



GPO Box 1747
Brisbane QLD 4001
t 07 3166 9216
m 0417 607 242
www.qtraffic.com.au

Our Ref: 1671_PAT01

15 September 2022

Department of State Development, Infrastructure, Local
Government and Planning
Economic Development Queensland
GPO Box 2202
Brisbane Queensland 4001

Attention: Brandon Bouda

Application No: DEV2022/1295

Site Location: 905 Flagstonian Drive, Flagstone

Application Description: Development Permit for a Material Change of Use for Child Care Centre and Indoor Sport and Recreation (Swim School)

Subject: Response to EDQ's Further Issues – Traffic Matters

Dear Brandon,

We refer to the development application for a Material Change of Use for Child Care Centre and Indoor Sport and Recreation (Swim School) on the site at 905 Flagstonian Drive, Flagstone.

This letter has been prepared in response to EDQ's Further Issues Letter dated 28 June 2022. It addresses the traffic-related issues contained therein, which are copied below for ease of reference, with responses provided following.

This letter is supplementary to, and should therefore be read in conjunction with, the Traffic Report prepared by Q Traffic which accompanied the development application.

Reference should be made to the amended development plans included as **Attachment 1**, which are discussed following.

Movement network

1) Minor amendments are necessary to provide a higher level of pedestrian safety and accessibility to and throughout the internal car park.

a. Provide an appropriately designed safety crossing (i.e. 'wombat' crossing), to directly connect the internal pedestrian movement pathways of the swim school to the child care centre, over the internal carriageway.

Response

In accordance with the design in Austroads Guide to Traffic Management Part 8: Local Area Traffic Management, a 'wombat crossing' has a minimum width of 6m, i.e. 3.6m crossing width plus minimum 1.2m ramp width on each side. The provision of this treatment would require the removal of at least three (3) car parking bays, and is therefore not a feasible option in this instance.

As an alternative, as shown in the plans included as **Attachment 1**, a zebra crossing across the main parking aisle (linking the swim school and the childcare centre) is now proposed. This crossing is aligned with the shared area adjacent to the accessible parking space. Speed bumps are proposed on the approaches to this crossing, to control vehicle speeds in proximity to the crossing.

The proposed pedestrian crossing treatment is considered to be appropriate, and in accordance with treatments commonly implemented in developments such as that proposed.

It is however recommended that the landscaping on the western side of the crossing be limited to less than 600mm in height, to ensure visibility between approaching vehicles, and pedestrians approaching this side of the crossing. This is a detailed design issue which could reasonably be addressed in response to a condition of the approval.

b. Provide an appropriately designed pathway connection to the existing pathway on Capricorn Street.

Response

As shown in the plans included as **Attachment 1**, a pedestrian pathway connection is now shown to the existing pathway on Capricorn Street.

2) The Development Scheme requires compliance with Council's parking rates. While EDQ can support a shared parking arrangement between the swim school and childcare centre due to different peak periods, no bicycle parking has been provided.

a. Submit amended plans to show the provision of 14 bicycle spaces. Note: bicycle parking must not detract from the landscaping provision.

Response

As shown in the plans included as **Attachment 1**, two (2) bicycle parking racks accommodating at least 14 bicycles are now proposed at the south-eastern corner of the childcare centre building, to the west of the zebra crossing.

5) Servicing and manoeuvring

a. Submit swept path diagrams which shows the central median on Road 1 (College Drive) and confirms that the ingress and egress swept path of the refuse vehicle does not impact on this median.

Response

As shown in the vehicle tracking diagram included as **Attachment 2**, up to a 12.5m long Heavy Rigid Vehicle would be able to enter/exit the site without the wheelpath of the vehicle conflicting with the central median, or the body of the vehicle overhanging past the central median into the opposing traffic lane.

Notwithstanding the above, it is considered unlikely that the largest vehicle requiring access to the site would exceed a 10.4m long refuse collection vehicle. A vehicle of this size would comfortably be able to enter and exit the site without conflicting with the central median, as shown in the vehicle tracking diagram included as **Attachment 2**.

b. Confirm the waste collection vehicle dimension is consistent with Logan City Council.

Response

Based upon our experience, the largest rear-loading refuse collection vehicles used for on-site refuse collection are typically approximately 10.24m in length, therefore a standard vehicle length of 10.24m is typically used in vehicle tracking analyses (noting that the manoeuvring requirements for a vehicle of this size vs a slightly larger vehicle of say 10.3m – 10.4m are typically very similar to those of a 10.24m long vehicle).

Reference has been made to the Logan City Council Planning Scheme which mentions a rear-loading refuse collection vehicle length of 10.3m (albeit for rear lot residential properties) in Note 2 of Table 3.4.5.1.2. It is therefore assumed that this is an appropriate assumed design vehicle length for a rear-loading refuse collection vehicle, for on-site collection.

As shown in the vehicle tracking diagram included as **Attachment 2**, a refuse collection vehicle of 10.4m length would comfortably be able to enter and exit the site in a forward direction, and manoeuvre on-site as required for refuse collection.

In light of the above, it is considered that the proposed refuse collection arrangements are acceptable from a traffic engineering perspective.

Conclusion and Recommendation

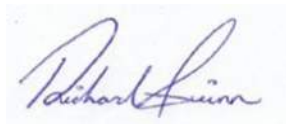
I trust the above information satisfactorily responds to the traffic items in EDQ's Information Request.

In my capacity as a Registered Professional Engineer of Queensland, I am satisfied that the development will operate acceptably from a traffic / parking / servicing perspective, without any unacceptable impact upon the adjacent road network.

On the basis of the above, it is recommended that the development application be approved from a traffic engineering perspective.

Should you have any queries regarding the above, please do not hesitate to contact the undersigned.

Regards

A handwritten signature in blue ink, appearing to read 'Richard Quinn', is shown on a light blue background.

