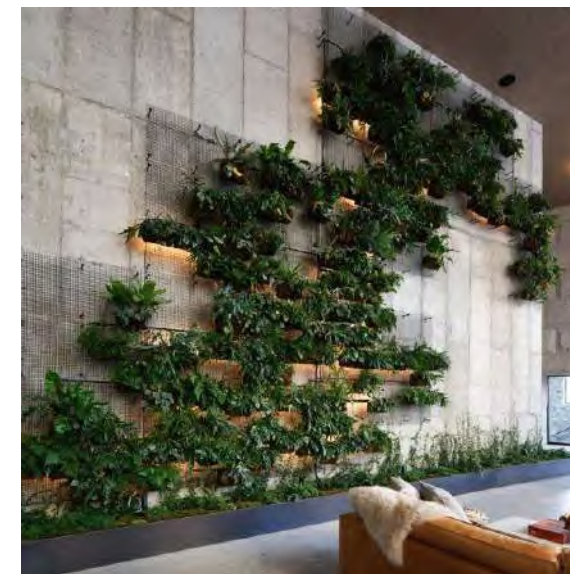
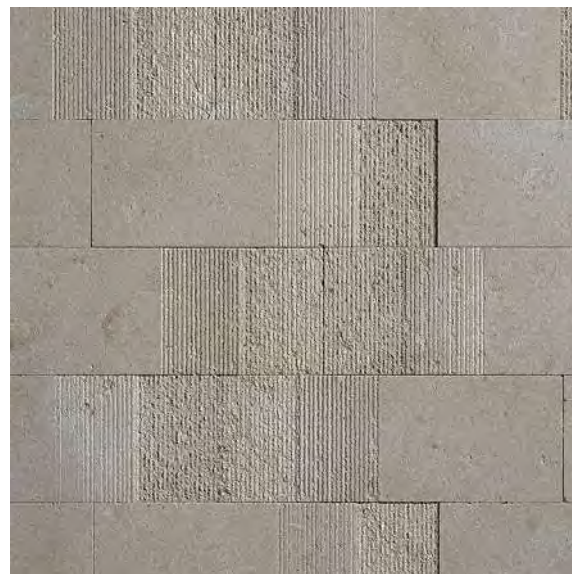
- Strong street presence and clear visual connection between cafe and adjacent road and shared cycleway
- Associated outdoor space sheltered by terrace above

ACCESSIBLE

- Cafe adjacent shared cycleway and on local bus transit corridor, accessible via active and public transport options
- Short walk and visible from local sporting precinct
- Clear point of entry with equitable access

SOCIAL ACTIVITY

- Cafe to serve as social hub, with outdoor space to engage with community
- Cafe to provide service not currently catered for within 15-minute walking radius



Architectural Approach

PODIUM: Townhouses

The design of the residential section of the podium is to be guided by the principles of Walkability, Safety, and Flexibility.

WALKABILITY

- Smaller, domestic-scale design elements to relate to suburban environment
- Facade to be textured and finely-detailed to provide visual relief to pedestrians
- Terraced landscaping to provide a soft transition to shared cycleway, creating comfortable and engaging atmosphere

SAFETY

- The elevated ground floor units to provide passive surveillance to the shared cycleway
- Private front yards to be secured by gated access and screened for privacy

FLEXIBILITY

- Floor-to-floor height allows for conversion of units to commercial/retail space, depending on future land-use demand



Architectural Approach

RESIDENTIAL

The design of the residential component is to achieve good Amenity, Privacy and Articulation.

AMENITY

- Large, usable balcony spaces / Wintergardens
- Units and balconies oriented to maximise access to winter sun and views

PRIVACY

- Balcony depth to provide visual buffer to the road below
- Planters with cascading plants to soften and screen units and balconies

ARTICULATION

- Niches used to break up floor plates and manage horizontal bulk
- Rounded, softened edges to provide gentle transitions and strong form
- No multi-storey walls of glass, to minimise sense of verticality