Richard Quinn
BECivil, MIEAust, RPEQ (08565)
Director – Q Traffic

ATTACHMENT 1

Amended Development Plans



Perspective View from the corner of Flagstonian Drive & 'Road One'

Flagstonian Drive Flagstone QLD
4280 AUSTRALIA
Stage 2Di Lot 905

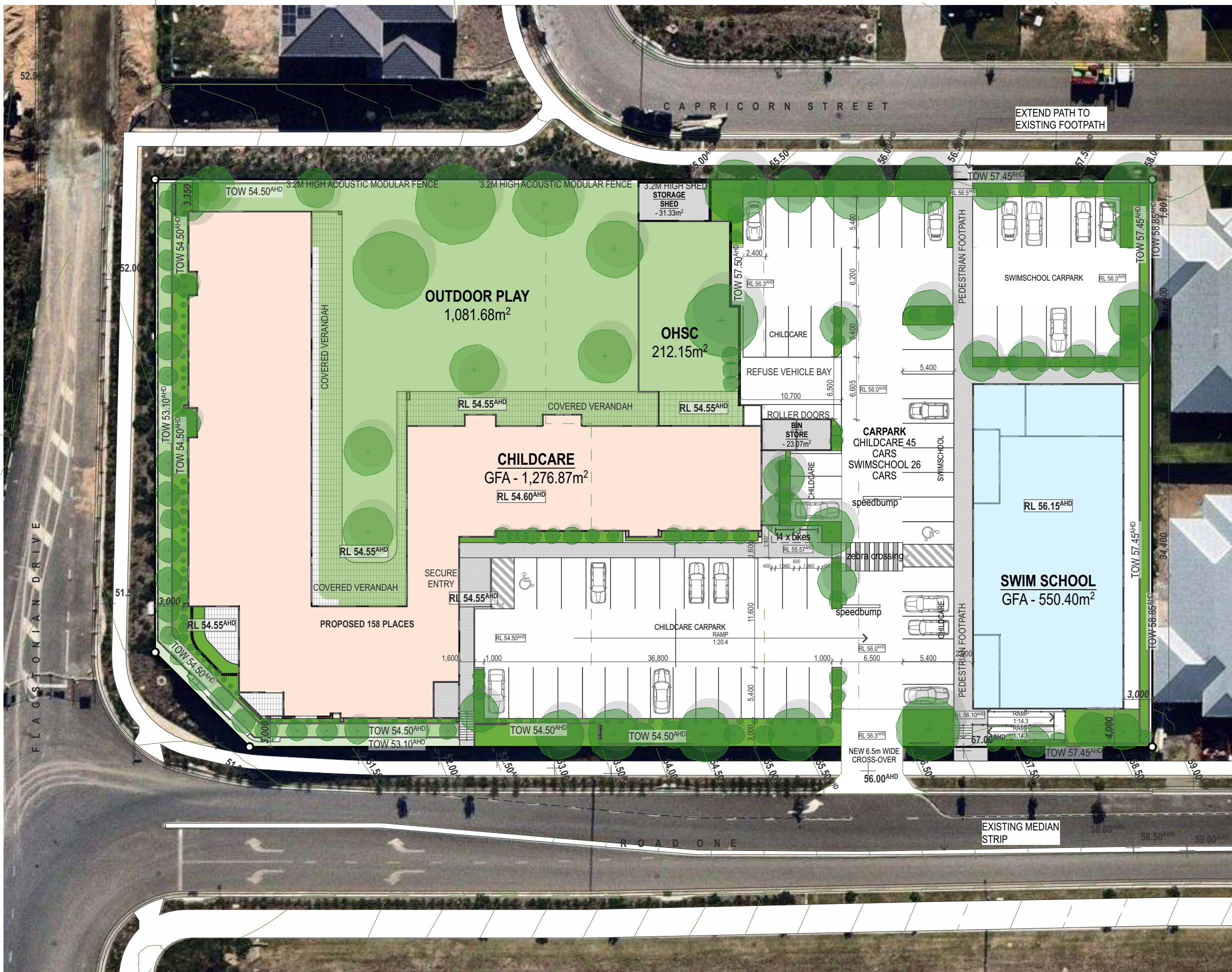
TOWN PLANNING SUBMISSION

PROJECT SUMMARY

Site Area	6,282m ²
Proposed Development	Childcare Centre & Swimschool
Carparking	Childcare: Drop-off 19 car spaces Staff: 26 car spaces Swimschool: 26 car spaces
New GFA	Childcare Centre 1,277m ² Swimschool 550m ²
Proposed Site Cover	2,210m ² (35%) includes covered verandahs, entry awning & bin store
Road Frontage	159.7m
Cross-over Width	6.5m
Impervious Area	4,374m ²



- LOCALITY KEY**
- 1. PROPOSED SITE
CHILD CARE & SWIM SCHOOL
 - 2. NEW RESIDENTIAL SUBDIVISIONS
 - 3. SANDY CREEK
 - 4.



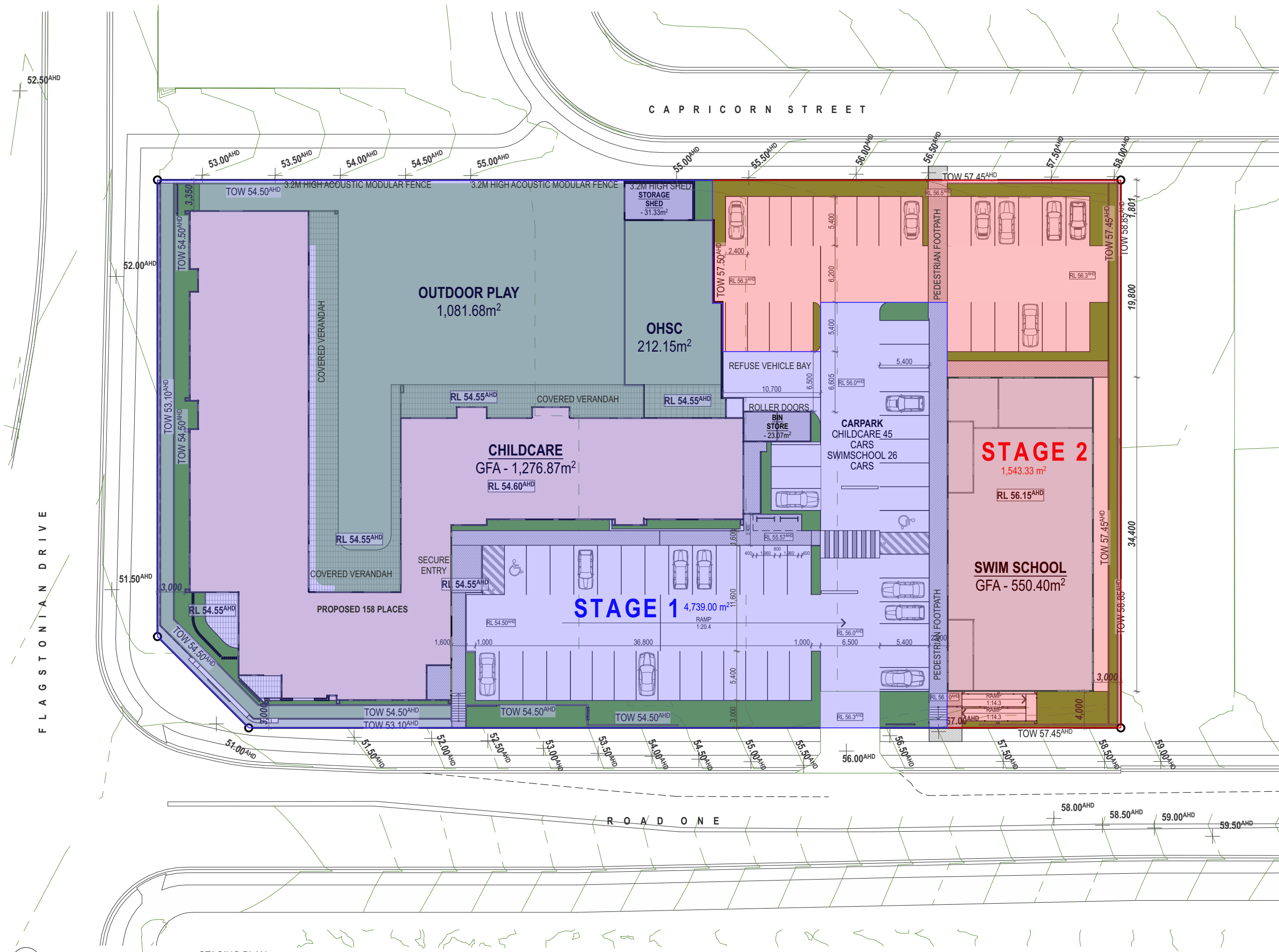
Project Statistics

Childcare Centre GFA: 1,277m²

0-5 yrs: 158 Places
Out of Hours School Care: 30 places
Drop-Off Cars: 19 cars
Staff Cars: 26 cars
Total Carparks: 45 Cars
Total Bicycles: 14

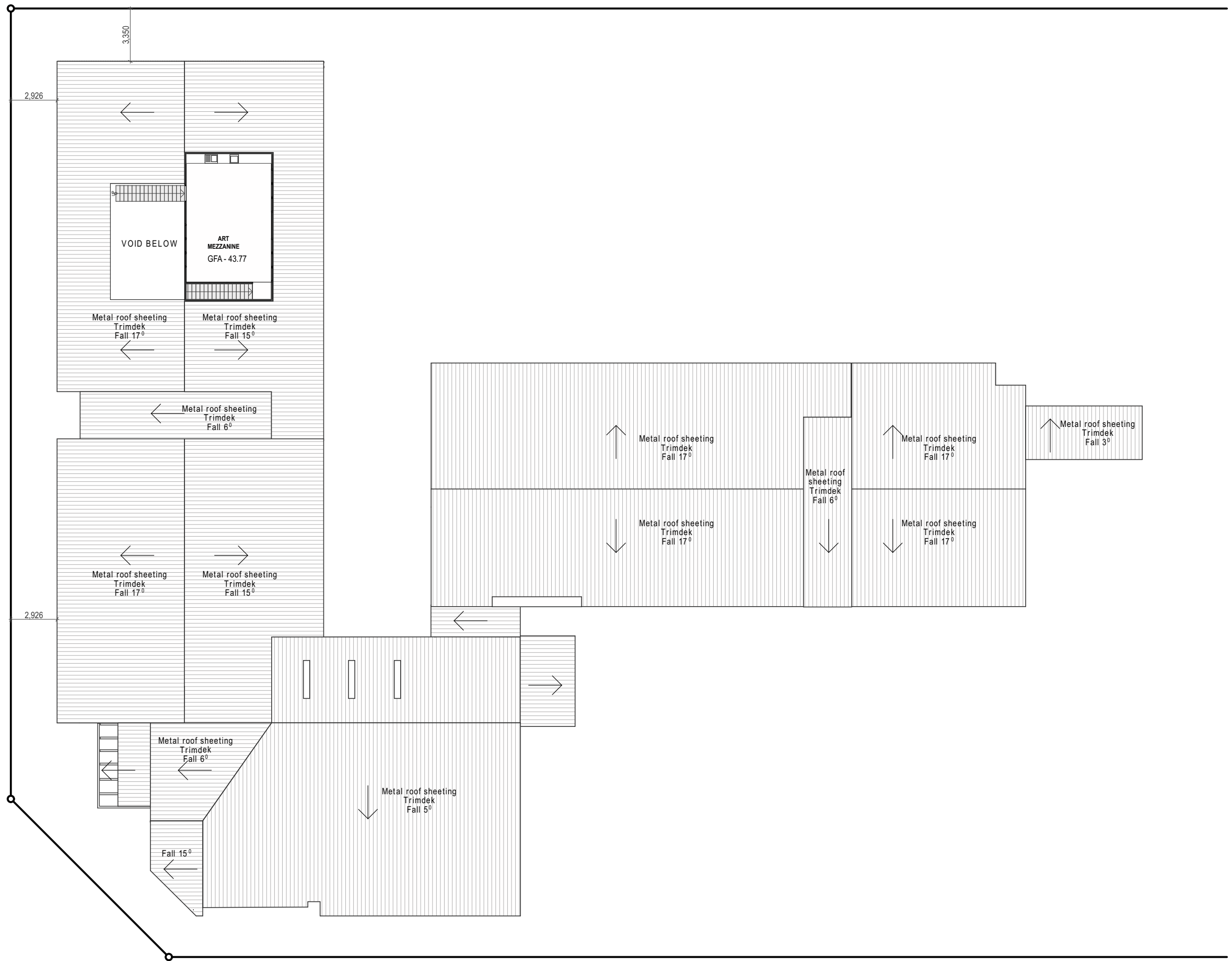
Swimschool GFA: 550m²

Swimschool Carparks: 26 Cars

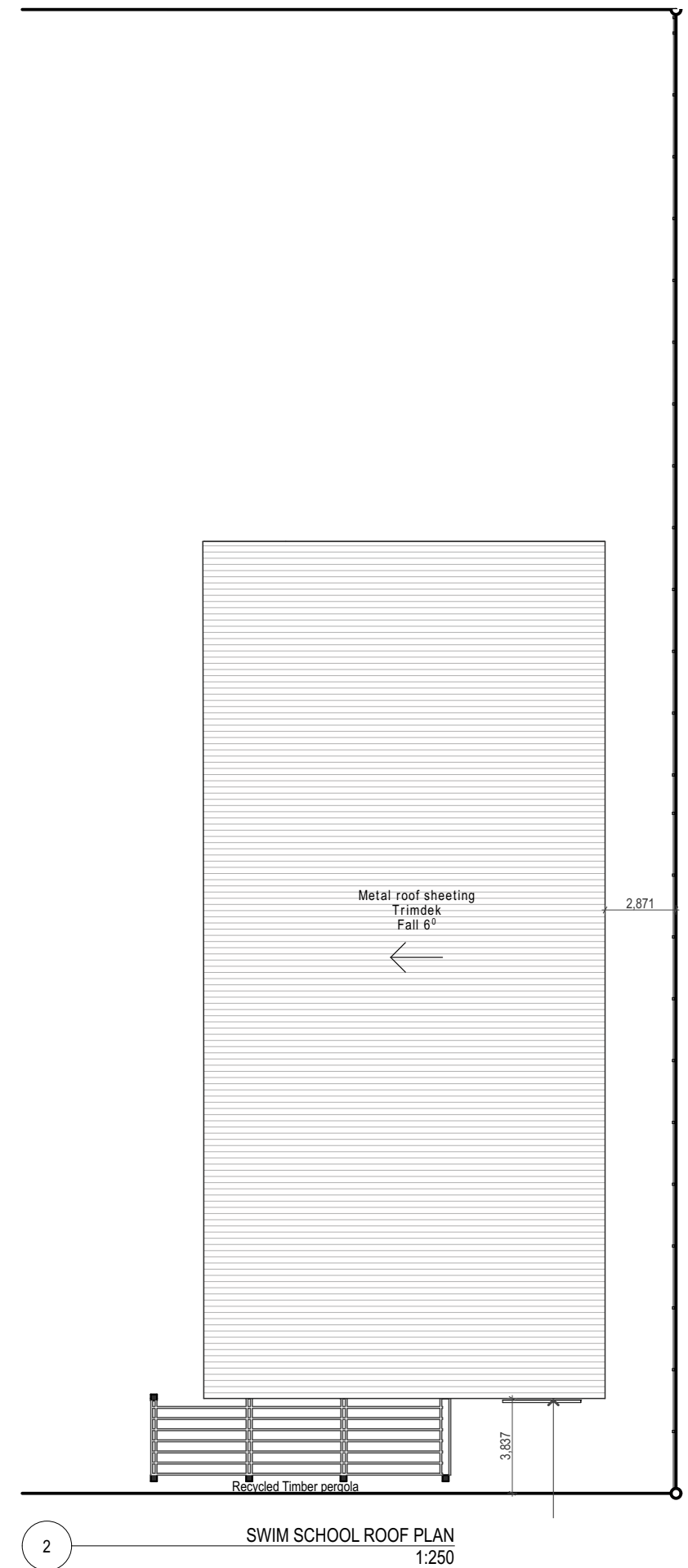


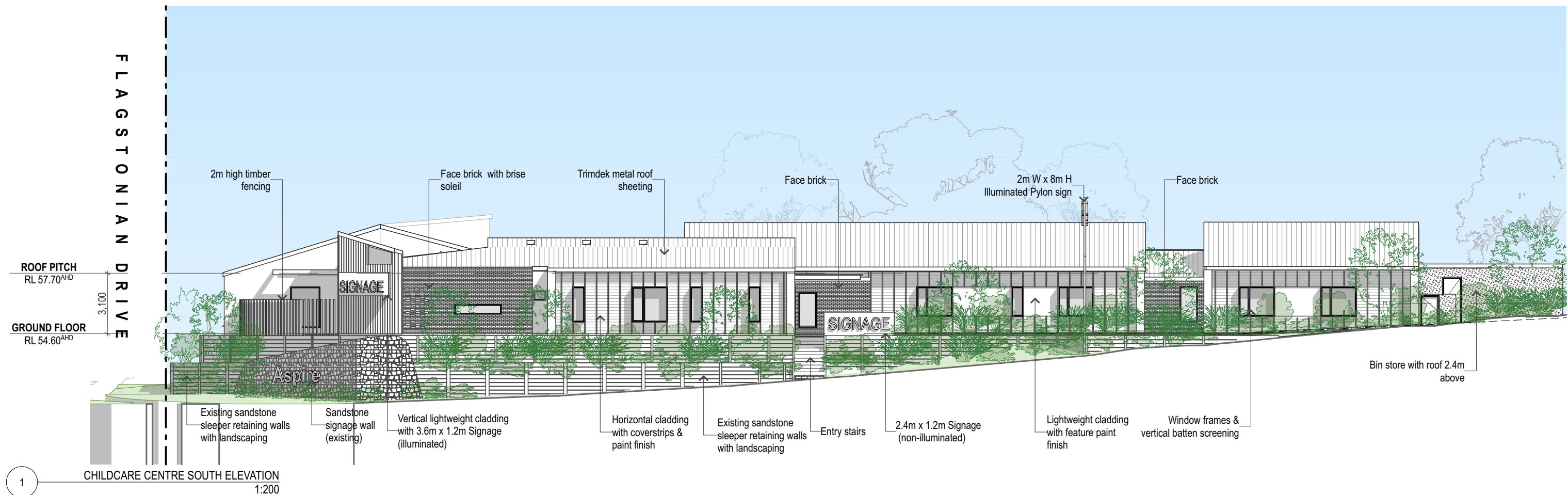
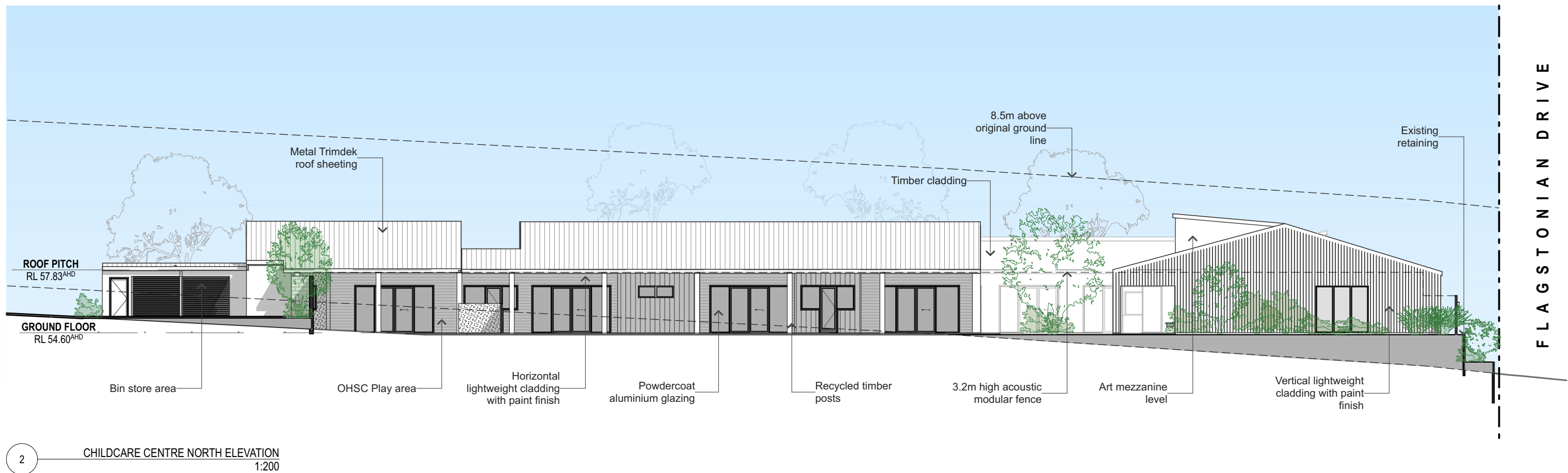
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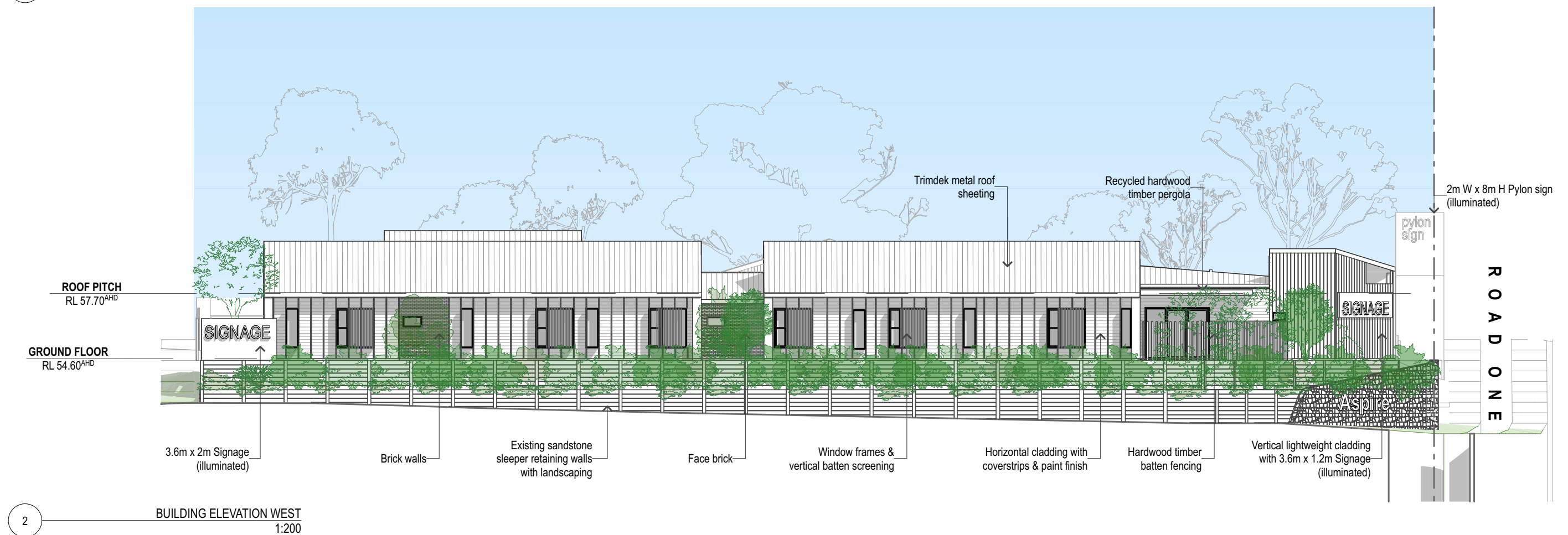
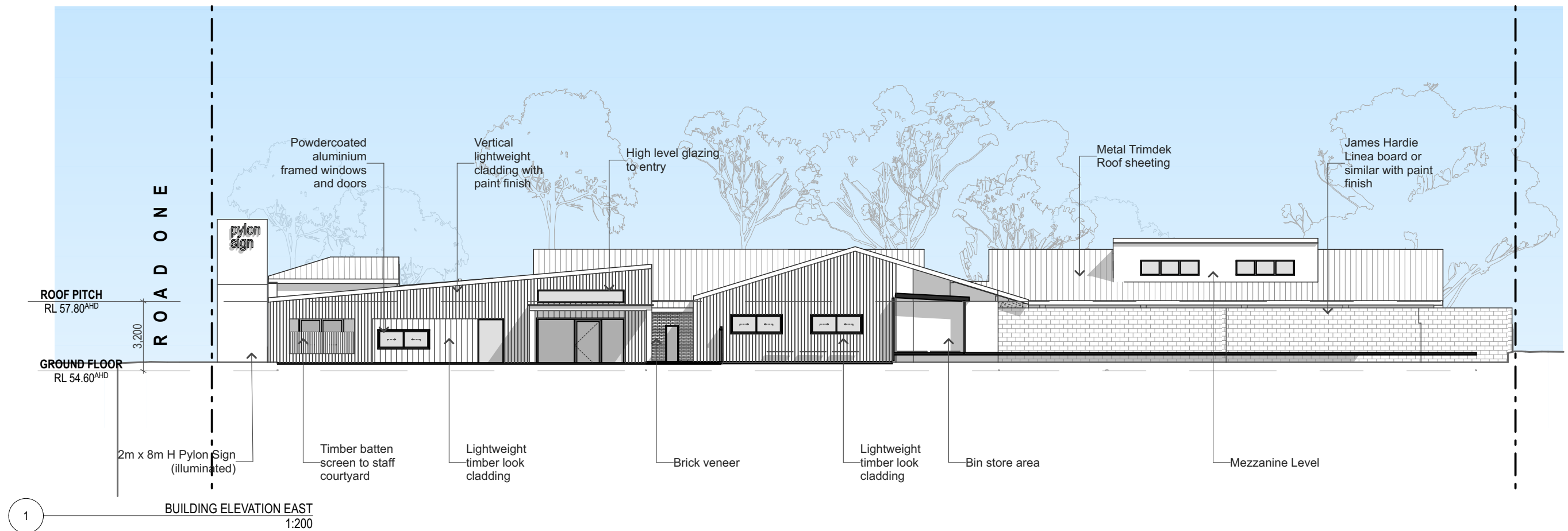
STAGING PLAN
1:400

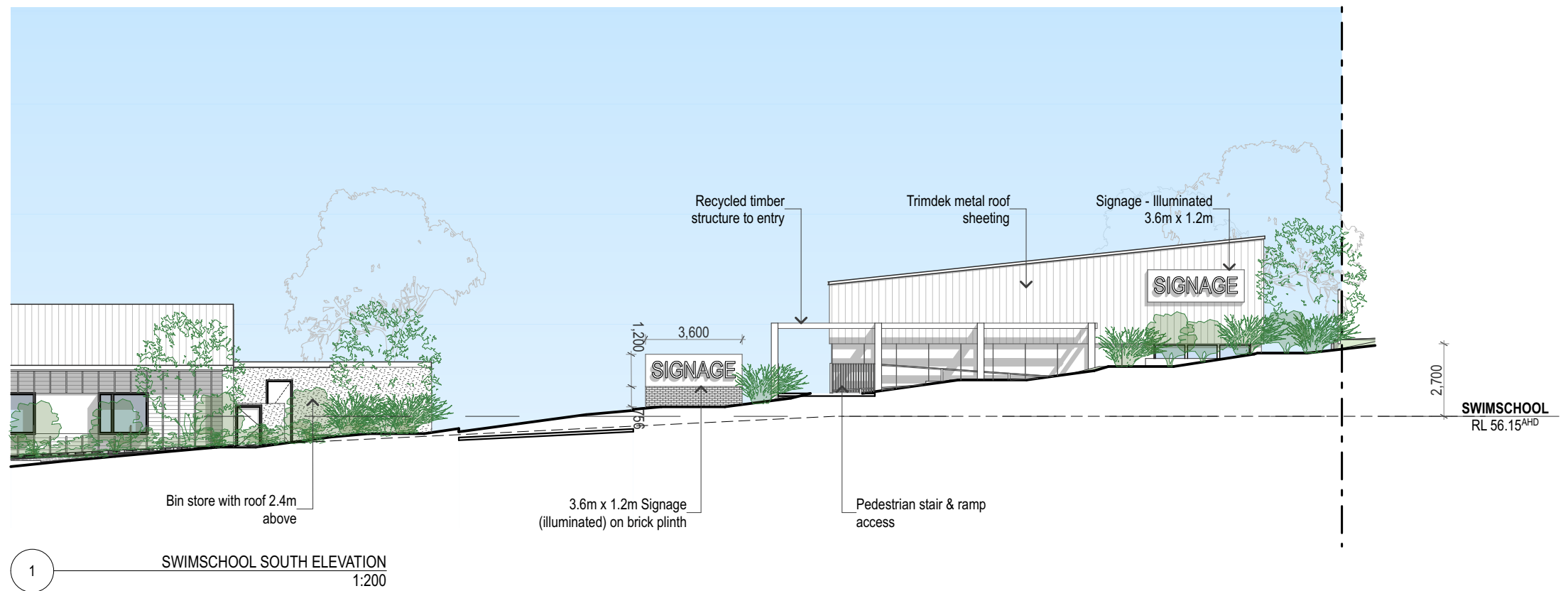
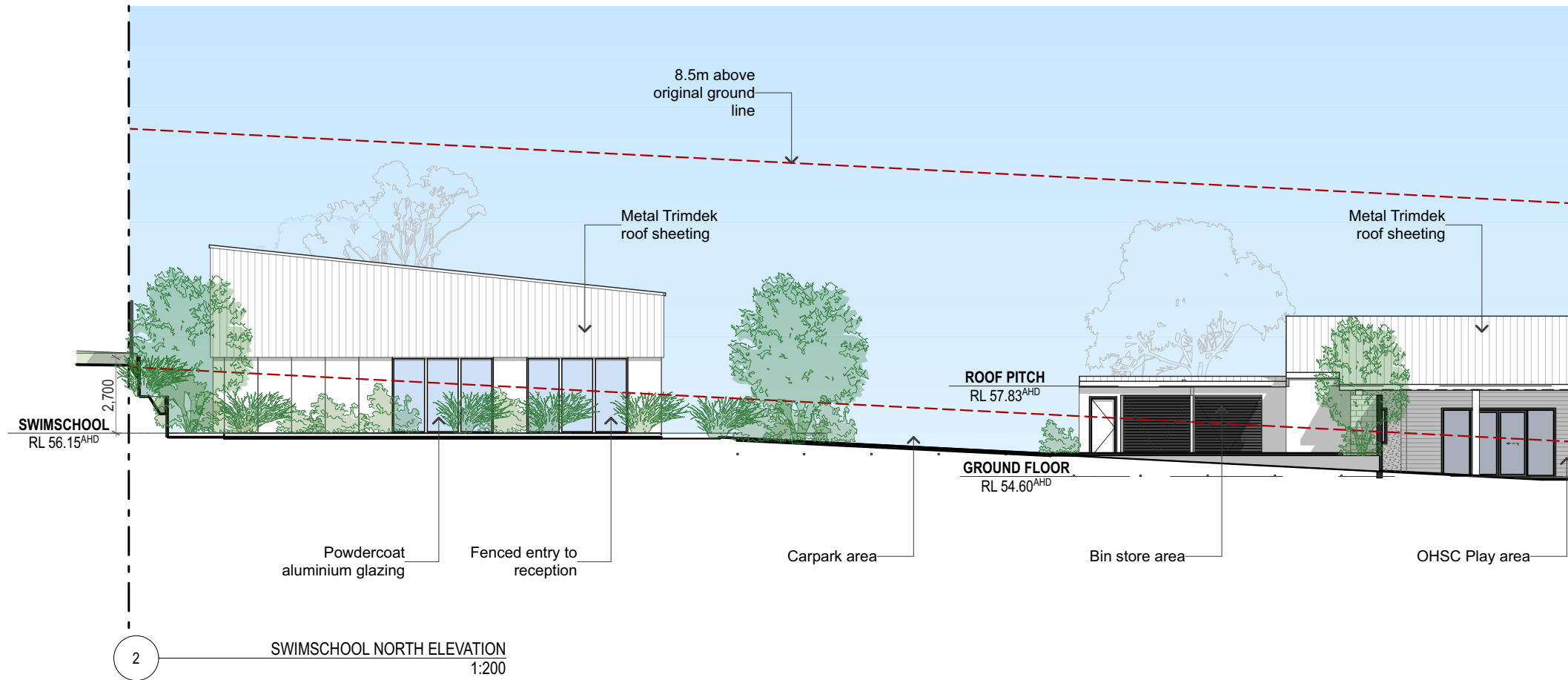


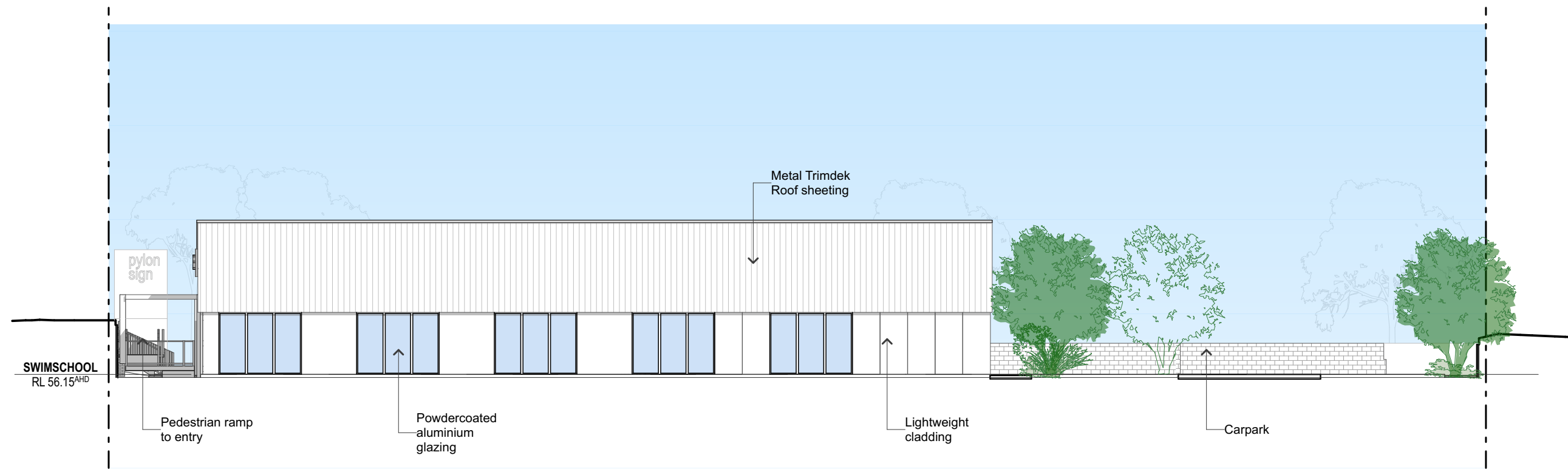
1 LEVEL 01 1:250



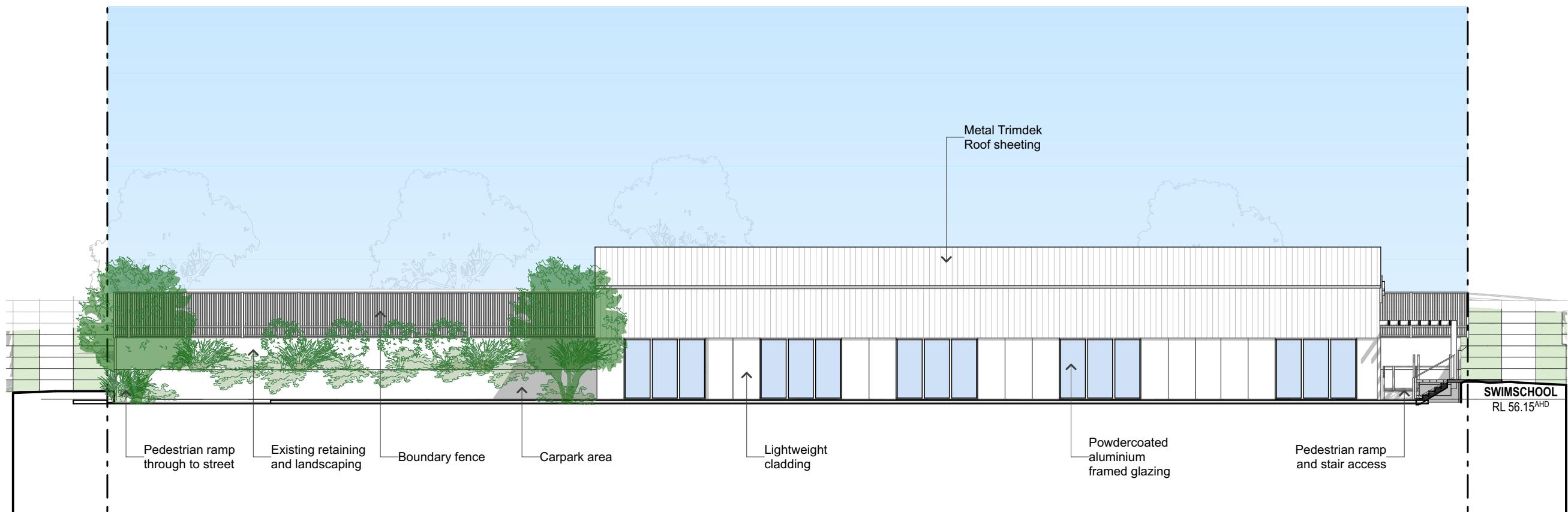




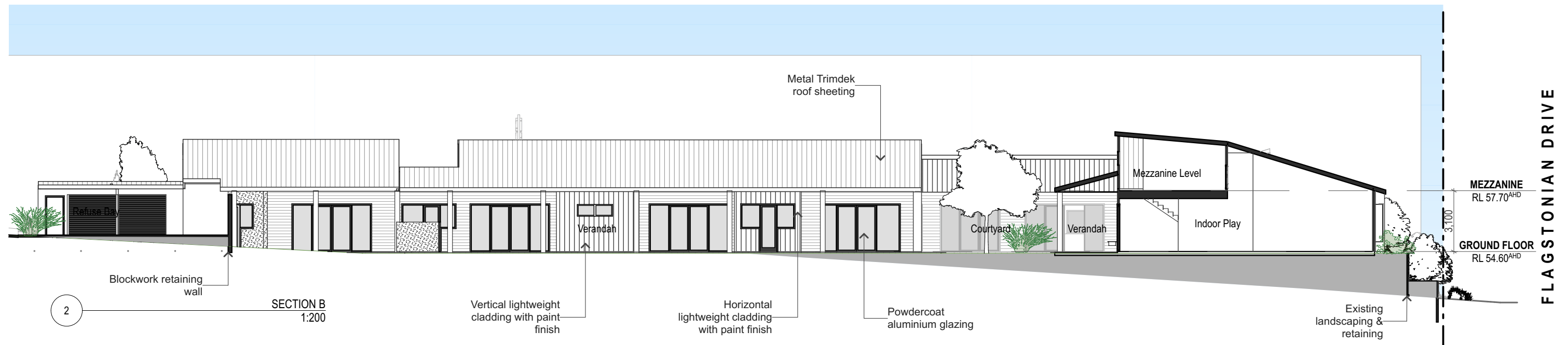
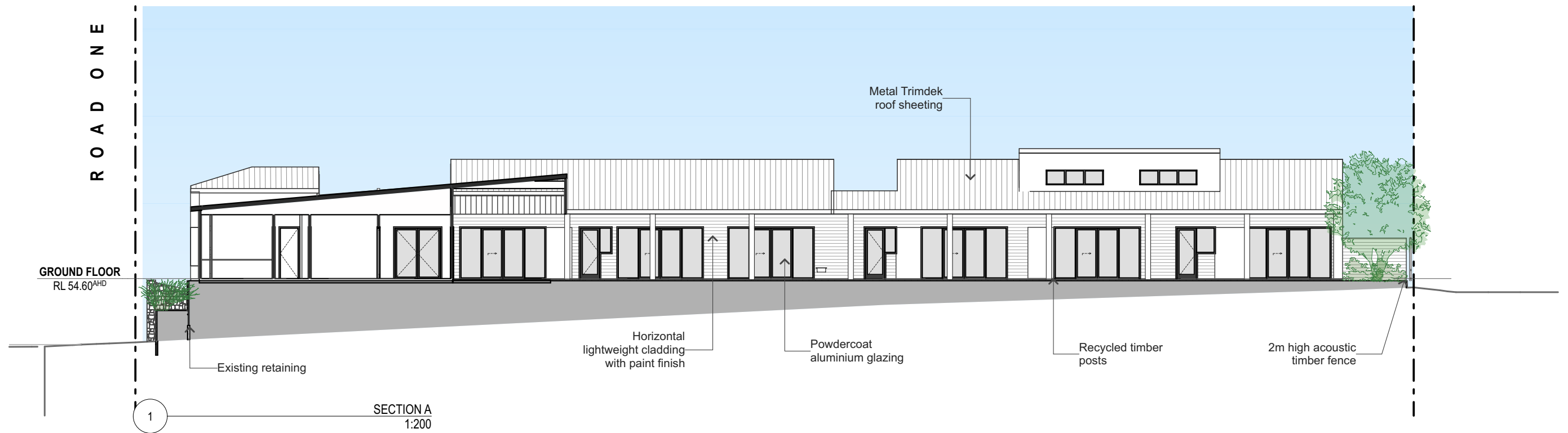




1 SWIMSCHOOL EAST ELEVATION
1:200



2 SWIMSCHOOL WEST ELEVATION
1:200

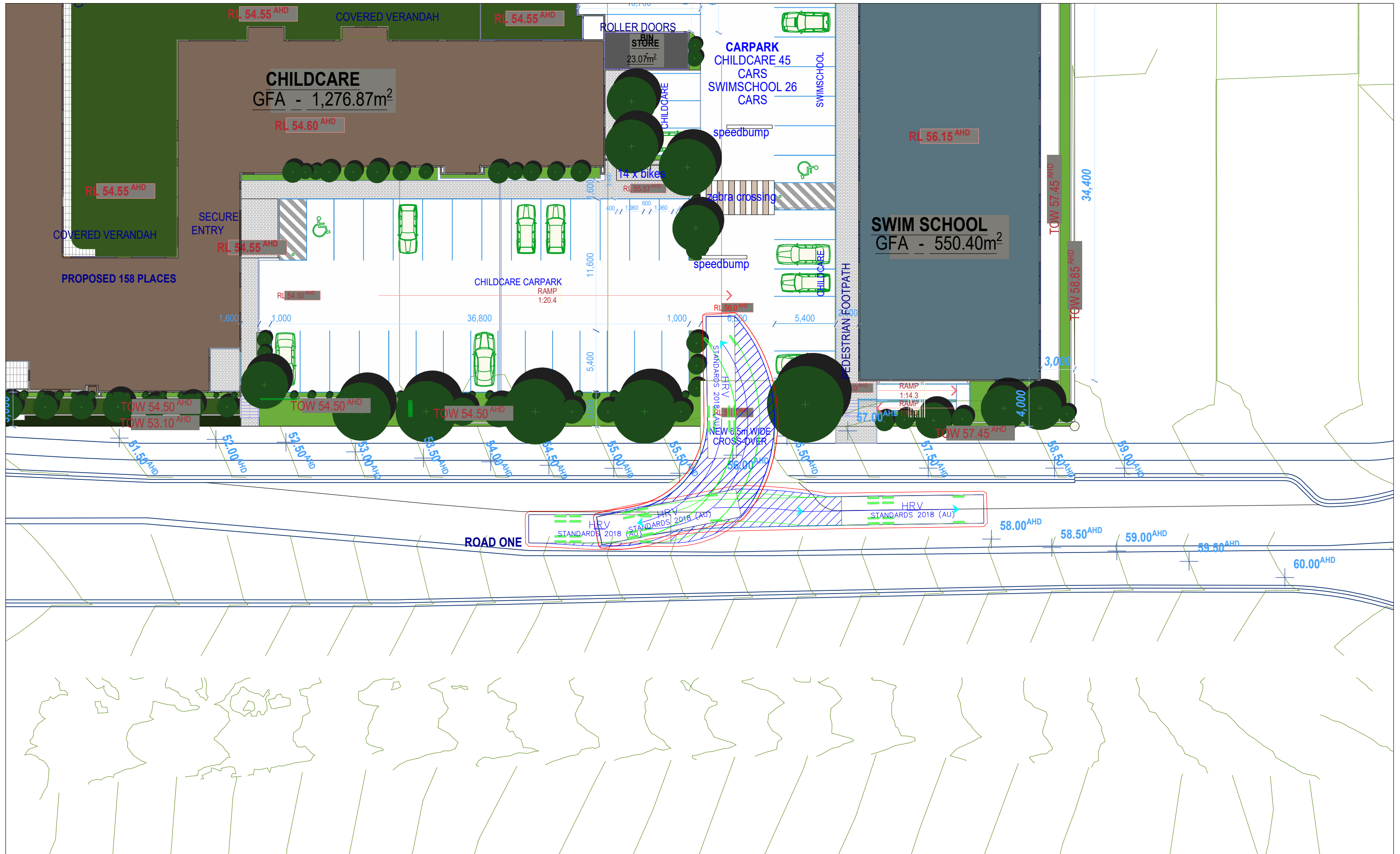




Perspective View from 'Road One'

ATTACHMENT 2

Vehicle Tracking Diagram – Heavy Rigid Vehicle



ATTACHMENT 3

Vehicle Tracking Diagram – Refuse Collection Vehicle

